Empowering Minority Voices

A dissertation presented by

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"Man can only liberate himself. He cannot be liberated or developed by another. For Man makes himself. It is his ability to act deliberately, for a self-determined purpose, which distinguishes him from the animals. The expansion of his own consciousness, and therefore of his power over himself, his environment, and his society, must therefore ultimately be what we mean by development. So development is for Man, by Man, and of Man."

- Julius Nyerere, President of Tanzania

Declaration of Dar es Salaam: *Liberated Man, the Purpose of Development*, 1976

Abstract

Minority cultures have a history of voicelessness. If in the past lack of voice was conditioned by dominating majority groups and discriminating social structures, at present this needs to be seen in relation to the unequal distribution of tools and platforms that can enable expression, communication, and participation in the public sphere of discourse. The growing importance and ubiquity of information and communication technologies (ICTs) create new premises and open new possibilities for the exercise of voice. Moreover, appropriation of ICTs by minority cultures is not only a matter of access, but requires deeper consideration of how the uptake of ICTs affects the existing community dynamics, knowledge production, and communication practices. This study engages with such issues, examining the conditions under which ICTs can support minority communities in ways that respond to local needs and goals and are consonant with local worldviews and epistemologies. To this purpose, it draws on the body of knowledge studying the use of ICTs for community development, focusing on poor, disadvantaged, and marginalised groups.

The research was designed to favour the emergence of local views through inductive reasoning, grounded investigation, and a cyclic approach to data generation and analysis. Two complementary methodological approaches were used. Participatory Action Research informed the design, implementation, and assessment of a participatory content production experience involving two rural Romani communities in South-Eastern Romania. Grounded Theory, a methodology for inductive theory generation, was used as the overarching framework for the research design, and provided principles and procedures for case selection, data generation and analysis, and transferability of outcomes.

The main results of this study can be synthesized as follows:

1. Context-Responsive Action: a methodological framework for the design, implementation and evaluation of community media initiatives.
2. Conceptual contributions: an examination of the conditions for community involvement in the design of technology-enhanced communication processes and artefacts.
3. A web design format: a template for community websites that reflects the systematic design approach employed, favouring orality, first-person narratives, and interpretation of web design components through local perspectives.
4. Two community websites: two specific instantiations of the design format for the rural communities involved in this research.

The *main original contribution* of this study may be considered the concept of context-responsiveness, i.e. the capacity of a socio-technical environment to single out evolution of needs and goals and to devise ways for dynamically adapting to meet them. Three strategies for instantiating context-responsiveness are proposed: learning, envisioning, and alignment.

Learning expands the knowledge base on ICTs and makes explicit views, needs, and wants. *Envisioning* builds upon this foundation to give direction and purpose to the appropriation of ICTs. *Alignment* refers to the process by which the usage of ICTs is connected to the goals and interests elicited, using indicators operationalized from the vision. When applied iteratively throughout a community-based technological intervention, these three strategies can enable members to direct the change brought about by the introduction of ICTs towards the advancement of self-identified goals.

This study could serve as an exemplar to nourish the debates around the relationship between ICTs and voice in minority communities, both in the academic and practitioners' arenas.

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Abbreviations

AE – Action Evaluation

AR – Action Research

BJR – County Bureaus for the Roma (Ro. 'Birourile Judetene pentru Romi')

CCM – Constant Comparative Method

CI – Community Informatics

EAR – Ethnographic Action Research

EC – European Commission

ECRI – European Commission against Racism and Intolerance

EU – European Union

GTM – Grounded Theory Methodology

HCI – Human-Computer Interaction

ICT(s) – Information and Communication Technology(ies)

ICT4D – Information and Communication Technologies for Development

IK – Indigenous Knowledge

ITU – International Telecommunication Union

NAR – Network Action Research

NTIA – National Telecommunications and Information Administration

OECD – Organisation for Economic Co-operation and Development

PAR – Participatory Action Research

PR – Participatory Research

QDA – Qualitative Data Analysis

QDAS – Qualitative Data Analysis Software

TCEs –Traditional Cultural Expressions

UNDP – United Nations Development Programme

UNESCO – United Nations Educational, Scientific and Cultural Organization

1 Introduction

"(O)ne of the intense pleasures of travel and one of the delights of ethnographic research is the opportunity to live amongst those who have not forgotten the old ways (…). Just to know that Jaguar shamans still journey beyond the Milky Way, or the myths of the Inuit elders still resonate with meaning, or that in the Himalaya, the Buddhists still pursue the breath of the Dharma, is to really remember the central revelation of anthropology, and that is the idea that the world in which we live does not exist in some absolute sense, but is just one model of reality, the consequence of one particular set of adaptive choices that our lineage made, albeit successfully, many generations ago. All of these peoples teach us that there are other ways of being, other ways of thinking, other ways of orienting yourself in the Earth. (…) Now, together the myriad cultures of the world make up a web of spiritual life and cultural life that envelops the planet, and is as important to the well-being of the planet as indeed is the biological web of life that you know as a biosphere. And you might think of this cultural web of life as being an ethnosphere, (…) the sum total of all thoughts and dreams, myths, ideas, inspirations, intuitions brought into being by the human imagination since the dawn of consciousness. The ethnosphere is humanity's great legacy. It's the symbol of all that we are and all that we can be as an astonishingly inquisitive species."

- Wade Davis, 2003[1]

This research study is an incursion into the possibilities opened up by Information and Communication Technologies (ICTs) for fulfilling the needs for collective expression and communication of minority cultures. At its core, this is a study of how cultures of otherness (minorities) may use the communication tools of a reversed other (majorities, or Western) for encoding, representing, and transmitting their own knowledge. It is about how a colonised culture may appropriate the tools of the coloniser for advancing self-designed goals, or about how the marginal, cornered *other* of a society may take hold of its cherished tools for digging avenues for expression and communication in the public sphere of that same society or for enriching one's own, community-restricted practices.

This introductory chapter sets out the premises of this study, positions it in the disciplinary and theoretical strand, and lays out the conceptual and methodological pillars of the research approach taken.

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[1] Wade Davis, 'Dreams from endangered cultures', TED Talk, February 2003. http://www.ted.com/talks/wade_davis_on_endangered_cultures.html

1.1 Rationale

Voiceless cultures

Minority groups are *the others* of our societies. Their very definition does not capture intrinsic group features, but dwells on a relational perspective that marks their distinction from dominant groups or majority populations. Historically, minority ethnic groups were caught in uneven power relationships where majorities made the rules with respect to their participation in social, economic and political life in the societal system they shared, and determined their collective life choices: the languages they were allowed to speak, the cultural practices they could perform, and the ways of educating their children. In this process, the cultural ethos of many minority cultures was strangled and their voices suppressed. The most extreme forms of annihilation of the cultural ethos were advanced by colonial powers in Australia, Canada, and the Americas. In these contexts, indigenous people became minorities in their previously owned lands, in many cases forced to amass in government-controlled reservations, forced to speak the languages of the colonisers, embrace their education systems, and make a living in the socio-economic order newly defined by the colonial powers. Yet minorities are not only the indigenous people, but to be found everywhere in our societies where groups of people, be it native or immigrants, are differentiated by their race or ethnicity and where majority ethnic groups define the rules of the game.

This study was motivated by a particular feature that marks the condition of minorities: their voicelessness. 'Voicelessness' is a powerful metaphor that captures a multidimensional reality of suppression and deprivation. Three facets are worth examining:

1. Inability to represent oneself and speak on behalf of oneself;
2. Inability to produce knowledge and communicate it; *and*
3. Inability to have a say and participate in social, economic and political processes.

First, voicelessness is manifested as lack of agency in processes of social and cultural representation. Minorities are 'spoken on behalf of'. The representation of minorities, in particular indigenous people, in art, narrative, as well as social research has been done from an Eurocentric perspective aligned to "vocabulary, scholarship, imagery, doctrines, even colonial bureaucracies and colonial styles" (Said, 1978: 2). Their history was interpreted and written by those outside the group, infused with their own meanings, values, and perspectives. These representations of minority history, lifestyle, and culture may give an illusion of objectivity, yet in reality they communicate the values and ideas of those who produced them. For example, Lucassen et al. (1998) single out three labels assigned to the Romani minority throughout their whereabouts on the European continent: criminality,

marginality, and poverty. These labels are frames distorting the perception and understanding of the Romani travellers, and can be linked to broad themes and discourses, circulated and held high in certain historical times. They betray the underlying assumptions and projections about the status of lower classes, concretized in labels that evolved from their alleged criminality to marginality and poverty.

This bias can be identified in representations produced for many other minority cultures in amateur art, essays and travel narratives, as well as early-date quasi-scientific ethnographic accounts of indigenous people in the newly discovered lands. Romanticized accounts of the pure natural savage living in sheer simplicity and natural beauty in islands such as Tahiti (Geoffroy-Schneiter, 2005: 18) co-existed with the stories of the 'fierce Black' people without a soul that needed to be Christened in Africa. These views could be held equally by common people, respected personalities, authorities, and research circles. For example, in his "Observations on the Feeling of the Beautiful and Sublime", Immanuel Kant writes:

> "Mister Hume defies anyone to give him the example of a Black that would prove talent, and he states that, among the hundreds of thousands of Blacks taken away from their country, many of whom have been set free, never was one to be found to produce something great in Arts, sciences, or in any other discipline, while it is not rare to see whites from the plebs elicit the admiration of the world by the excellence of their gifts. These two human races seem as different in sensibility as they are in color. The cult of fetishes, highly honored among them, is maybe some kind of idolatry so measly that it seems to contradict the human nature. A bird feather, a cow horn, an oyster or any other common thing, given its being consecrated by a few words, becomes an object of veneration invoked in the oaths."
>
> - Kant, 1764, cited in Amselle, 2002: 133

From an anthropological standpoint, these accounts are just as many facets of the West's encounter with otherness. 'The other' and 'otherness' are concepts that mark the construction of a group's identity on virtue of real or imagined difference from the dominant group's identity (Staszak, 2008). Identifying a group as 'the other' dwells in reality on a negation of identity, a stark formulation of opposition and difference rather than acknowledgement of intrinsic group features. Defining 'the other' also implies an asymmetry in power relations: it is only the withholder of power that can impose its rationality and its values in constructing the identity of the other in opposition to their own (Ibid.).

Second, voicelessness stands for inability to produce and communicate knowledge using the codes, symbols, and tools pertaining to or aligned to a socio-cultural system, within and outside community borders. The capacity for voice can be limited by denying the resources needed to make voice possible, for instance systems of codes and significance such as language. By imposing different systems of thinking and meaning-making. By denying the

value and importance of the knowledge produced. And by impeding the distribution of the knowledge produced. One illustrative example of how voice can be suppressed at these levels is made of indigenous knowledge. These traditional knowledge systems cover all aspects of human life and the environment for a community sharing the same geographical space, and has been developed cumulatively, drawing on the experience of each generation and its transmission to the next ones (Grenier, 1998). To stay in existence, indigenous knowledge depends on the one hand on the preservation of community lifestyles, which give it relevance and validity and at the same time perpetuate it by embedding it in everyday and ritual practices. And on the other on systems of codes, symbols, and shared meanings through which it is expressed, manifested, and given shape. Colonial policies brought indigenous knowledge systems to extinction in many parts of the world by eroding the pillars that sustained it on all sides. The reasons for its existence were shattered by affecting indigenous people's livelihoods, through the proliferation of new socio-economic forms that required different kinds of knowledge and made old ones inapplicable. The imposition of new languages, systems of thinking and meaning-making and the gradual dissolution of the traditional ones deprived indigenous knowledge of the structure and tools necessary for giving it form. Finally, its legitimacy was denied by imposing a Western reference point for validity, by which indigenous knowledge forms were deemed simplistic and naïve, while Western knowledge became the only valid form of knowledge (Spivak, 1988). Scholarly literature brought to the forefront several valences of this complex process. For instance, Gayatri Spivak speaks about the "epistemic violence" exercised by the West on indigenous people, by imposing Western ways of thinking and knowing as *the* valid ones, lowering the value of indigenous knowledge as unscientific and naïve, and imposing Western socio-economic, educational and political systems (Spivak, 1988). Of value to the argument is also Arjun Appadurai's observation on the "terms of recognition" that define what types of knowledge and practice are valid and adequate in a society, and therefore may gain recognition and acceptance from its members (Appadurai, 2004). When seeking to understand how and why minority knowledge may be at risk, it is useful to take a holistic outlook that envisages how knowledge production and distribution is supported and conditioned on all sides by socio-cultural resources, the congruence to the social systems in which it is being produced and embedded, and the conventions by which it continues to hold validity and have relevance for a community and for the outside world.

Third, voicelessness manifests as exclusion from participation in the socio-economic, cultural, and political life. This perspective on voice is particularly poignant in development studies, embodied in the concepts of 'voice poverty' and 'social exclusion'. 'Voice poverty' refers to the failure to have a say and to make one's needs, interests, and views heard in matters that impact upon one's life (Tacchi, 2008). 'Social exclusion' refers to "the process through which individuals or groups are wholly or partially excluded from full participation in

the society in which they live" (EFILWC, 1995: 4). These complementary and partially overlapping concepts are particularly evocative for the position of minority ethnic groups. Voice poverty denounces invisibility, silence, denial of the right to express one's views and further to work towards the fulfilment of one's interests and needs as can be met by socio-economic processes. Social exclusion indicates more broadly the position of marginality of groups and individuals caused by a "rupture of social bonds", and its analysis requires a systemic and organic perspective that sees society as an organic whole (De Haan, 2001).

Minorities' voicelessness manifested as lack of agency in self-representation, lack of opportunities for expression and communication, and societal exclusion was the object of scholarly attention, and also included in the agenda of organisations concerned with international cooperation and development. In the academia, attention to these issues was raised by postcolonial studies. In 1985, postcolonial researcher Gayatri Spivak published a landmark article that condensed *the* question to be asked with respect to minority lack of voice in a concise title: "Can the subaltern speak?" (Spivak, 1988). 'Subalterns' encompass those that Antonio Gramsci called the 'subaltern class', people with unequal access to privileged social and economic goods in a society (Gramsci, 1978, in Gandhi, 1998). The approach of postcolonial studies is one of critique with the aim of awareness-raising, yet carried out principally by academics schooled in Western education and research circles. Important research was carried as well from within minority circles, especially in indigenous studies. Apart from the critiques of the universalist Western approaches to knowledge-building, indigenous studies contributed to re-instating the value of indigenous ways of thinking and knowing in research, and also contributed towards community-driven movements for self-determination and cultural assertion that were echoed in changes in policies in many of the countries where indigenous people live (Smith, 1999).

In the second half of the 20th century attention to the situation of minority ethnic groups began to take a prominent place in the agenda of transnational organisations concerned with international cooperation and development. At a first level, attention was directed towards the incredibly rich diversity of cultural forms, traditional knowledge and native languages that were at risk. UNESCO acted as one of the leading agencies driving attention towards the importance of native cultures for the heritage of humanity (see for instance UNESCO 1996, 2001, 2009). Second, practical steps were taken for ensuring equal rights and working towards social inclusion of minority groups. Standard-setting instruments were created by international development agencies (e.g. United Nations, 2007, 2011, 2012), and policy recommendations and new inclusive laws were issued at national or regional level (e.g. Council of Europe, 1995, 2000).

This study focused on a minority group deeply affected by lack of voice at the three levels outlined. The Roma are Europe's largest minority, and deemed to be the social segment

most affected by economic and social exclusion, negative stereotyping, stigmatization, and multiple discrimination (Goldston, 2010; Council of the European Union, 2008, 2009; European Commission, 2010a,b). For the European Roma, a pan-European movement for Romani cultural assertion and socio-economic inclusion emerged only in the past two decades, much later than similar waves set in motion by minority cultures around the world. Romani political activism and the work of non-governmental organisations contributed to significant changes in the policy and institutional infrastructure in many European countries in the past decades. Yet these campaigns and measures encountered very little success in changing the negative public opinion on the Roma and in bringing sizable benefits to those impoverished and marginalised among them. At the grassroots level, the Roma encounter the same levels of discrimination in schools and at work, are stigmatized by the public opinion, and persist in their social and informational isolation. Their views are not taken out in the public sphere, and were found to differ significantly from the ones of the Roma that allegedly represent them (Gay y Blasco, 2002).

This research paid particular attention to the situations of minority groups in socially isolated contexts such as rural and remote areas. The study stems from a preoccupation with the invisibility of these people, with the silence of the *grassroots* minority voices. It seeks to understand the underlying factors conditioning voicelessness, but more importantly to understand how can solutions to these issues be devised. It therefore positions the issue of voicelessness in a developmental disciplinary perspective concerned with identifying causes and conditions of voicelessness as a ladder step towards the formulation of solutions and strategies for voice recovery that can resonate in ampler positive social change. In this process, it focuses on the role that ICTs can play.

Technology for voice

The interplay between ICTs and minority knowledge production and communication is studied in ethnic minority media and indigenous media studies, with valuable insights from other areas such as ICTs for development (ICT4D), community informatics, and community media studies. This interdisciplinary literature contains descriptive knowledge, critical appraisal, as well as practical and action-oriented insights inclusive of methods, processes, and forms by which minorities can appropriate ICTs and employ them to serve their communication purposes.

In linking the potential of ICTs with the dimensions of voicelessness described, three broad streams of research can be identified: the inclusion agenda, the cultural agenda, and the transformative agenda. *The inclusion agenda* looks at the relation between ICTs and minority social inclusion/exclusion. Its central premise is that in the information society, social inclusion is becoming increasingly conditioned by access to and usage of ICTs. The extent

to which people can use computers and the Internet impacts on the possibilities opened for communication, access to information, civic participation, as well as employment opportunities, and the ability to enter new forms of social organisation and entertainment (Warschauer, 2003: 27-8). In this context, e-inclusion and social inclusion appear to be highly intertwined: "e-Inclusion is essentially about social inclusion in a knowledge society" (Kaplan, 2005: 5). By developing increased abilities to access, produce, and distribute knowledge through ICTs, people heighten their opportunities for equal participation in the social and economic spheres (Warschauer, 2003: 8-9; Kaplan, 2005). Access to information delivered through ICTs can connect minority members with the world at large and lower the levels of social and informational isolation. By being informed people can also become more aware of their rights and encouraged to pursue their fulfilment. Acquisition of digital literacy skills broadens people's perspectives by enabling them to compete on the labour market, and to produce digital content and deliver it in the public sphere of discourse.

The cultural agenda explores the role of ICTs in processes of cultural expression, revitalisation, and preservation, and for encoding and transmitting local knowledge. Design engaging with these issues can be oriented at producing artefacts such as digital archives (e.g. Christen, 2008; Denison et al., 2012), 3D reconstructions for embedding indigenous stories (e.g. Rodil et al., 2012), or networked digital spaces (Srinivasan 2006a,b). In turns these artefacts can enhance context-specific goals, for instance cultural preservation and intergenerational transmission among members of a minority community (e.g. Verran et al., 2006), connecting members that once had been part of a culture (e.g. Srinivasan 2006a,b), and recovery of ties with a community's ancestral past and safe keeping of community memory (e.g. Christen, 2008). In this research stream, critical theory discourses on communication technology and its interplay with knowledge production and communication practices become particularly relevant. It is being questioned if ICTs, as representational technologies, are adequate tools for working with local knowledge, which includes performative and tacit dimensions (Verran and Christie, 2007). Moreover, work with ICTs and local knowledge raises issues with respect to local ownership of knowledge and clashes between the worldviews and epistemologies that frame on the one hand technology, and on the other local knowledge systems (Christie, 2004, 2005; van der Velden, 2010).

The transformative agenda looks at how ICTs can enhance processes of empowerment and social change and adjust the balance of power in relations with authorities or majority populations. Inclusion and empowerment may be thought to build on similar processes: access to information and opportunities for expression and communication are important drivers in both. Yet, as agendas for ICT appropriation and usage, they build on different perspectives and consequently single out different concerns for research: inclusion discourses are formulated from a stance that gives prominence to societal integration, becoming part of an organic whole, and aligning rights and opportunities for all citizens.

Empowerment, on the other hand, is about pushing away the limits of deprivation and marginalisation (Drydyk, 2008) and building internal individual and group capacity for taking hold of opportunities in society. If access and literacy are dominant topics in inclusion agendas, topics such as social change and the interplay of knowledge and power are prevalent in research on ICTs for empowerment. Important relations can be drawn as well between culture and development (UNESCO, 1996; Fukuda-Parr, 2000) or cultural assertion and empowerment. For instance, Shilton and Srinivasan (2007) speak of "empowered narratives" and "empowered preservation" when local people are involved in processes by which local content is produced, selected and archived according to community-driven taxonomies.

The key dimension for linking these three streams and a fundamental concern in literatures engaging with these issues is represented by local people's control over processes and practices mediated by ICTs. If the cultivation of voice through ICTs is to be effective for inclusion, cultural, or transformative agendas, this depends to a large extent on the degree to which people engage directly with ICTs and have power over media production and distribution.

The *processes* by which communities can appropriate and use ICTs to serve self-designed goals were studied in particular by ethnic minority media, indigenous media and community media studies. All three take a focused interest in "the way local populations create media texts, practices, and institutions to serve their distinctive needs and goals" (Howley, 2010: 3), with a focus on minority and indigenous contexts respectively for the first two. ICTs appropriation and usage can happen based on community initiative and be entirely in its control, or it can involve the agency of an external party, for instance in technology interventions with a developmental agenda. The focus in this research falls in particular on interventions subsidised by developmental agencies and donors, in which new technology is introduced in minority contexts.

1.2 Research Question and Objectives

This research engages with the study of voice and voicelessness in minority communities, and investigates the role of ICTs in supporting *collective* processes of cultural expression, knowledge production, and communication. Its driving question is:

> *Under what conditions can ICTs support minority collective expression, knowledge production, and communication practices in ways that respond to local needs and goals and reflect a group's cultural discourse and worldview?*

This question was fine-tuned in three research objectives:

1. Understand and conceptualize the interplay between communication technology (traditional and digital) and local expression, knowledge production, and communication practices in minority communities.
2. Examine the conditions by which ICTs can be appropriated for meeting community-defined communication interests and goals.
3. Devise means for coalescing this knowledge into the community-driven design of ICT artefacts and ICT-enhanced processes.

These objectives reflect a balanced preoccupation with understanding phenomena and processes happening in a particular context, and with using this knowledge for conceiving and developing communication solutions for the same or akin contexts. They blend an analytical and a design perspective. The first objective is concerned with unveiling the nexus among communication technology and processes of knowledge production and communication naturally occurring in a local context. The second objective deals with analysing the response to *newly introduced* technology, and is meant to single out conditions for locally-relevant appropriation of ICTs. The third objective builds on the responses provided by investigating the first two, and further explores the valid ways of using this knowledge for the design of ICT artefacts and communication processes that respond adequately to a community's needs and goals.

1.3 Approach

1.3.1 Disciplinary positioning

The study of the interplay between communication technologies and minority knowledge production and communication requires an interdisciplinary outlook, as well as a take of perspective. In this research, a developmental perspective was used as the main vector for the investigation: the core object of inquiry (the interplay between minority communication and ICTs) was contextualized in a broader concern with how communication in general and communication technologies in particular can foster the development of minority communities. The research was oriented towards the delivery of insights, tools, and conceptualisations of processes that can support voice recovery as a step towards broader communal development. As such, the study is positioned in the disciplinary field of Information and Communication Technology for Development (ICT4D), which explores the use of ICTs for fostering socio-economic and cultural development, with application in developing, marginalised, and poor contexts.

ICT4D research is driven by a moral concern (Heeks, 2009; Unwin, 2009) which explicates its pronounced practical orientation: ICT4D is focused on action-taking for creating the conditions under which the livelihoods of poor and marginalised people can be improved (Heeks, 2006, 2009; Unwin 2009).

> "Unlike IT and ICT, where the main focus is on what is and what can be achieved, ICT4D is about what should be done and how we should do it. ICT4D therefore has a profoundly moral agenda. It is not primarily about the technologies themselves, but is instead concerned with how they can be used to enable the empowerment of poor and marginalised communities."
>
> - Unwin, 2009: 33

Within the ICT4D field, the approach of this study resonates most closely with the social embeddedness discourses, which looks at development as an organic process of growth in which innovation (in particular technological innovation) has to be absorbed in a socio-cultural context by weaving with and being integrated into existing forms (Avgerou, 2009). Social embeddedness discourses are informed by theoretical perspectives drawing on social constructionism and situated research (Avgerou, 2007, 2008, 2009). Technology is seen as a product of the social, shaped by social values, norms, and meanings during its design and production as well as during usage (Pinch and Bijker, 2012; Weick, 1990). ICT innovation is studied as a "locally (and) socially constructed course of action" (Avgerou, 2007: 7). In this study, the theoretical framework for studying communication technologies is built by drawing on two theoretical traditions: the social constructionism body of theory in sociological studies and sociocultural theory in social psychology studies, exposed in more detail in the forthcoming sub-section.

Apart from ICT4D, the study used insights from connected disciplines at the overlap of development, minority, community and ICT studies, and in particular: development communication, community informatics, and community media studies scholarship.

Development communication can be defined broadly as the communication science branch preoccupied with understanding how communication strategies, practices, and tools can transform life conditions (Howley 2010: 181). Its beginnings as well as its evolution are inextricably linked to research and practice in underdeveloped nations and regions, therefore it can also be defined as "the application of communication strategies and principles in the developing world" (Waisboard, 2001). This study found particularly relevant the participatory approach to development communication, which centres the development discourse on the people, rather than the media, and places importance on acknowledging local needs and the involvement of the people in development programs, alongside training, informing and motivating them (Servaes, 1995; Waisboard, 2001). This includes increased sensitivity to local cultural factors, as well as new methodologies for adequately assessing the needs of

the populations that directly benefit from development programs. Participatory and action research approaches are deemed to be the most appropriate for conducting research for development.

Community informatics is an emerging research and practice area concerned with the study of ICT uses in community settings from a double theoretical-practical lens (Stillman and Linger, 2009). An early definition of the field was given by one if its key proponents, Michael Gurstein:

> "Community Informatics pays attention to physical communities and the design and implementation of technologies and applications, which enhance and promote their objectives. CI begins with ICT, as providing resources and tools that communities and their members can use for local economic, cultural and civic development, and community health and environmental initiatives among others."
>
> - Gurstein, 2000: 2

The evolution of the community informatics research field needs to be seen in relation to its double concern with theory and practice (Gurstein, 2008; Stillman and Linger, 2009), whereby theoretical advances are fuelled and shaped by the issues, doubts and questions encountered in the practical implementation of community informatics projects.

Community media studies share the concern of the media studies research field with understanding "how communication technologies and communicative forms and practices affect community structures, social and economic relations, and political processes" (Howley, 2010: 3). At the same time, community media studies take a more focused interest in exploring "the way local populations create media texts, practices, and institutions to serve their distinctive needs and goals" (Ibid.). In the past, the term ' community media' was used as well to indicate targeted media campaigns for groups with special needs and interests or ethnic minorities (Berrigan, 1979: 7). However, the contemporary focus of inquiry of community media studies is on how local communities or non-expert citizens manage the production and distribution of media through traditional broadcasting channels such as television and radio, and digital platforms such as the Internet. The switch from communities as recipients to producers and distributors of media content is what makes the core object of community media studies.

> "Community media are adaptations of media for use by the community, for whatever purposes the community decides. They are media to which members of the community have access, for information, education, entertainment, when they want access. They are media in which the community participates as planners, producers, performers. They are the means of expression of the community, rather than for the community. Community communications describe an exchange of views and news, not a transmission from one source to another."
>
> - Berrigan, 1979: 8

Community media for development stands for the junction between community media and development communication, with the understanding that by being involved directly in communication processes, local communities in marginalised and underserved contexts can work toward advancing development from within (Berrigan, 1979). Given its focus on communities and development, this stream provided valuable insights that informed the advancement of the present study.

1.3.2 Theoretical outlook

The theoretical perspective employed in this study draws jointly on two theoretical traditions: social constructionism and sociocultural theory. The two have in common the tenet that communication technology is socially embedded. Yet their contributions to defining the theoretical perspective of this study are to be regarded as complementary, rather than overlapping. Complementarity is given by the two disciplinary traditions to which the two theories pertain. Social constructionism employs an analytical angle rooted in sociological studies and focuses on the interplay between technology design and usage on the one hand, and the social sphere, inclusive of social systems, networks, and processes, on the other. Sociocultural theory (also termed cultural-historical theory) is a social psychology approach, and its main concern is with studying mind and human action in the interplay between individuals and the socio-cultural context, focusing on the mediating role of human-made tools (Wertsch, 1998).

The insights brought jointly by these two theories were used to shed light on the factors to take into account when ICTs are introduced in a new context of use, and the legitimate ways of studying them. The definition of ICTs and their role in supporting human action places in evidence their social construction (Bijker et al., 2012): ICTs are thought to encompass the devices as well as the practices they support (Lievrouw and Livingstone, 2006), defined in a dynamic way in each new context of usage (Suchman, 2007). The usage made of ICTs and the practices they may enable in new contexts cannot be therefore anticipated (Idem). Another crucial aspect regards the issue of technology neutrality. Social constructionists take ICTs to be constructs invested with values, norms, and meanings that reflect dominant discourses, practices, and standards vehiculated and accepted in a socio-cultural context (Bijker et al., 2012). These values and norms are embedded in their design and may pass unobserved, but are prone to influence and guide behaviour by suggesting the adequacy of specific usage patterns (Feenberg, 1999; Latour, 1992).

An insight by sociocultural theory regards the study of ICT usage. Sociocultural theorists argue that the usage of ICTs needs to be approached as a whole inclusive of the agent, the tool, and the activity being carried out, what Wertsch calls the “agent-acting-with-mediational-means”, a notion hinting at the inseparability between an agent and the tools

that enable the activities s/he is conducting (Wertsch et al., 1993; Wertsch, 1998: 26-7). In being employed in an activity, technology is bound to affect it qualitatively, yet it is impossible to single out the weigh of its impact. This view can be illustrated by the way language affects our way of thinking. Just as language serves to render and order human thinking into sense-making units, material artefacts support human activity and in so doing they drive and direct it (Erstad and Wertsch, 2008: 26). It is as difficult to separate an activity from its mediational means (Wertsch, 1998), as it is to understand how would verbal manifestations of human beings make sense without the mediation of language. Therefore, the study of ICTs cannot be done by separating the tool and the agent, like in functional analysis. The study focuses on the whole composed by the agent, the tool, and the action mediated. In sociocultural analysis, the core unit of analysis is mediated action or the activity supported by the employment of technology (Wertsch et al., 1993; Wertsch, 1998).

1.3.3 Conceptual constructs

The conceptual fodder for the study is made of a dynamic interplay between *voice* as capacity, process, and product, and *ICT* as tool, enabler and capacitor, applied to the situation of minority communities. *Empowerment* is a feature characterizing this dynamic and evolving interplay when its outcomes indicate a positive change in the dimensions of voice or in its agents. Each of these concepts is charged with significance gathered through employ in various theoretical outlooks and disciplinary strands. Below, each construct is defined as understood and approached in this study.

Minority community

This study covers the appropriation and use of ICTs for cultural expression and communication in *minority communities*. The constructs ‘community’ and ‘minority culture’ serve to properly delimit the object and application area of this research. With respect to minority cultures, the bulk of definitions in the sociology and minority studies literatures rely on a relational perspective, distinguishing minority cultures with respect to opposition to or difference from majority cultures. For instance:

> “We may define a minority as a group of people who, because of their physical or cultural characteristics, are singled out from the others in the society in which they live for differential and unequal treatment, and who therefore regard themselves as objects of collective discrimination. The existence of a minority in a society implies the existence of a corresponding dominant group enjoying higher social status and greater privileges.”
>
> - Wirth, 1945: 347, quoted in Meyers, 1984: 6

The accent placed on defining minorities with respect to their relation with majority populations was critiqued for being blind to determinant features of minorities such as their historical, socio-cultural, and value systems (Verkuyten, 2005: 120). To do justice to literature approaches while avoiding the risk of elusiveness, the definition of minorities employed in the present study bridges a relational and a group-specific characterization. Minorities are taken to be ethnic groups whose ancestry, history, and culture differentiates them from the social group that "has preeminent authority to function both as guardians and sustainers of the controlling value system, and as prime allocators of rewards in the society" (Schermerhorn 1996: 17). Their most important features are:

- Possessing a group-specific history, ancestry, and culture, which they may strive to safe keep while being under constant pressure to assimilate into the majority culture (Verkuyten, 2005: 120); *and*
- Lack of power and reduced scope for action in social, economic, and political processes, which can be complemented by marginalisation and oppressive attitudes and/or measures from the majority culture members or political delegates (Meyers, 1984: 7).

With respect to the 'community' construct, this study focuses on geographically situated groups of people with a common ethnic origin: people that inhabit the same space, share a common history and ancestry, and comply to collectively accepted rites, norms and customs. This approach resonates with Tönnies' (2002) definition of *Gemeinschaft* (community) as different from *Gesellschaft* (society). According to Tönnies, Gemeinschaften are associations characterized by collective selves, or what Tönnies calls "unity of will". Members are related by very strong bonds, abide by common values and beliefs, and conduct their lives according to collectively accepted rules. This unity of ancestry, customs, and traditions in a collective corpus is an essential feature of the groups included in this research. The most evident instantiation of this take on 'community' are rural communities. There can be also, however, minority groups living in urban areas that still maintain a collective identity, equally relevant to this study.

For a more operational definition of 'community', Joël de Rosnay's approach is employed, by which a community is at the same time a network and a system (Casalegno, 2005: 31-32). As a network, it is composed of knots or agents that communicate with one another, exchanging information and consequently regulating reciprocally their behaviour. As a system, a community is composed of interdependent elements which function together according to a particular dynamics given by a set of "reciprocally accepted constraints": rules, customs, laws, and habits. Another factor of cohesion for communities is, in de Rosnay's view, given by a shared identity of tradition, language, and ideology (p. 32).

Drawing on the above, this study defines minority communities as groups of people who:

- inhabit a shared geographical area, have a common ethnic origin and history, and abide by collectively accepted norms, rules, and customs, *and*
- have been historically or at present part of socio-political formations controlled by another ethnic group, with pre-eminence to function as socio-political authorities.

An important feature of minority communities stands in their capacity to maintain a group-specific culture. Drawing on Jean Baudrillard's term, they are 'singularities', instances of social groups that elude change, who do not follow the universal rules of the game, but continue to function based on intrinsic group norms (Casalegno, 2005: 108-109).

ICTs

ICTs can be defined as:

> "(…) all those technologies that enable the handling of information and facilitate different forms of communication among human actors, between human beings and electronic systems, and among electronic systems."
>
> - Hamelink, 1997: 3

This definition is useful for classificatory purposes, as it provides clear criteria for identifying those technologies that can be labelled as ICTs in relation to human agents as well as electronic systems. However, for the purpose of this study it is necessary to have an understanding of ICTs that can shed light on the way they impact upon and are influenced in turns by socio-cultural factors, so that their employ in new cultural contexts can be duly studied. Drawing jointly on social constructionism (Bijker et al., 2012) and on sociocultural/cultural-historical theory (Cole, 1995; Rogoff, 1990, 2003; Wertsch 1994, 1998, 2002), ICTs are seen as cultural tools, instruments or mediational means created in a socio-cultural system, shaped, refined and transmitted intergenerationally. An important feature of ICTs is their instrumentality characterized by two features:

1. Instrumentality is defined by socio-cultural factors and not only by functionality. The capacity of technology to mediate human activities reflects systems of values and codes of meaning attribution privileged in a socio-cultural system, and evolving historically.
2. ICTs affect qualitatively the activity that they mediate. Usage of ICTs and other man-made technology presupposes an "irreducible tension" between the tools, the agent, and the context of usage, in which it is hardly possible to distinguish to what extent each impacts on the activity being performed (Wertsch et al., 1993; Wertsch, 1998: 26-7).

Voice

To properly position the notion of 'voice' in relation to minority cultures and the potential of ICTs, it is necessary to integrate, yet move forward as well from the base definition of the concept in communication sciences. In communication sciences, the concept can be broken down in two components: the human capacity to utter (also termed 'agency') and the linguistic function (also termed 'discourse'), to which a third one, the audience, can be added (Mitra and Watts, 2002). This study keeps to this three-layered composition of the construct composed of the agency, the discursive, and the audience levels. Yet it acknowledges that different interpretations can be assigned to each layer going beyond the mere exercise of verbal capacity, and re-works the interpretation of the construct from a developmental standpoint, which has more profound implications for the status of minority cultures (see Fig. 1.1). In a developmental perspective, 'voice' can stand for emancipation, action-taking, and agency in pursuing self-designed goals (Tacchi, 2010).

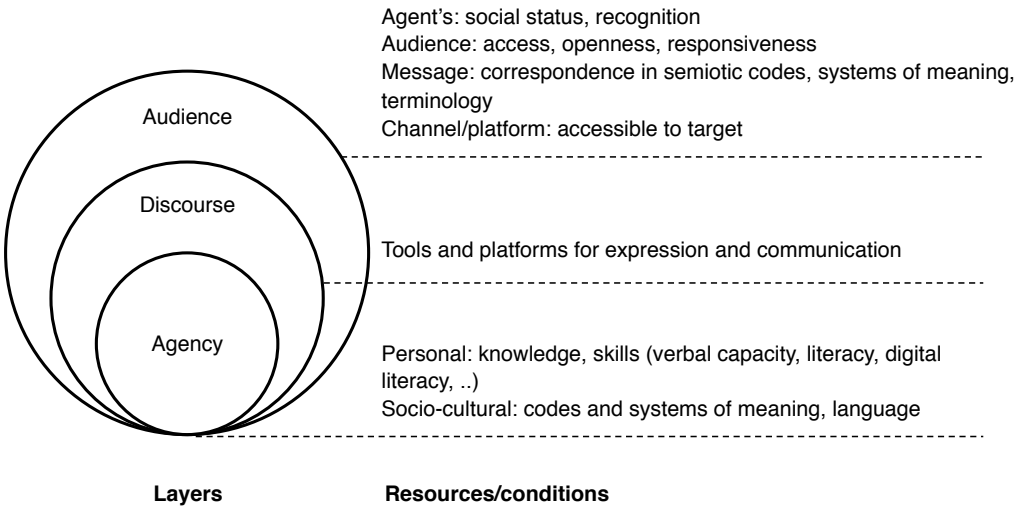

Figure 1.1. The three-layered concept of voice used in this study and resources/conditions for each. Source: author.

The 'agency' dimension indicates the capacity for expression and communication in accordance with the agent's inner drives, values, aims, and goals (Sen, 1985, 1999). The discursive layer refers to the exercise of voice, which can take the form of knowledge production, as well as speaking out about one's needs, values, and goals, and participating in the sphere of public discourse. The audience layer indicates the dialogic nature of voice (Watts, 2001), but points also to the importance of being listened to and having an impact (Tacchi, 2010).

For voice to take effect at each layer, certain resources are needed. At the agency level,

these include personal knowledge and skills (e.g. literacy) as well as socio-cultural resources such as language (Couldry, 2010). At the discursive layer, there is a need for expression and communication tools and platforms (e.g. computer, the Internet). At the audience level, resources possessed by the agent (e.g. social status, Couldry, 2010) need to meet conditions posed by the recipient (e.g. responsiveness), while the message needs to be encoded attaining to semiotic systems accessible to both.

Empowerment

In this study, 'empowerment' is used in relation to the 'voice' construct, and refers to the process by which the capacity, exercise, and impact of voice as expounded above are boosted, enlarged, and enforced. Amartya Sen's approach can shed more light on the employ of the concept. For Sen, empowerment refers to the expansion of agency (Ibrahim and Alkire, 2007). 'Agency' can be defined as "what a person is free to do and achieve in pursuit of whatever goals or values he or she regards as important" (Sen, 1985: 203). 'Empowering voice' refers in this research to the process by which the attributes of voice are reinforced and obstacles to its manifestation are removed, so that the agent is enabled and free to exercise it in accordance with her/his own values, drives, and goals. The agent is central in this process. Voice empowerment cannot be done from the outside. What can be done is to contribute to creating the right conditions or assist the agent in creating the conditions that open up opportunities for voice. For instance, conditions can be created by enhancing the development of abilities for the exercise of voice (such as digital literacy), by providing tools for shaping and embedding a discourse (such as access to Internet), or by producing a communication platform for reaching a specific audience (such as a community website).

1.3.4 Methodological approach

The main characteristic of this study's methodological approach is the alternation between knowledge generation and field action. This blend was instantiated in an emergent research design (Patton, 2002), which progressed in cycles of knowledge-building through data generation and analysis *and* action-taking on the premises of two selected communities. This dynamic approach to the research design was rendered effective by employing two complementary methodological packages: participatory action research (PAR) for driving a community-based communication intervention, and grounded theory methodology (GTM) for building the apparatus by which this intervention could yield usable research data.

The applied research project consisted in a participatory content production initiative involving two Romani communities in rural Romania, oriented towards the development of a

ICT solution that met self-defined community communication goals. The intervention was designed based on the PAR variation expounded in the writings of Fals-Borda, Rahman, and Tandon (Fals-Borda 1988, 2001; Fals-Borda and Rahman, 1991; Tandon, 2002a,b). This PAR variation was forged through practical community work with marginalised groups and illiterate rural workers in South-America and India. It has grown out of a concern with the disempowered condition of these groups, and aimed to provide practical means for changing the balance of power in their favour. This concern is reflected in three core participatory principles: research as experience; co-action and co-research; and research as open-ended endeavour. *First*, research is conducted as an experiential process, mingling theory and practice, and bringing together the lived experience of the communities involved as well as the experience of the research team schooled in the academia. Research builds on knowledge drawing on lived experience, and also aims to produce knowledge that can be employed experientially and ultimately can lead to the empowerment of the groups involved by increasing their confidence, changing perceptions with respect to their own capacities, and endowing them with practical skills for bringing positive change in their lives. *Second*, the principles of co-action and co-research imply at once that:

- Research is conducted as partnership between local communities and research teams, *and that*
- Research as knowledge pursuit is alternated with field action in cycles.

In this vision, researchers and research participants become co-researchers, equal bearers of expertise employed and equally benefitting from the outcomes of the research conducted. *Third*, research is conducted as open-ended endeavour, fuelled by a mutual commitment to the joint project as agreed by the research team and the community members. Commitment to partnership, rather than hard bound plans and associated deadlines is what drives the research process and keeps it on track. The inherent flexibility in the PAR process allows the practical methodological steps to be designed on the field, and be gradually refined and adapted through application. This is made possible by conceiving research not as a timeline, but as a cycle that alternates action with analysis and reflection on its results. These three methodological principles were applied in the two field studies for designing on-site and implementing a context-specific participatory content production experience. The constant observation of this process provided a rich data corpus that was used for meeting the three research objectives of this study and building the research outcomes.

This data corpus was generated and interpreted following the principles of grounded theory methodology, a methodological package for inductive theory generation. GTM includes flexible, yet very precise procedures for the generation, coding, and analysis of data for producing a theory that adequately reflects the concerns of the people involved. The original usage of GTM in this study resides in the fact that it was employed to produce not only

conceptual, but also methodological contributions. As will be expounded in greater detail in the 'Research Design' chapter, employing GTM for producing methodology rather than theory implies that the analysis of 'what is' is further used for answering a 'how to' question. This process did not imply deviation from the GTM procedural outline, but rather a take of perspective, oriented toward understanding in what conditions certain combinations of factors and conditions are likely to favour the emergence of certain effects.

1.4 Roadmap

The structure of the argument in the remainder of this monograph is shaped across 11 chapters divided in five parts (Table 1.1):

1 Research approach
2 Fieldwork
3 Research outcomes
4 Related work and discussion
5 Critical overview and future work

The argumentation flow and structure reflects the approach to conducting this research, having as main principles grounded investigation and inductive thinking. In particular, it evidences that this study was not driven by a conceptual framework pre-defined before engaging with fieldwork. The literature provided starters, sensitising concepts (Patton, 2002), and insights before and during the fieldwork, yet no unified conceptual framework was used to guide the investigation from the onset. In line with a grounded theory methodology approach, an extensive survey of the literature was done in the last stages of fieldwork as required by emerging outcomes. The literature was scoped in relation to the need to position, shape, and round up the research results. To reflect this approach, the literature survey is introduced in part *4. Related work and discussion.* The purpose of this part is to present the body of literature relevant for this research as asked by its emerging outcomes (*Chapter 9*), anticipating a discussion on how the study outcomes mark advancement beyond state of the art research (*Chapter 10*).

An overview of each part and associated chapters is further provided below.

1 Research approach

The first part lays out the methodological framework driving the study and the context in which it was applied. The two are tightly related: the research design was built for and shaped by the context of application.

Chapter 2 expounds the research design from general higher-level principles down to

practical implementation details. It argues that the methodological package employed, inclusive of an overarching participatory inquiry paradigm, grounded theory methodology, and participatory action research, is particularly adapt for research with minority cultures, especially when the aim is to produce methodological and design outcomes. It details the approach to designing field action through the employ of PAR principles, and the design of the research through GTM procedures. The chapter describes how on the basis of the two methodological pillars, a participatory content production intervention was designed and implemented in two Romani communities in Romania. The multiple data generation instruments used are expounded, without entering for the time being into the exposition of sampling and administration protocols, which are explained separately in the chapters describing each field study. An important place is given to ethical issues. The approach to meeting ethical constraints posed by research in minority communities is laid out, making reference to the literature on ethics in communities, participatory research, and minority research, and against the practical factors met while implementing the project in each of the two locations.

Chapter 3 describes the context of this research, including the population selected for the study and the two communities involved in the participatory project. The Roma are presented as a minority culture, yet one of a particular type, as they are a stateless nation, dispersed in heterogeneous groups across Asia, Europe, Australia, and the Americas. The chapter outlines the multiple issues that afflict the Romani population in Europe, ranging from social exclusion to stigmatization and voicelessness. The last two chapter sections introduce the two communities involved, located in rural south-Eastern Romania, and outlines socio-economic and cultural features.

Fieldwork

The two chapters herein expound the fieldwork process in each of the two field sites, centred on the design, implementation, and assessment of a participatory content production initiative. Fieldwork was advanced based on a cyclical pattern in which field action, data generation, and data analysis were alternated. The results of data analysis were used in waves for informing the design of the content production initiative, as well as the design of the tools and protocols for data generation. To render clear the emergent quality of the research carried out on the field, the fieldwork process is exposed chronologically: for each stage of the initiative, methods are described, followed by preliminary results and consideration of how these results further shaped the design of the stages to follow.

Chapter 4 describes the fieldwork in the village of Podoleni, with a community of assimilated Roma. Fieldwork activities and the instruments for data generation are described across the four stages of the initiative: 1) Community needs assessment and vision definition; 2) Content production; 3) Website design and development; and 4) Delivery and maintenance.

Chapter 5 narrates the fieldwork process in the village of Munteni, involving a community of traditional Kalderash Gypsies (the name that they proudly prefer over the politically correct 'Roma' label). In this location, the project was designed on the same participatory principles, and moreover integrating insights from the first field study, commenced 10 months before. The chapter examines field activities and data generation across five stages: 1) Exploration; 2) Activity design; 3) Content production; 4) Website design and development; and 5) Evaluation.

Research outcomes

The chapters in this third part describe the research outcomes produced as they emerged from the grounded investigation. Chapter 6 describes CoRA, a methodological framework for the design, implementation and evaluation of participatory communication interventions in minority communities, or, by extension, in communities facing social or informational isolation.

Chapter 7 describes a design format for web-based communication and further illustrates how it was declined for producing two websites for the communities involved in the research.

Chapter 8 presents a series of conceptual contributions around the design and implementation of communication interventions in local communities, focusing on the role of community involvement and on the process of running participatory content production. The contributions are presented as propositions or hypotheses accompanied by methodological implications and empirical insights from the two field studies.

Related work and discussion

This part positions the research outcomes in the broader scholarship on the interplay between minority communication and ICTs from a developmental perspective. Second, it describes the advancement beyond the state of the art brought by this study.

Chapter 9 overviews the related work, including theoretical perspectives on the relation between voice, technology, and development in minority contexts, as well as established methods and processes for sustaining voice empowerment in community settings.

Chapter 10 discusses how the contributions of this research relate to or counter other positions in the existing developmental literature surveyed, and pinpoint the advancements to knowledge brought by the research.

Critical overview and future work

This final part includes a summary of the research contributions from a critical perspective and maps future directions for research that can either build upon these results or counter some of their limitations. Chapter 11 sums up the contributions of this study and points to the limits of the research. Chapter 12 sums up the study approach in relation to its outcomes,

and closes by mapping the open spots in research on minority communication and ICTs left by this study, as well as questions newly raised by its results.

Table 1.1. Research design and thesis outline**.**

Research question		
Under what conditions can ICTs support minority collective expression, knowledge production, and communication practices in ways that respond to local needs and goals and reflect a group's cultural discourse and worldview?		
Research objectives		
Understand and conceptualize the interplay between communication technology (traditional and digital) *and* local expression, knowledge production, and communication practices.	Examine the conditions by which ICTs can be appropriated for meeting community-defined communication interests and goals.	Devise means for coalescing this knowledge into the community-driven design of ICT artefacts and ICT-enhanced processes.

↓

Methodology	**Ch. 2**
Framework: participatory action research and grounded theory methodology *Approach:* community-based intervention *Data generation:* multi-method approach (emergent interviews, participant observation, semi-structured interviews, cultural probes, focus groups)	
Research context	**Ch. 3**
Minority cultures. The Romani minority. Two rural Romani communities in Romania.	
Fieldwork	**Chs. 4, 5**
A participatory content production intervention with two rural Romani communities oriented towards the participatory design of a locally-relevant ICT solution.	
Research outcomes	**Chs. 6, 7, 8**
Methodological outcome: Context-Responsive Action, a methodological framework for the design, implementation and evaluation of community media initiatives. *Conceptual outcomes:* an examination of the conditions for community involvement in the design of technology-enhanced expression and communication processes and artefacts. *Design outcomes:* a web design format; two community websites.	
Literature positioning	**Ch. 9**
Core literature: Information and Communication Technologies for Development *Relevant literatures:* community/ethnic minority/indigenous media studies, development communication, community informatics	
Discussion (contribution to knowledge)	**Ch. 10**

PART I. RESEARCH APPROACH

2 Research Design

"The participatory worldview allows us as human persons to know that we are part of the whole rather than separated as mind over and against matter, or placed here in the relatively separate creation of a transcendent god. It allows us to join with fellow humans in collaborative forms of inquiry. It places us back in relation with the living world."

- Heron and Reason, 1997: 275

2.1 Synopsis

The research design has been crafted under the constraints and possibilities raised by three sets of concerns: 1) the nature of the object of inquiry (minority cultures and ICTs), 2) the aim to deliver methodological contributions as the main research outcomes, and 3) the aim to produce valid and rigorous contributions in academic standards without precluding their applicability in practice. The considerations around these three points determined the defining features of the research design:

- The emergent quality of the inquiry;
- The use of a participatory methodology for informing the design of the field studies;
- The constant alternation between data generation, analysis and field action; and
- A grounded approach to building conceptual and methodological contributions.

As an instance of an emergent research design (Patton, 2002: 44), this study evolved throughout fieldwork driven by a limited array of starters – a clear focus of the inquiry, a set of sensitising concepts (Idem: 278), and a methodological package based on inductive reasoning which laid out the broad strategy for fieldwork rather than providing hard bound steps to follow. The methodological framework combined tenets of the participatory inquiry paradigm, grounded theory methodology (GTM), and participatory action research (PAR). The participatory inquiry paradigm provided the higher-level principles that shaped the perspective and soundness criteria for the research. The core participatory principles embraced are:

- At ontological level, the co-created nature of known reality, in interaction between the agent and the object of knowledge;
- At epistemological level, the fact that knowledge is emerging from participation, and the validation of local forms of knowledge and knowing;
- At axiological level, the value of research as a transformative practice, producing

actionable knowledge that serves scientific progress as well as practical benefits for people involved; *and*

- At methodological level, framing the relation with research participants in terms of co-research and co-operation.

GTM, a methodological package for inductive theory generation, was used as an overarching frame for the research design, informed by its two key methodological principles: the constant comparative method and theoretical sampling. GTM delivered the guidelines and procedures for shaping:

- The research question and the research objectives;
- The criteria for the selection and relating of the two research cases;
- The data generation and analysis strategy; *and*
- The main criteria for ensuring reliability and transferability for the study outcomes.

PAR informed the applied research, a technology intervention carried out with two Romani communities in rural Romania, focused on the production of local content. The PAR variant used draws on the liberationist form advocated by Fals-Borda, Rahman, and Tandon (Fals-Borda 1988, 1991, 2001; Fals-Borda and Rahman, 1991; Tandon, 2002a,b), employed in working with disempowered, illiterate, and oppressed communities in South-America and India. This variant provided three PAR principles that framed the design of the participatory project with the Roma: 1) research as experience, 2) co-action blended with co-research, and 3) research as open-ended endeavour, guided by a mutual commitment between the researcher and the local people. The content production method was localized by blending the PAR cycle Plan-Act-Observe-Reflect (Kemmis and McTaggart, 2005; Hearn et al., 2009) with a content creation model based on inquiry learning tenets – The Inquiry Cycle (Bruce, 2002; Bruce and Bishop, 2008).

The selection of the two communities involved in the study was done based on theoretical considerations derived from case study research, GTM, and participatory research literatures, twinned by practical considerations with respect to access and shared language. The Romani minority was selected as an instance of a minority culture characterized jointly by a specific cultural system and historical and present-day marginalisation by majority populations. The determinant criteria for choosing the first community were practical (access and language) and derived from participatory research (capacity of the project to respond to a local need). The first field study served to highlight the contextual conditions that impacted on the expected research outcomes, and were further used as pointers in selecting the second field study. The first community involved is part of the assimilated Roma, characterized by strong group bonding, rural setting, increased poverty levels, and low literacy (literacy as skill, though little practiced). The second community is made of traditional Roma of the Kalderash group, living in a rural area, semi-nomadic, with high poverty levels

and largely illiterate or semi-literate (especially women).

The data generation strategy in both sites was characterized by emergence, evolution, contextual fit, and cyclic iteration with data analysis. Data generation was done continuously throughout the fieldwork and alternated in cycles with data coding and analysis following GTM principles. It made use of multiple instruments, which were selected based on their capacity to yield reliable data considering the type of participants and contextual requirements. The instruments used were: emergent interviews, participant observation, semi-structured interviews, focus groups, and cultural probes.

The strategy for data analysis was defined for reaching two objectives: 1) to inform the design and adaptation of the project against field requirements; and 2) to inform the development of conceptual and methodological contributions (the expected research outcomes). For the first, data was analysed at substantive level every four to seven field visits, and its results were fed in the design or re-design of the project. For the second, data were coded, processed and interpreted based on GTM procedures along three stages: open coding, selective coding, and theoretical coding.

The ethical approach employed in working with the two communities was informed by insights from literatures on ethics in participatory community-based research and indigenous research, interpreted and shaped in interaction with members during the progress of the fieldwork. The approach was driven by a concern with developing shared understandings on the research project conducted and the benefits derived from it on both sides, and shared principles for conducting it. Two ethical instruments were employed: 1) a community agreement and 2) an individual consent form with separate entries for research agreement and agreement for publishing stories and testimonials furnished by individual participants.

2.2 Rationale

The main principles for the research design were developed in the exploratory phase of this study, based on insights derived from a literature survey and interviews conducted with domain expert researchers. The aim was to shape the research in response to three aspects:

- The nature of the object of inquiry, made of the interplay between ICTs and minority cultures;
- The goal to deliver design and methodological contributions as the main research outcomes; *and*
- The aim to produce on the one hand valid and rigorous outcomes in academic standards, and on the other practical and applicable contributions for the chosen

target population, starting from the very communities involved in the applied studies.

Considerations around these three points were mapped through a survey of the literature on critical theory, indigenous research, participatory research, qualitative research methodology, and philosophy of social research. Interviews were conducted with researchers and practitioners in the fields of community-based participatory research (n=2), community media (n=4), and anthropology (n=1). The interview guides were designed to provide practical insights for community-based technology interventions, and employed targeted questions on gaining access, local involvement, engagement in participatory research, protocols to observe, and ethical issues.

The results of this exploratory study and the literature survey were processed in a series of guiding principles for the research design, designed to serve two purposes:

- Macro-level principles that could frame the general methodological approach of this study and contribute to advancing a coherent and relevant research.
- Practical insights for designing a community-based research intervention involving a minority group.

The guidelines are expounded below. The first four guidelines stem from axiological, epistemological, and methodological considerations and were used to shape the pillars of the research design – the theoretical and methodological approach. The last three cover practical and operational aspects for designing fieldwork and the relation with research participants.

Guideline #1 – Alignment to locale: Use an investigation approach rooted in respect of local culture, values, and protocols.

This principle draws on ethical and axiological considerations. Historically, qualitative research in minority and particularly indigenous contexts advanced hand in hand with colonialist practices where inquiry served to understand, know and represent the 'Other' as means for exercising power and control (Denzin and Lincoln, 2003; Smith, 1999; Vidich and Lyman, 2000). These practices objectified minority groups, typified, analysed and classified them following the principles of positivist inquiry and obscuring their human dimension (Smith, 1999). Research tended to either belittle local knowledge or re-interpret it from the vantage point of the researchers, often in terms that made explicit the superiority of Western forms of knowing (Bishop, 1999, 2005). This process was subsumed to the same high-standing principles that make research a tool for social progress: the pursuit of truth and the advancement of human knowledge and control over the environment (Denzin and Lincoln, 2003; Smith, 1999).

> "Sadly, qualitative research, in many if not all its forms (observation, participation, interviewing, ethnography), serves as a metaphor for colonial knowledge, for power, and for truth. The metaphor works this way. Research, quantitative and qualitative, is scientific. Research provides the foundation for reports about and representations of 'the Other.' In the colonial context, research becomes an objective way of representing the dark-skinned Other to the white world."
>
> - Denzin and Lincoln, 2003: 1

The emancipation of indigenous people contributed to changing this state of affairs in social science research. Indigenous methodologies were crafted, which were aligned to local socio-cultural protocols and placed indigenous worldviews, interests and cultures at the centre of the scientific inquiry. Kaupapa Māori research is such an example, a product of the cultural revitalization and self-determination movement of Māori people in Aotearoa/New Zealand, which aligns research inquiry aims to indigenous self-determination goals and locates the source of legitimacy for knowledge production within the Māori community (Bishop, 1996, 1999, 2005). In North-America, American Indian studies emerged as a discipline concerned with the recovery and transmission of Native American culture and history which seeks to revive and extend traditional knowledge from an indigenous viewpoint (Fixico, 2003).

The ethical and axiological problems surfaced by research in minority contexts did not influence only the development of indigenous methodologies. Questions related to legitimacy, ethics, and representation began to play a fundamental role in shaping qualitative inquiry (Denzin and Lincoln, 2003), fostering the emergence of new research methods and approaches which sought to counter-balance the uneven relationship between researchers and research participants. Participatory research and action research emerged as methodological approaches that critiqued the base assumptions of traditional social science research: the objectivity stance, the distance between researchers and research subjects, and the idea that only scientific knowledge could be considered valid. Māori researcher Russell Bishop (2005) notices the relatedness of Kaupapa Māori research and participatory research methodologies, encompassing features such as: serving the purpose of self-emancipation for groups involved in research, shifting the source of authority and legitimacy toward research participants, equal positions and a dialogue-based relationship between researchers and research participants, and working toward the fulfilment of local benefits (p. 120). Based on these considerations, participatory methodologies were shortlisted as potential rewarding instruments for designing this research study in full respect of the worldview, protocols, and values of the communities that I aimed to involve.

Guideline #2 – Emic vs. etic: Use an approach prone to unravel emic views and perspectives.

Grand theories fuelled by etic (outsider) perspectives may fail to capture and account for emic (insider) perspectives in a particular socio-cultural context (Guba and Lincoln, 1994).

This observation is particularly important in research involving groups with worldviews and socio-cultural protocols different from the researchers', such as minority cultures. The question is: *At what level does research need to incorporate emic views?* Can we speak of incorporating emic views when the voices of local people are elicited through deductive approaches framed by researchers' own methodological principles and techniques? Or should the entire research apparatus be deconstructed and reconstructed around considerations that favour the incorporation of emic views?

At a first level, local views can be integrated in the results of research, involving local people as informants. Traditionally, research on indigenous populations failed to account for these views, giving privilege to the researchers' own interpretations. Mihesuah (1998), for instance, laments the absence of American Indian voices in the accounts of American Indian culture and history. Even when this requirement is met, however, it may fail to capture the full meaning embedded in a local way of thinking. It can be argued that qualitative inquiry may rightfully stipulate a central concern with capturing the research participant's point of view (Denzin and Lincoln, 2003: 12), however by integrating it in the researcher's interpretative frame it contributes to its distortion. When extracted from locality and interpreted by an investigator from the vantage point of his or her own worldview, local voices may lose completely their force, truthfulness, and significance.

At a second level, it is not only local voice as data or information that can be integrated in research, but the perspective and worldview that aliments endogenous ways of thinking. American Indian researcher Donald Fixico (2003) speaks of an American Indian way of seeing, knowing, and relating to the world, fundamentally different from the Western, Cartesian, linear way of thinking. It is a worldview fuelled by a holistic perception of all things as related, where knowledge is pursued through seeing (comprehending the totality and relatedness of all things in the world) and listening (as a gap of thought that leaves place for reflection) (Idem: 1-7). When American Indian history and culture are narrated by outsiders, it is "written from a 'window' perspective 'about' Native Americans" (Idem: 24). To reach this second level of incorporating emic views a deconstruction and reconstruction of research theory and methodologies is required (Fixico, 2003: 24; Smith, 1999).

> "(T)he methodologies and methods of research, the theories that inform them, the questions which they generate and the writing styles they employ, all become significant acts which need to be considered carefully and critically before being applied. In other words, they need to be 'decolonized'."
>
> - Smith, 1999: 39

The approach taken in this study was to identify theoretical and methodological options from a viewpoint that places "an ethnic group at the centre of the inquiry" (Tillman, 2002: 4). This is a fundamental change from typical qualitative research in which the investigator takes

central stage, as can be noticed from this definition of qualitative research:

> "Qualitative research is a situated activity that locates *the observer* in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world."
>
> - Denzin and Lincoln, 2003: 3 (my *emphasis*)

The centrality of the indigenous/local/ethnic group determines a re-thinking of the entire research apparatus, from its design, theoretical assumptions, and methods. For instance, Bishop (1996, 2005) identifies five factors that need to be re-modelled from an indigenous perspective in Kaupapa Māori research:

- Initiation: who started and designed the research, and based on what goals?
- Benefits: who derives benefits from the research, and how will these be measured? What benefits do research participants yield?
- Representation: whose views and interests does a text reflect? Whose voice is heard?
- Legitimation: who interprets data and who evaluates accuracy of results?
- Accountability: to whom does the researcher respond? Who has access to the knowledge produced and who controls it? (Bishop, 1996, 2005).

Guideline #3 – Methods grounded vs. methods applied: Favour the local emergence of methods employed for data generation and intervention design.

A derivative of the principles outlined above is that the methods by which research proceeds need to be assessed with respect to their adequacy to context. The exact role that standard, 'Western' research methods have in minority research needs to be critically examined (Bishop, 2005; Mataira, 2003; Smith, 1999). In an indigenous perspective, alignment of research methods to a local context is not simply a matter of adaptation. It resides on the deconstruction of Western paradigms and re-articulation in indigenous epistemological frameworks (Mataira, 2003), wherefrom new, context-specific methods may emerge. This position indicates that the main issue is not with the methods themselves, but rather with the relation between methods, methodological approaches, and the theoretical and epistemological assumptions that drive them, or "the link between (…) the world view to which the researcher subscribes, the type of research question posed, and the technique that is to be adopted as a basis for research" (Morgan and Smircich, 1980: 499). The question of identifying the right methodological approach for a given context is doubled by a concern with clarifying the epistemological premises to which it is aligned (Bryman, 1984: 79) and achieving coherence between the two.

In this study, the first step was to clarify the inquiry paradigm in which the research was being conducted and select the methodological approach aligned to it. Methods and techniques were further devised to be aligned on the one hand to the inquiry paradigm (for instance favouring knowledge production through interaction, akin to the participatory worldview), and on the other taking into account the requirements of the local site of implementation (for example favouring data generation in group settings).

Guideline #4 – Research partners vs. subjects: Favour people's involvement in research as partners, not as subjects.

This principle blends ethical, axiological and epistemological issues. At ethical and axiological level, it hints at the relations that should be established among researchers and research participants.

> "(W)hat we must focus our attention on is the quality of relations with the people we seek to represent in our texts: are they viewed as mere fodder for professionally self-serving statements about a generalized Other, or are they accepted as subjects with voices, views, and dilemmas – people to whom we are bonded through ties of reciprocity (…)?"
>
> - Narayan, 1993: 672

Bishop (2005) speaks about this reciprocity in Kaupapa Māori research as a form of connectedness in pursuing knowledge, where researchers and research participants engage in the development of a research group as a *whânau* (extended family). Partnership in research includes but at the same time goes beyond sharing common interests and goals, it is rooted in a deep feeling of relatedness nurtured through participation where the individual 'I' is transcended into 'we'.

This principle indicates, as well, epistemological considerations that cannot be bypassed, especially with respect to objectivity and subjectivity in research as knowledge pursuit. Conducting research as partnership is not a stand-alone endeavour and choice, it needs to be backed up and integrated in a certain worldview and certain epistemological assumptions. Just the same, the distance among researchers and researched in traditional social research was asked for by particular epistemological tenets. Social research dwelling on a positivist inquiry paradigm, for instance, aims at objectivity acquired through distance-taking from the object of inquiry, a stance modelled on the research approach of the natural sciences (Baert, 2005). The accountability and reliability of such research are formulated based on the assumption that it is possible to objectively and neutrally study phenomena or human subjects. This tenet motivates a definite separation between the researchers as guardians of the standards and criteria for objectivity, and research participants as data providers. As such, the distance among researchers and researched in the pursuit of knowledge is aligned to its epistemological tenets. Research as partnership becomes a fundamental

methodological principle, on the other hand, for inquiry paradigms which see knowledge as co-created. The most illuminating example in this respect is made of the participatory worldview, which deems knowing and knowledge to be of subjective-objective nature, created in the interaction between the knowing agent and the object of knowledge (Heron and Reason, 1997). On the basis of this principle knowledge co-creation through partnership between researchers and research participants is at the same time legitimated and encouraged as the most valid source of knowledge pursuit. Kaupapa Māori research is another example where research partnership is legitimated by an epistemological position that refutes the idea of objectivity and distance-taking in research:

> "To invoke 'distance' in a Māori research project would be to deny that it is a Māori project. It would have different goals, not Māori goals."
>
> - Bishop, 2005: 119

In this study, research as partnership emerged as a principle to embrace in respect of the people involved in the study, as well as in consonance with the epistemological principles of the participatory inquiry paradigm, which argue for the value of knowledge produced in interaction between the investigator and research participants from equal positions.

Guideline #5 – Scientific outcomes vs. local benefit: Include community return among the preoccupations of this study, alongside scientific pursuit.

Social research may create uneven distribution of benefits between the researchers and the research participants. Scholars work in the pursuit of knowledge and truth, which are considered values in themselves. The people involved are providers of data, and their interests are not further pursued in typical social research projects. When investigation includes communities and draws on their cultures, knowledge and thinking, this process can be looked back from the eyes of the researched and seen as exploitative and unethical:

> "Aboriginal communities have been 'researched to death' with few positive outcomes or improvements in their communities."
>
> - Assembly of First Nations (AFN), 2001, p. 8, cited in Patterson et al., 2006: 48

One of the preoccupations of this study has been to build on a genuine meeting of interests with the community that would be involved as part of the field study. As it will be described in section 4 of this chapter, the search for a community to collaborate with has proceeded not only based on social science sampling considerations, but also seeking to identify a communal need to which the research project could provide a viable answer.

Guideline #6 – Knowledge sharing: Make explicit, spread awareness of, and discuss openly and at any stage the knowledge derived through and from the study with local people.

One easily bypassed aspect of social research, especially when it involves communities,

regards the sharing of the study results with the people involved (Smith, 1999: 15). Sharing of information and knowledge back to the people is part of the ethics of participatory research (Fals-Borda, 1988) and indigenous research (Smith, 1999; Mataira, 2003). Knowledge should be shared in a fashion which is clear and understandable for participants, and following local protocols (Mataira, 2003).

In this research project, knowledge sharing has been considered part of the equal relationship to be developed with the research participants, and also an important component of the benefit that the community would derive from the project.

Guideline #7 – Learner vs. investigator: Use the field project as an occasion for learning and make this attitude manifest in all interactions with research participants.

In standard qualitative social research, especially when involving less schooled participants, the investigator is invested with power and authority over the process of knowledge production (Denzin and Lincoln, 2003), a position which is manifested implicitly or explicitly in interactions with participants. The figure of the investigator in partnership-based research needs to incorporate new valences. Fals-Borda (1988) speaks about the social investigator becoming an 'organic intellectual' in participatory action research projects, by overcoming her/his Cartesian thinking patterns and embracing a pattern of thinking shared with research participants. Investigators should also manifest and embody the respect of local cultural protocols, people, and hierarchies (Smith, 1999). Another aspect cherished in this study regards active listening. Donald Fixico (2003) refers to listening as an essential part of the Indian way of thinking, which allows to sense relationships and meanings, and leaves space for reflection and thus the momentum to relate what one has seen and heard to the teller and to oneself (p. 4-5).

These considerations are summed up in this study in the concept of 'investigator as learner'. Apart from the patience and humbleness the term conveys, it also hints at qualities of active listening, curiosity, and eagerness to know and understand. This attitude seeks to replace the authoritative figure that a researcher arriving on a community's premises might embody, and at the same time sets new premises for the active inquiry that fuels the project, based on co-learning and cooperation.

2.3 Epistemological and Methodological Framework

The research design was fashioned jointly by a participatory inquiry paradigm, grounded theory methodology, and participatory action research. The participatory inquiry paradigm provided the underlying ontological, epistemological, axiological and methodological principles that guided the research design. Grounded theory was used as a fully-fledged

methodological package that structured and paced the research from the formulation of research objectives to the definition of the data generation and analysis strategy. Participatory action research was used for designing a community-based communication intervention in two rural locations. This methodological blend (Fig. 2.1.) has allowed to balance the concerns for producing a rigorous research design by academic criteria and employing it in respect of the communities involved.

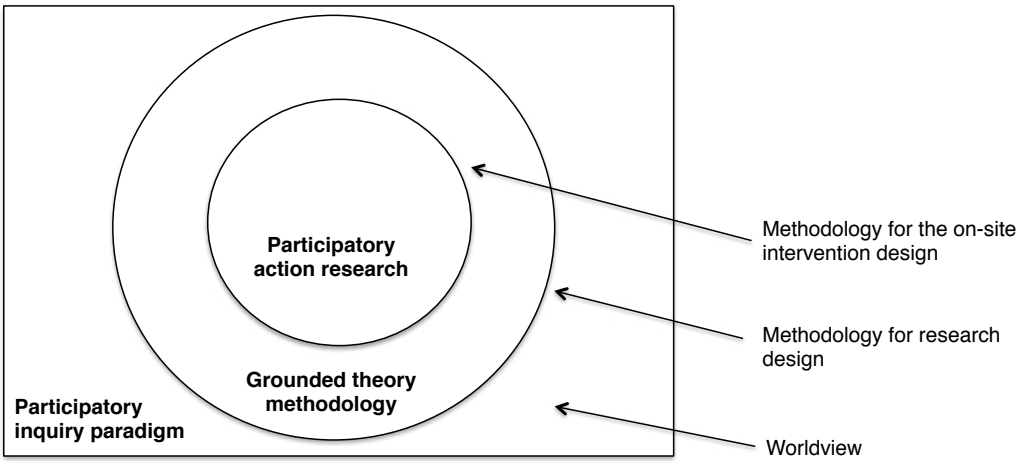

Figure 2.1. Epistemological and methodological framework. Source: author.

2.3.1 Working in a participatory inquiry paradigm

The participatory inquiry paradigm provided the principles that framed the underlying assumptions of this study with respect to:

- The nature of knowledge and knowable reality;
- The purpose and value of research as a knowledge-pursuit activity; *and*
- The valid ways or methodologies for conducting rigorous research.

According to Guba and Lincoln (1994) a paradigm is

> "a set of *basic beliefs* (or metaphysics) that deals with ultimates or first principles. It represents a *worldview* that defines, for its holder, the nature of the 'world', the individual's place in it, and the range of possible relationships to that world and its parts, as for example, cosmologies and theologies do."
>
> - Guba and Lincoln, 1994: 107, authors' *emphasis*

An inquiry paradigm is defined, according to the authors, by basic beliefs that cover the answers given to three foundational questions, all mutually determinant:

1 *The ontological question*, which deals with the nature of reality and what can legitimately be known about it.

2 *The epistemological question*, which treats the relationship between the knowing agent and the object of knowledge.
3 *The methodological question*, which lays the legitimate ways for the knower to find out what can be known (Idem: 108).

Other authors (Creswell, 2007; Heron and Reason, 1997) as well as a revised version of the argument by Guba and Lincoln (2005) include an axiological dimension to the three. The axiological question deals with what is "intrinsically valuable in human life, in particular what sort of knowledge, if any, is intrinsically valuable" (Heron and Reason, 1997: 277).

The participatory inquiry paradigm is particularly relevant for framing research with minorities or marginalised groups, as it calls for practical steps to bring positive change in the lives of the research participants (Creswell, 2007: 21; Fals-Borda, 1988, 2001; Selener, 1997: 12). Participatory studies define their research problem starting from a social issue, or the needs and interests of a particular group, and include the betterment of their condition among the envisaged outcomes (Kemmis and Wilkinson, 1998). In a similar vein, this study was motivated by a problem faced by minority cultures – lack of voice – and defined an approach by which research could respond to this issue.

The way 'knowledge' and 'knowing' were dealt with in this study is of particular concern. In a participatory worldview, known reality is of subjective-objective nature, it is created by the interaction between the knowing agent and the outer perceivable object (Guba and Lincoln, 2005; Heron and Reason, 1997; Reason and Bradbury, 2001). Reality, or the reality that can be known and experienced, can only be unveiled through participation:

> "To experience anything is to participate in it, and to participate is both to mold and to encounter; hence experiential reality is always subjective-objective."
>
> - Heron and Reason, 1997: 278

The subjective-objective nature of knowable reality also implies that there is no possibility to have a direct and final knowledge of all that there is, or the world out there (Reason and Bradbury, 2001). The knowing agent shapes reality through her/his perception while interacting with it. This assumption positions participatory research midway between the two strong pillars of social research paradigms - positivism and constructivism. Positivism takes reality to be outer, objective, and knowable as such (Baert, 2005; Charmaz, 2011: 4-5), while constructivism is grounded in relativism, and posits that known reality is always contextual and constructed (Guba and Lincoln, 1994, 2005). Participatory research claims that while there is a reality out there, we can only know it through the mediation of our senses, and hence in the process of perception it becomes subjective-objective (Reason and Bradbury, 2001). This view of knowledge as product of the interaction between the agent and outer reality also indicates that the separation line between the ontology and the epistemology of participatory research is blurred. The merge between the ontological and the epistemological

is characteristic as well of the critical theory and constructivist paradigms, insofar as knowing is intricately linked to the interaction between the knowing agent and the object of knowledge (Guba and Lincoln, 1994: 110-111).

The epistemology of participatory inquiry is articulated by Heron and Reason (Heron, 1996; Heron and Reason, 1997; Reason, 1994) in four forms of knowledge and knowing: experiential, presentational, propositional, and practical. *Experiential knowledge* is based on a first-hand encounter between the agent and the world, it is a product of their interaction and shares qualities imprinted by the perception of the former and the features of the latter. *Presentational knowledge* stands for sensorial forms in which the agent represents knowledge in her/his inner world and is reflected in creative acts given shape in all expressive forms, from vocal and visual to auditory. *Propositional knowledge* is based on concepts and uses language for its formulation. Presentational and propositional knowledge are grounded in experiential knowledge; their nature is more subjective as they are no longer the product of a direct encounter with the world. *Practical knowledge* refers to knowing and being able to do a specific action, and is manifested in abilities and skills. The four forms of knowing are interconnected through a relation of consummation which builds from experiential up to practical forms of knowing, and of grounding, in which the top-forms need to rely on the forms below for consistency (Fig. 2.2). For instance, propositional knowing works with concepts, which are grasped and delivered in presentational forms (e.g. vocalized words) and are as well grounded in some encounter with or experience in the world.

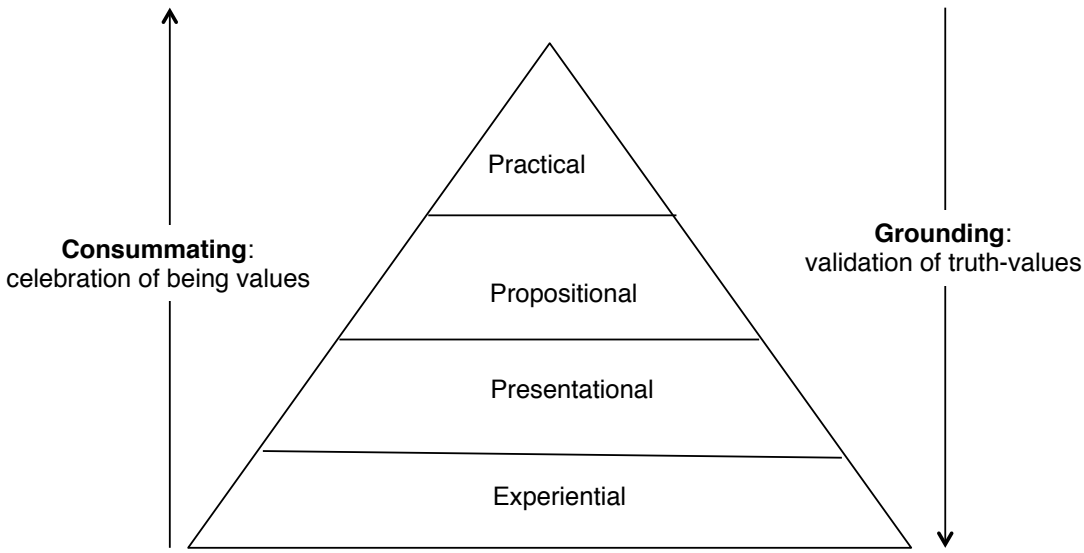

Figure 2.2. The consummating and grounding relations among the four participatory inquiry forms of knowing. Source: Heron and Reason, 1997: 282.

The highest form of knowing in a participatory worldview is the practical one, a form that builds on all the others and at the same time brings them to fulfilment (Heron, 1996: 34; Heron and Reason, 1997: 281). In order to practice or perform an action as enabled b practical knowing, the agent needs to have propositional knowledge on the action performed, use a presentational form, and ground it in experience. The accent placed on the value of practical knowing is aligned to the *axiological principles* to which participatory inquiry adheres. Participatory research aims to produce knowledge that is applicable and useful for everyday life and for the development of society at large (Reason and Bradbury, 2001). This tenet requires a re-conceptualization of the way knowledge derived from research is distributed in society. In classical social research, a limited number of experts maintain the control over the production, use and distribution of knowledge (Hall, 2002; Tandon, 2002a, b). In participatory research, knowledge is no longer exclusively bound to academic and research circles, nor is scientific knowledge the only form of valid knowledge. Knowledge pursued through participatory research blends "academic knowledge and popular wisdom" (Fals-Borda, 2001: 32). Some authors insist on the relation established between knowledge and power and on how changing the structures by which knowledge is produced and distributed, the balance of power can be inclined in the favour of disadvantaged, oppressed or marginalised groups (Fals-Borda, 1991; Rahman, 1991). The ultimate goal of knowledge pursuit is transformation, positive change.

Research as transformative practice requires a re-thinking of the way researchers and research participants interact in the process of knowledge production. At this point, the axiological premises flow into the *methodological premises* of the participatory inquiry paradigm: for engaging in research as transformative practice that can bring positive development and change for common people, the relations among investigators and research participants need to be re-conceptualized. The subject-object relationship of traditional social science research is challenged and replaced by a subject to subject relation, of co-operation (Fals-Borda, 1988). The investigators and the participants become at the same time co-researchers – sharing decisional power over the research design, and co-subjects – collaborating in all action-oriented research activities (Heron, 1981).

In co-research investigators and research participants produce knowledge from their interaction. The role of researchers can be described as *facilitators*, insofar as they encourage participants to unveil and express truth (Wadsworth, 2001: 420). Equality of positions does not preclude the acknowledgement and employ of each partner's expertise (Reason, 1994). On the contrary, knowledge emerges from interaction with greater force when each party brings to the process their skills, knowledge, and expertise.

Participation in research may take different forms. Heron (1996: 20-21, see also Oates, 2002) differentiates between epistemic and political participation. Epistemic participation has

to do with the relation between the knower and the known, and is instantiated in direct participation in knowledge production as well as knowing through participation. Political participation refers to involvement in decisions that affect one and hence requires participants' involvement in decision-making about all aspects of the research design.

The methodological family aligned to a participatory inquiry paradigm is very large and includes forms such as action research, action science, participatory action research, participatory community-based research, and cooperative inquiry. Heron and Reason (Heron and Reason, 1997, 2001; Reason, 1994) propose the notions of 'critical subjectivity' and 'critical intersubjectivity' as central tenets for scoping the range of participatory inquiry methodologies. 'Critical subjectivity' is a form of awareness of one's subjective position and unilateral perspective in interpreting the world, coupled with the capacity to manage subjectivity and express it by cultivating a self-reflexive and critical attitude. It indicates as well awareness of the possible forms of knowing and the ability to use them in full understanding of the way they are related. In research, this means that the inquirer needs to be aware of the experiential luggage on which any propositional form relies, and therefore the contextual and culturally determined nature of these forms. 'Critical intersubjectivity' denotes an awareness of the shared experiential and cultural luggage, it is an awareness of the larger context which influences our thinking and acting and at the same time gives the possibility for sharing, exchange, and communication. The methodologies aligned to a participatory worldview should, according to Heron and Reason:

> "draw on (participatory inquiry) extended epistemology in such a way that critical subjectivity is enhanced by critical intersubjectivity; hence, a collaborative form of inquiry, in which all involved engage together in democratic dialogue as coresearchers and cosubjects."
>
> - Heron and Reason, 1997: 283

This study adheres to participatory inquiry principles transversal to most methodological forms, shaping the direction of research without going into the precise guidelines and procedures. The more precise procedural guidelines are provided by participatory action research, described in the third part of this section.

Summing up, the following participatory principles were embraced in this research:

- The co-created nature of knowledge and known reality. This ontological assumption helped to portray research as a knowledge production process inevitably rooted in participation and interaction.
- The validation of local forms of knowledge and knowing.
- The value of research as a transformative practice, a tool for progress and social change.
- The value of actionable knowledge and practical forms of knowing.

- Framing of the relation with research participants in terms of co-research and co-operation.
- The importance of conducting research serving scientific pursuit and the participants' own personal advancement.

2.3.2 Shaping the research design through grounded theory methodology

Grounded theory methodology (GTM) was used as framework for modelling the research design. GTM was first exposed in the 1967 book "The Discovery of Grounded Theory", by American sociologists B. G. Glaser and A. L. Strauss. The authors have shaped the methodology in the frame of a project investigating the context of dying patients, described in the 1965 monograph "Awareness of Dying" (Glaser and Strauss, 2006/1967: ix). The purpose of GTM is to produce theory from the systematic collection and analysis of data in social research (Idem: 2). The feature that distinguishes it from other social science methodologies is the accent it places on inductive generation from data, as opposed to deductive verification of theories (Birks and Mills, 2011; Charmaz, 2011; Glaser and Strauss, 2006). GTM marks a stark separation from the positivist trend in social science research, characterized by logico-deductive thinking, verification of pre-conceived hypotheses, and privileging quantitative methodologies (Charmaz, 2011: 4-5). While, somehow ironically, later on GTM came to be nominated for its positivist assumptions (Idem: 9), in its historical context it created a new avenue for social science research privileging bottom-up theory development, starting from data, rather than the verification and confirmation/disproval of the investigator's initial hypotheses as advocated by positivist thinking.

In this study, GTM was selected as guiding methodology for the research design after an overview of methodologies that could answer the inquiry goals, and in particular over case study inquiry methodology for theory generation. Below, the main principles of GTM are exposed, arguing that they make GTM a particularly relevant methodology for advancing this study. The second sub-section describes how GTM was used in practice to shape the research design.

Principles and rationale

Birks and Mills (2011) propose that the use of GTM is indicated when

> "… little is known about the area of study; the generation of theory with explanatory power is a desired outcome; (and) an inherent process is embedded in the research situation that is likely to be explicated by grounded theory methods."
>
> - Birks and Mills, 2011: 16

The inductive approach makes GTM particularly appropriate for investigating contexts about which an investigator has little initial knowledge, or which are characterized by different socio-cultural protocols, such as minority cultures. GTM procedures minimize the risk of bias potentially carried by the researcher's own preconceptions and allow her/him to discover a theory reflecting the main concern of participants, through constant collection and analysis of field data (Glaser, 2002; Glaser and Holton, 2004).

A second reason for employing a GTM approach in this research is its strong focus on *conceptualization*, which singles it out from other qualitative research methodologies preoccupied with description of empirical phenomena (Glaser, 2001, 2002, 2009, 2011; Glaser and Holton, 2004). GTM procedures allow the researcher to maintain a focus and grounding in data, while working at a higher level of abstraction (Charmaz, 2011: 6). The investigator starts from raw data and gradually works her/his way up to indicators, concepts, and relations or hypotheses linking these concepts, by constantly comparing concepts with indicators and with other concepts and patterning them accordingly for developing the grounded theory (Glaser, 2002; Glaser and Holton, 2004).

Thirdly, GTM was selected for its capacity to account for and conceptualize *social processes,* which made it adequate for guiding the development of methodological outcomes, as required by this study. Glaser warns that the code of 'process', or 'Basic Social Process' (BSP) is not pre-conceived in GTM, however it is particularly adequate (Glaser and Holton, 2004). Other scholars make the study of social processes central to GTM (e.g. Charmaz, 2011). The concern of GTM with the study of social processes indicates its adequacy for developing non only conceptual but also methodological outcomes (Fei, 2009), making it preferable over other theory-building methodologies such as case study inquiry (as advocated for instance by Eisenhardt, 1989; George and Bennett, 2005; and Yin, 1994). The focus on analysing processes allowed me to capture the dynamic nature of the phenomena happening on the field, identify the patterns by which they were related, and understand how factors boosting or inhibiting the success of the intervention were associated to contextual or intervention features, gradually creating the backbone for the methodological framework developed as one of the research outcomes. Importantly, the adaptation of GTM for producing methodological in addition to theoretical outcomes, did not incur modification of standard GTM principles, but rather a *focused perspective* on a meaningful set of features, those that spoke most evidently of the adequacy and effectiveness of the test intervention designed and run. More precise details about how GTM has been used for methodology development are given in section 3.6, on data analysis.

The most valuable contribution of GTM in this study was that it provided precise guidelines for operating at conceptual level, while maintaining a strong focus on data. GTM favours an inquisitive look by which underlying patterns in the data are observed and worked out into

concepts of a gradually higher level of abstraction, without losing the link with the data patterns they indicate. Glaser (2002) defines concepts as “the naming of an emergent social pattern grounded in research data” (p. 24). Concepts are related through hypotheses, also termed propositions (in Corbin and Strauss, 1990; Strauss and Corbin, 1998). The process of working data into concepts and hypotheses relating them, eventually leading to the development of the grounded theory is guided by two methodological principles: the constant comparative method and theoretical sampling.

The constant comparative method (CCM) refers to the strategy of systematically selecting and studying comparison groups for generating substantive or formal theory (Glaser and Strauss, 2006: 9). CCM is derived from one of the basic methodological principles of research: comparative analysis. In social research, comparative analysis can be used for ascertaining that the evidence used in a certain theory is correct and verifiable by other sets of evidence; for establishing the level of generalization and the applicability of a theory; for specifying the unit of analysis of a study and delineating it from others; as a means for verifying theory by bringing in new sets of data; and for generating theory by constantly checking emergent conceptual formulations against new sets of data (Idem: 22-31). In GTM, CCM is operationalized in three types of comparisons:

- Comparing incidents to incidents in the data, checking for uniformity and conditions for variation. From this analysis concepts and hypotheses are derived.
- Comparing concepts to more incidents. In this process, more properties of existing concepts are developed, and new concepts and hypotheses are generated. The concepts are verified and scoped through elaboration of properties, until theoretical saturation is reached.
- Comparing concepts to concepts, to ensure that the most appropriate concepts are associated with each set of indicators and delineate conceptual levels between concepts associated to the same set of indicators. At this phase, the combination of concepts into hypotheses is verified and completed. The sets of hypotheses generated will be the basis for the formulation of the grounded theory (Glaser and Holton, 2004).

CCM implies that data generation and analysis processes are alternated and interrelated, so that the results of analysis guide further data generation in waves. This relation is captured in the core GTM principle of *theoretical sampling*, which indicates that “the analyst jointly collects, codes, and analyses his data and decides what data to collect next and where to find them, in order to develop his theory as it emerges” (Glaser and Strauss, 2006: 45). After an initial data generation round, data are coded and analysed. As codes emerge from data, the investigator will decide where to collect data further, so that existing codes can reach theoretical saturation and new codes relevant for the area of inquiry can be generated.

Theoretical sampling guides the sources of data gathering as well as the design of its tools and protocols. The question to be asked for theoretical sampling is: “to what groups and subgroups does one turn to next in data collection – and for what theoretical purpose?” (Glaser and Holton, 2004).

Application

This study employed the GTM variation developed by B. G. Glaser, who elaborated on the form initially created together with A. L. Strauss first exposed in the 1967 monograph “The Discovery of Grounded Theory”. What characterizes Glaserian GTM is its insistence on theory building by *discovery*. In this respect, Glaser remained faithful to one core principle of GTM as outlined in its first version - the generative nature of theory building. The theory is not assembled, but it *emerges* through systematic data generation and analysis: the scheme for integrating the elements of the theory is best found in the data themselves (Glaser and Strauss, 2006: 41). It was due to its preoccupation with theory emergence that this variation has been chosen from a plethora of GTM forms that have proliferated in the literature on social research methodology. While they all maintain a common concern with inductive theory building and key principles (e.g. CCM and theoretical sampling), detailed procedures differ across GTM forms such as the one advocated by Strauss and Corbin (Corbin and Strauss, 1990; Strauss and Corbin, 1998), or the constructivist variant of GTM developed by Charmaz (2011).

GTM allowed a holistic, rigorous, yet flexible design of the entire research project, starting from fashioning the research question and objectives (Fig. 2.3).

Glaser states that a GTM study should start with an initial topic, while the research problem is discovered on the field, corresponding to the main concern being faced by participants (Glaser and Holton, 2004). The starting point of this study has been a preoccupation with understanding the potential of ICTs for minority communication. The application of GTM allowed this initial topic to become gradually more focused during the fieldwork, as it began to meet and be clarified by the concerns of the local people, identified and analysed through constant cycles of data generation and analysis. The research question and the objectives were shaped gradually during the progress of the fieldwork. A separation between the analytical and design perspectives emerged and was made explicit in the formulation of the research objectives.

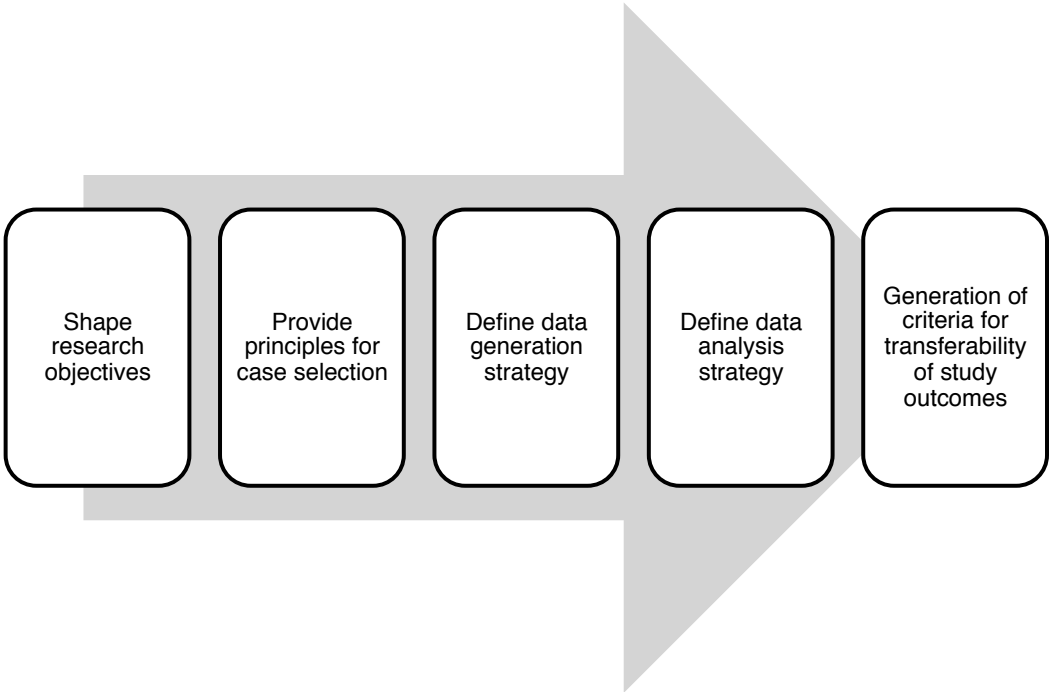

Figure 2.3. The principal facets of the research design shaped by grounded theory methodology. Source: author.

GTM principles guided as well the *selection of the two field cases*. The design of the research across the two field studies was done instrumentally to the development of the methodological and conceptual contributions. The second case was used for refining and outlining the conditions for variation of the methodological and conceptual propositions generated from the first case. These considerations are treated at length in the section 3.4, on the selection and relating of the two cases.

The data generation and analysis strategy was shaped by the GTM principles of constant comparative analysis and theoretical sampling. The principle of theoretical sampling has determined all throughout the research progression what data needed to be collected, from what participants, and with what instruments. The constant comparative method allowed to transcend the level of empirical data and work at a conceptual level, constantly comparing 1) incidents in the data with other incidents in order to generate concepts; 2) concepts with new incidents for shaping and finishing them until reaching theoretical saturation; and 3) concepts with concepts for establishing levels and relations and ascertaining that each concept is associated with the appropriate set of indicators (Glaser and Holton, 2004). Data generation, coding and analysis were iterated during the fieldwork. Intensive data generation sessions with the two local communities in Romania (of cca. two weeks each) were alternated every six to eight weeks with data analysis conducted in the university, throughout the entire

fieldwork period.

Finally, GTM provided the criteria for assessing *the quality* of the conceptual and methodological contributions and *the limits of applicability*. Glaser and Strauss (2006) specify that a good theory in social research should employ clear categories and hypotheses that can be operationalized and verified empirically; they should be understandable not only by experts in the same field, but also by non-experts; they should be applicable to the data on which they draw and capture adequately the phenomena studied (p. 3). Moreover, the authors claim that more than being built on a process, the theory itself is a process, an "ever-developing entity" rather than an "a perfected product." (Idem: 32). The fixed form it may take, as for instance in an article, is only a momentary instantiation; its evolving quality reflects the changing and evolving nature of social reality. Grounded conceptual propositions are not verified or disproved by new data, they are refined through application in new contexts "with emergent fit" as their concepts become more clearly outlined and the relations among them are modified to fit the new data sets (Glaser, 2002: 25).

2.3.3 Designing the site intervention through participatory action research

The applied research project consisted in the design, development and assessment of a participatory content production initiative involving two Romani communities in rural Romania. Design was approached as a process of discovery involving local people, rather than a pre-made plan to follow. The design process was about charting a territory full of unknowns, identifying the community issues and interests relevant in the scope of the project, and devising a communication solution as well as the course of reaching out to it. The inherent process of discovery in design activities is indicated by John Cato (2001) by paraphrasing Danish poet Piet Hein's quote on 'art' to refer to qualities shared by design:

> "Design is solving problems that cannot be formulated until they have been solved.
> The shaping of the answer is part of the question."
>
> - Cato, 2001: 2

This take on design was informed by participatory action research methodology. Kemmis and McTaggart (2005) propose that PAR can be differentiated from other forms of social science research by three features: partnership and common ownership of the research projects, involvement of the community in analysing its social problems, and the propensity to include community action. PAR is in itself a family of approaches and methodologies which, even if going under the same name, have been developed in different contexts from which they derived distinguishing features. To properly position the PAR form employed in this study among participatory inquiry methodologies, five distinct criteria have been used:

the central participatory principles, the target group, conceptual focus, primary concern, and research goal. (Table 2.1). These criteria allowed to differentiate PAR from other participatory methodologies, and further to distinguish the particular form used in this study from other PAR forms.

Table 2.1. Characteristics of the PAR form used in this study. Source: author.

Participatory principles	Balanced focus on action and participation.
Target group	Broad: Communities. Core: Poor, isolated, oppressed, or marginalised groups.
Conceptual focus	Relationship between knowledge and power.
Primary concern/problem	Uneven distribution of knowledge and power in society.
Research goal	Change the balance of knowledge and power in favour of the powerless.

Selener (1997) categorized the PAR literature according to the target groups involved in research, in four strands: 1) participatory research for community development, 2) action research conducted in organizations, 3) action research in scholarly contexts, and 4) participatory research with farmers. Drawing on this categorization, the present study has used a PAR variation consonant with the first category, characterized by a focus on communities and envisaging communal development. The focus on communities does not cover, however, the multiplicity of visions and methods existing in PAR, and a more precise delineation can be done at conceptual level (Reason, 1998). The research project has been further shaped by the approach to community-based PAR rooted in liberationist movements, advocated with particular poignancy by Fals-Borda, Rahman, and Tandon (Fals-Borda 1988, 1991, 2001; Fals-Borda and Rahman, 1991; Rahman, 1991; Tandon, 2002a,b). This form is distinguished by its focus on working with disadvantaged, poor, marginalised or oppressed segments of society and has a primary concern with the way knowledge is related to power, aiming to change this balance in favour of the powerless (Fals-Borda, 1988; Reason, 1994). This variation was considered particularly adequate for approaching the target population of this research project, Romani groups being an example of socially isolated, marginalised, and oppressed populations, often affected by poverty.

Apart from the liberationist form of PAR, insights and techniques have been used from Kemmis and McTaggart (2005) and the action research variation for new media initiatives advocated by Hearn et al. (2009). These were examined critically looking for base principles, methods, and techniques. The approach in employing them was characterized by flexibility

and openness, allowing the field requirements to shape the methodology in an on-going way. The methodological framework has therefore not been pre-conceived, but rather sketched in fine lines, while it gained in concreteness throughout fieldwork.

In particular, a set of PAR principles and a root action model (Fig. 2.4) have been selected. PAR *principles* provided a flexible framework for the intervention design in which relationships, roles, participation patterns, the project timeline, and communication flows could be defined. A variant of the typical PAR action-reflection cycle was used to structure activities in the intervention.

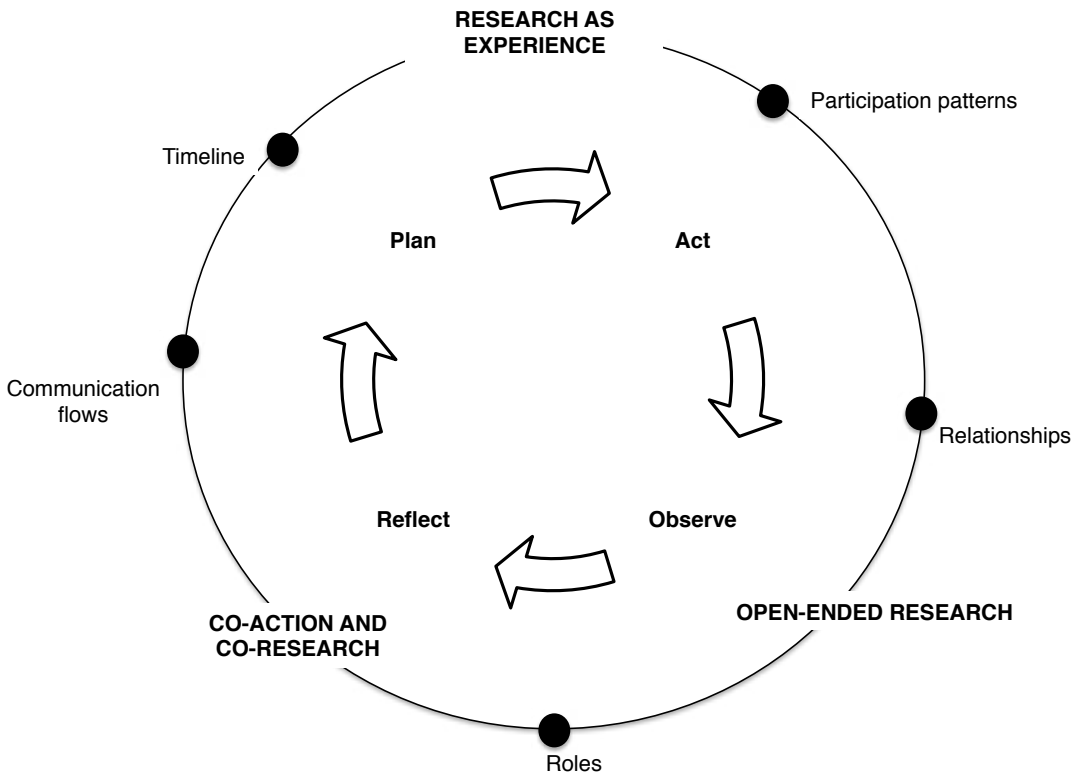

Figure 2.4. Visual representation of the PAR-based methodological framework used for the on-site intervention design. Source: author.

Further, the employ of the principles and the action model are outlined.

PAR principles: a framework for the intervention design

The core PAR principles that informed the intervention design were: research as experience, co-action and co-research, and research as open-ended endeavour. These principles influenced the intervention at the level of the relationships established with local people,

roles assigned in the project, participation patterns, the project timeline, and communication flows (Fig. 2.4).

Research as experience

The PAR form employed in this study dwells on an approach to research as a holistic and experiential process, drawing on Spanish philosopher José Ortega y Gasset's concept of 'experience' (Fals-Borda, 1991: 4). Ortega y Gasset observed that objective knowledge of reality or the past is always mediated by one's subjective experience and hence knowledge is inextricably confined to perspective, or the individual's viewpoint. Rather than obscuring this subjective appreciation and going for bare empirical facts, therefore separating science from experience, knowledge pursuit is to be mediated by experience: knowing is being and acting in the world in full acknowledgement of oneself as 'the I', the external circumstances, and the others (Holmes, 2011). In PAR research, experience - *vivencia* in Spanish - is the quality of research conducted as transformative practice. For Fals-Borda (1991), 'research as experience' is the higher-level principle upon which other central PAR tenets – such as subject-subject relationships, and participation – need to reside if they are to be authentic. In research practices, experience on the one hand mediates knowledge (we come to know *through* experience) and on the other permeates relationships and allows authentic subject-subject reports to be installed. In this process knowledge production draws on two pools: the academic knowledge of researchers and the local wisdom that people gained from being and acting in the world (Fals-Borda, 1988, 1991). This does not preclude in any way the scientific orientation of the research. PAR is equally preoccupied with yielding sound scientific knowledge, and knowledge that is understandable and usable by unschooled, regular people (Fals-Borda, 1988).

In the two field studies conducted, experiential research has been at the same time a goal to reach, a process constantly in the making, and the broader frame in which all project activities were contextualized. The two facets of the concept of 'experience' that shaped the approach to conducting research were: experience as *medium for knowledge production*; and experience as *quality of interaction* among people.

Knowledge production drew on two sources. The community as collective agent possessed knowledge on its history, culture, and traditions, which constituted the principal pool of information for the project. I had expertise on technology potential and usage, project management, and content production techniques. Knowledge production activities were designed to enable jointly the two agents to understand, get awareness of and learn about these aspects by direct participation. My knowledge of the local reality was garnered by combining data generation techniques with engagement in several community practices, like visiting work places, attending ceremonies, and interacting with people on the streets. Local

people's knowledge of digital technology was favoured through direct interaction (aiming to produce experiential knowledge). Their knowledge of project design and research was fostered through group discussions iterated with presentation of the outcomes produced by decisions taken in prior discussions, for facilitating a sense of tangible impact on the course and outcomes of the project.

Experience as quality of social interaction was instantiated by organizing project activities as convivial social events, encouraging interaction among people in free and informal formats, for information sharing and shared decision-making. Activities were fashioned around data generation tools and techniques for content elicitation and production. While these two types of activities were essentially distinct for investigation purposes (data generation vs. intervention implementation), they were all organized as friendly events. In most cases, a group of people participated directly, and others were welcome to attend and would also intervene occasionally. For instance, focus groups were at the same time a data generation tool and an occasion for interaction, organized as convivial events, with refreshments, a relaxed atmosphere, and encouraging open voicing of opinions. While each focus group started with a fixed number of participants, people were free to join in during its course.

Co-action and co-research

The experiential process of research was rendered operational by instantiating field action and research activities in which me and local people took part jointly. The instatement of co-action and co-research was not a neat and immediate process. It required firm resolve, flexibility, and a capacity to twist and turn what was known to account for unexpected responses. The first concern was with installing the *climate* for co-research so that relations, interaction patterns, and roles could grow organically from it throughout the course of the project. This has been done by negotiating and discussing together the common goal of the project, and then resolve to commit jointly to its achievement. Fals-Borda (1988, 1991) speaks about mutual commitment in pursuing shared goals as the fundamental drive for PAR research. Mutual commitment solves the inherent differences and dialectical tension among the parties involved and allows them to create and shape spaces of understanding and harmonious patterns of interaction.

In my experience, mutual commitment was not a given, but had to be nurtured in time and in this process it had to break pre-established patterns of thought and interaction with outsiders, and especially 'city people', on the community's side. People's attitudes towards me were fuelled by deeply held beliefs of myself as a person living in urban areas, schooled and knowledgeable, an authority figure at least for the portion of knowledge, skills and activities I was proposing as part of the project. Fals-Borda (1988) indicates a similar issue with the relationship of submission inherent in reports between local people and outside activists and

investigators, which needs to be broken for genuine PAR reports, or “horizontal communication patterns”, to be established. In his view, this depends to a great extent on the abilities of the field investigator to nurture equalitarian and respectful relations with local people.

In the two field studies, the attempt to foster this type of relationships was done by patient listening and consideration of others’ opinions, active inquiry for people’s own ideas and insights, and by nurturing friendly, informal and relaxed interaction. The typical distance in social science research between investigators and subjects was overcome by organizing all field sessions as convivial events, blending informal and project-bound talk and inviting people to feel at ease. Project activities served their purpose as part of the overall design while remaining occasions for friendly interaction and cooperation.

Fals-Borda (1988) uses the notion of “organic co-operators” to capture the quality of the reports established between activists/investigators and local people in authentic PAR projects. Organic co-operation implies that the subject-object relationship of submission has been overcome, and replaced with a subject-subject relationship, on the basis of which authentic participation can build. In establishing this relation, caution needs to be taken for avoiding paternalistic attitudes, where outside parties take upon themselves the hat of the protective yet better-knowing authority. In the project with the Roma, organic co-operation was manifested as joint action based on complementary employ of skills. The project brought into evidence that organic co-operation is at the same time an outcome and a condition. It was an outcome as it was sustained by a long process of negotiating goals, committing to achieve them, creating a common conceptual luggage and language to express it, and fostering equalitarian relationships. It was also a condition as only on its basis the actual content production activities could be deployed passed the exploratory phase.

Research as open-ended endeavour

Often, PAR projects are long-term and proceed with no fixed deadlines until reaching their goals, with a rhythm given by the people’s commitment to attain them (Fals-Borda, 1988). In the two field studies, the research was pursued as an open-ended endeavour especially in its first months, and finally grew to integrate commonly agreed deadlines and landmarks in a flexible manner. In the beginning period, open-endedness was a must rather than a choice, as there were still many unknowns about the project and many as well with respect to people’s capacity to carry it on in a certain time interval. Initially, planning included only the meetings to be held next, and their agenda. There was no finite end to achieve by a given date. Gradually, as we worked together and defined a rhythm of work, an optimum sequence of time for reaching goals in a satisfactory manner, emerged. In the first field study,

landmarks for achievements started to be established during the second part of the content production experience. In the second field study, I have attempted to work with deadlines in an earlier phase, however these were very flexible and in the end progress continued to be given by the people's rhythm of work rather than by rigid time bounds. In both field studies, projects were motioned towards achievement by achieving the expected outcomes of each stage. For instance, content production flowed into the website design when a sufficient amount of content items emerged and the most important community themes elicited had been covered.

A correlative of research as an open-ended endeavour is that the relationship with local people does not end on project accomplishment. I have continued to pay courtesy visits in both community sites, and noticed that people's attitude was full of expectancy for an on-going report.

The action-reflection cycle

In the framework created by the three action principles exposed (Fig. 2.4), activities have been designed based on the root AR/PAR model cycling action-oriented and reflective activities. There are several variations of this model in the AR and PAR literature, however all maintain the alternation between action and reflection. For instance the cycle has been represented in five steps, *Diagnose → Action planning → Taking action → Evaluation → Learning/Findings →* (Susman, 1983); in four steps, *Plan → Act → Observe → Reflect →* (Hearn et al., 2009: 51-52; Kemmis and McTaggart, 2005); or in three steps, either *Plan → Act → Reflect →* or *Look → Think → Act →* (Stringer, 2007).

The model employed in this study draws on the four-stepped cycle as advocated by Hearn et al. (2009) and Kemmis and McTaggart (2005). Activity planning flows into action coupled with observation, and further triggers reflection, resulting in a re-iteration of the cycle based on the internalization of the insights produced (Fig. 2.5).

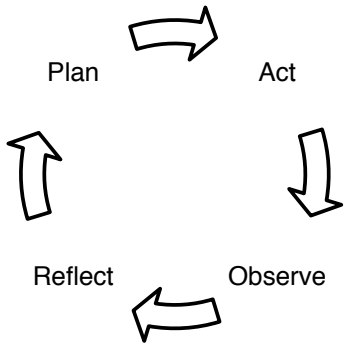

Figure 2.5. The root PAR action model used in this study. Drawing on Hearn et al. (2009) and Kemmis and McTaggart (2005).

The action-reflection cycle has been used as a macro-pattern for conceiving types of activities as part of the project, concentrating on the cycle steps and their sequence.

Activities all throughout the fieldwork have been modelled so that action-oriented sessions were preceded by planning and coupled with observation during their course. *Planning* involved a core group of persons and covered the practicalities of research activities (i.e. planning of data generation sessions) and intervention activities (i.e. planning content production sessions). Participant *observation* was conducted by myself for all the activities, and documented by constant writing of field notes. *Reflection* was triggered by discussions held in group meetings at several points in the project course.

The PAR cycle was used as well as basis for developing a context-specific content production model, in conjunction with an existing content creation model, The Inquiry Cycle (Bruce, 2002; Bruce and Bishop, 2008), detailed in sub-section 2.6.

2.4 Cases Selection and Relating

2.4.1 Timeline and criteria

The selection of the research cases was done based on social science research principles and constraints of a practical nature. The scientific principles were derived from GTM, case study research, and participatory action research literatures. The importance of case selection for the design of research and the reliability of its outcomes, especially when theory building or inductive reasoning are pursued, has been recognized in the research methodology literature (Eisenhardt, 1989; Yin, 1994). The definition of the population is important in case study inquiry as this will define the universe to which case study findings can be generalized (Eisenhardt, 1989). Further, a distinct sample of the population can be selected following theoretical sampling, or statistical sampling criteria. Theoretical sampling refers to the selection of cases with a view to filling existing gaps in theory, or considering possible replication. One strategy is to choose extreme situations or polar types (Eisenhardt, 1989), which allow findings to be generalized within given categories (Idem). These considerations have been taken into account in relation to GTM principles with respect to the development and refinement of substantive theory. GTM advocates that a theory developed through research in a certain substantive area can be further applied in a different area with the goal of refining it through constant assessment of the fit between its initial concepts and hypotheses and novel field data. An important GTM tenet is that the definition of the features based on which several samples may be chosen are *not pre-defined.* The distinctive features of the group and processes studied emerge through the application of GTM procedures in a

first study and stand for the conditions for variation of the inductive theory generated. The subsequent study or studies can therefore be chosen taking into account these features, for testing or modifying the theory to fit new conditions in a new context, and tracking the conditions for variations further.

In addition, participatory research provided an important criterion: meeting a genuine local interest through the project proposal. The research needed to involve a community that had an interest or a benefit to derive from the project. These theoretical reflections were twinned by considerations of practical nature, with respect to possibilities of being granted entrance in a community and possibilities of communicating with the people on site (e.g. common language).

The considerations above dictated a timeline for selecting the two field cases going through:

1. Selection of the population (a specific minority culture);
2. Selection of the first sample of the population (first community);
3. Identification of core contextual conditions that had an impact on the transferability of research outcomes;
4. Selection of the second sample based on these features (second community);
5. Outline of the conditions for variation and transferability of study results.

The universe to which the research outcomes can be related is made of minority cultures. The Romani minority was selected as a minority culture, with a series of distinguishing features that can be set in parallel with attributes (intrinsic and relational) that characterize the condition of minorities around the world:

- Having a distinctive cultural system, different from the populations with which they have shared or are sharing the same geographical space;
- Having experienced or experiencing unequal access to economic, social and political goods, positions and rights, as compared to the stable population; *and*
- Having experienced or experiencing negative stereotyping, marginalization or stigmatization either at state and institutional level or by members of the majority population.

Further, a distinct sample of the Romani ethnic group was selected. Practical constraints with respect to access and communication possibilities (e.g. language) concurred in the decision to narrow the area of choice to Romani communities of Romania, my native country. Romania has a considerable Romani population, present for more than five centuries, first as nomads and later as settled population. All Romani people speak Romanian, in addition to their native Romani language, an aspect which solved the language barrier. With respect to access, though an outsider to the Romani community, in my quality of being Romanian I could use a network of local contacts to gain entrance.

The search for a Romani community in Romania started in the summer of 2009. Overall, from summer 2009 to fall 2010, when the reports with the second Romani community of my study concretized, I contacted and negotiated with seven communities: one in Western Romania, one in the mountain region of Eastern Romania, and five in South-Eastern Romania. With some of them, negotiation was limited to one or two visits; with others, activity was pursued for a longer time, until several factors impeded collaboration. The first community with which collaboration has been concretized was a group of assimilated Roma in the village Podoleni, commune Barcea, in the Galati county of South-Eastern Romania. This first field study served to develop a draft version of the main expected research outcomes. The field study also indicated the most significant contextual conditions which impacted on the transferability of these outcomes, in particular the CoRA methodological framework and the conceptual contributions on participatory communication projects. It was on the basis of these conditions that the second community was selected, with the goal of:

- Checking the adequacy of the concepts employed and their formulation: Could concepts be modified to better fit patterns of behaviour? Could they be further generalized?
- Checking the range of concept properties: Could concept properties be modified to account for new patterns of behaviour? Could other properties be added?
- Checking the contextual fit of the propositions: Do the propositions reflect the patterns of behaviour and processes on the field? How can they be appropriately modified to ensure better coverage of these patterns? What are the conditions for variation dictated by the new field data? How can these conditions for variation be adequately captured in conceptual formulations?

The most significant contextual features emerged in the first field study, used to guide the choice for the second field study, were mapped on five dimensions:

1. Group cohesiveness. At the two extremes, there are communities that nurture strong relations not restricted to blood ties (e.g. in rural areas); at the other end of the spectrum there are instances of communities characterized by individualism and very weak relations beyond those created by common interests, activities, or blood ties (e.g. in urban conglomerations);
2. Local setting, rural vs. urban;
3. Literacy and media literacy levels;
4. Degree of assimilation (in association with openness to the values and norms of the dominant culture); *and*
5. Economic standard (e.g. poverty levels).

Figure 2.6. Typical clothing and hairdressing style in the villages of Munteni (above) and Podoleni (below). Source: author.

Based on these features, the aim was to involve a second group with significant features of similarity with the first, as well as clear features of difference. The community in the village of Munteni, located in the same county at 20 km distance, provided an ideal second case. The Roma in Munteni were living in a rural area as well and from first explorations it emerged that they had strong community bonds, low literacy (later confirmed as wide-spread illiteracy), and were affected by significant poverty. As different from the community in Podoleni, the Roma in Munteni are of the Kalderash traditional Romani sub-group, who are considered to be among the most traditional Roma of Romania. Having been nomadic until the end of the 1950s, and still semi-nomadic, the Roma in Munteni maintain a vivid cultural tradition and a lifestyle dictated by rules, norms and customs inherited from the past.

The process of gaining contact and then entrance in the community of Munteni was much longer and more difficult than in the first case. My main contact person was the expert for the Roma of a nearby commune who enjoyed good contacts with the local expert and opinion leaders in Munteni. After an initial field visit in the summer of 2010, reports were established and agreement was confirmed in fall, same year.

2.4.2 Implications for transferability of research outcomes

The contextual features that defined the scope of transferability of study outcomes were elicited in the first field study, re-assessed in the light of the findings from the second study, and interpreted globally in terms of seven dimensions.

The *common contextual features* of the two communities encompassed:

1. The existence of a specific socio-cultural system different from that of the researcher's;
2. Community type (cohesive group, shared geographical space, of Gemeinschaft type, see Tönnies, 2002);
3. Literacy and media literacy levels (low);
4. Degree of social and informational isolation (high degrees, rurality in under-developed areas); *and*
5. Economic standard (high poverty levels).

On other two dimensions, the two communities had highly *differentiated features*, and therefore can be taken to be instances of polar types:

1. Attitude towards the outside: open vs. closed, *and*
2. Attitude towards cultural continuity vs. social integration.

The community in Munteni maintained amiable, but distant reports with members of the majority culture, and was effectively accessed only with mediation. The community had a

strong will towards cultural continuity, and had no or little concern for social integration. The community in Podoleni, on the other hand, was open and easily accessible, making even strangers feel at home. People had mixed views on cultural continuity, but agreed in their majority on the importance of integration in the mainstream society.

These seven features had a strong bearing on the way the communication intervention was received, the way technology was appropriated for cultural expression, and the type of content produced. They were found to impact in a varying degree on the transferability of each of the three research outcomes (the methodology, the design format, and the lessons learnt) to other contexts, as follows.

For the first outcome, the CoRA framework, the significant factors of impact encompass the first four features. The methodological steps included in CoRA are particularly fit for implementation in communities:

- Characterized by unique cultural systems different from that of the interventionist team;
- With strong internal bonds, especially if set in rural or rural-type settings, with shared spaces for socialization and open relations nurtured through daily interaction;
- Whose members have low literacy and digital literacy; *and*
- Being physically and/or socially isolated, or having very little exposure to global information flows.

The other contextual features hint at increased sensitivity to applying certain steps in CoRA, without affecting their overall sequence. Poverty levels can be significant determinants when negotiating benefits and building relationships. The openness of the community is fundamental in the first part of the project. A closed community should raise the attention to respecting local cultural protocols. Finally, for communities committed to cultural continuity a heightened sensitivity is required for respecting local cultural protocols in the process as well as in the products resulted from applying CoRA.

The transferability of the second research outcome, the web design format, requires a different kind of rationale. The format is a ready-made template that has emerged from people's choices in particular settings, bringing to fruition personal and collective views that can be regarded as context-bound. The fact that other communities share contextual features with the communities involved in this study is not to be taken as an indication that they are automatically prone to find adapt the same website design solution. Rather, transferability in other contexts and consequently the means for adapting the design solution are likely to differ from context to context based on factors that are difficult if not impossible to assess in advance. It is possible that in contexts with a strong cultural ethos a ready-made design solution may not be adapt at all. In these cases, the design format can serve rather as an exemplar of how an ICT solution can be designed with and for a local community.

The third research outcome, the conceptual propositions, are particularly fit for application in settings characterized by the first four features. The latter three should be taken into account for finer-grain aspects and processes. For instance, the poverty levels should be considered when negotiating benefits in the frame of a project. They can also have an impact on ethical issues, as poor communities may have developed unique expectations of material benefit from outsiders and researchers coming on the community premises.

2.5 Data generation Strategy and Instruments

2.5.1 Strategy

Data generation is described by Glaser as a process of discovery, not purposefully guided but pursued through openness, prone to capture the concerns of participants unbiased by the researcher's prior expectations and hypotheses (Glaser and Holton, 2004). The strategy for data generation in this study was developed following GTM and participatory principles. Its salient characteristics are: *emergence, evolution*, *contextual fit,* and *cyclic iteration with data analysis.*

The GTM principle of theoretical sampling (Charmaz, 2011; Glaser and Holton, 2004; Glaser and Strauss, 2006) determined the emergent and evolving quality of the data generation process, and its weaving with data analysis.

- An initial data corpus was generated using emergent interviews and observations. As the main concerns of participants became evident throughout coding and analysis, these informed the design of subsequent data generation tools, protocols, and sampling.
- Data were further analysed in waves and results were used for designing or adapting the tools and protocols for further data generation.
- The design of instruments and protocols evolved continuously. Based on each new wave of findings after analysis, the protocols underwent modifications, aiming to reach theoretical saturation of the concepts developed. For instance, in the semi-structured interviews used in the Podoleni study new questions were integrated and some taken out depending on the analysis results and the dimensions that required further and deeper investigation or those that proved of little relevance for participants' concerns.

In practice, this cyclic approach to data generation and analysis was rendered possible by organizing the fieldwork process as a series of 2-week intensive fieldwork on community premises, alternated every six to eight weeks with analysis conducted in the university.

With respect to instrumentality, GTM allows multiple data generation instruments to be used in a study (Glaser, 1978). In designing data generation instruments, I have looked for contextual fit, referring to the quality of a tool to yield best results in the constraints imposed by local factors. Contextual fit was ensured by observing and analysing local interaction and designing instruments around these naturally occurring patterns. This process was supported by participatory methodological principles, especially 1) the focus on knowledge production through interaction (Guba and Lincoln, 2005; Heron and Reason, 1997), and 2) the principle of congruence (Heron, 1996; Heron and Reason, 1997; Reason, 1994). *First*, those instruments were preferred that allowed knowledge to emerge in natural interaction with participants. The instruments favouring this approach were emergent interviews, cultural probes, and focus groups, all bound to foster natural flows of conversation as opposed to data elicitation on pre-defined models. In both field settings these instruments were indicated early in the process as the most adequate means for data generation. For instance, groups formed spontaneously during my field visits, and designing data generation around groups appeared to be both natural and rewarding in terms of the rich data provided. *Second*, the instruments were designed observing the principle of congruence in a participatory inquiry paradigm, referring to seamless relating among the experiential, presentational, propositional, and practical forms of knowing in the process of knowledge production (Heron, 1996; Heron and Reason, 1997; Reason, 1994). Instruments such as participant observation and cultural probes were favoured, as they support an unbroken flow from the agent's experience to the production of research data.

The tools designed based on these principles were complemented as well by tools that allowed to gather factual data necessary for a better understanding of the locale, for instance semi-structured interviews.

2.5.2 Instruments

Five types of instruments were used:

1. Emergent interviews
2. Participant observation
3. Semi-structured interviews
4. Cultural probes
5. Focus groups

This section describes data generation instrumentation across the two field studies, while precise sampling and administration details are given in chapters 4 and 5, for each field study. An overview of the data corpus for the two field studies is provided in Annex 7.

Emergent interviews

According to Kvale (1996), the design of qualitative interviewing can be explicated by referring to the original meanings of the terms 'method' and 'conversation: 'method' in its original Greek meaning is "a route that leads to the goal", while 'conversation' originally meant in Latin "wandering together with" (p. 4). Qualitative interviewing is a guided conversation in which the investigator does not rigidly pre-conceive and trace the road ahead as for instance in survey-based research, but allows it to be shaped in interaction with the respondent, listening and looking for the meanings conveyed (Kvale, 1996: 4; Warren, 2001: 85-86). It is a way to "enter into the other person's perspective" (Patton, 2002: 341). In this study, emergent interviews were used at the beginning of the fieldwork, to gradually unveil participants' perspectives around the investigation topics. Emergent interviews (Glaser, 2001) bear similarities to Patton's (2002) informal conversational interviews (p. 342-343), or Carlson and McCaslin's (2003) meta-inquiry. These interview forms have in common the quality of open-endedness and emergence, they rely on "the spontaneous generation of questions in the natural flow of an interaction, often as part of ongoing participant observation fieldwork" (Patton, 2002: 342).

Emergent interviews are particularly fit when employing GTM, as they help the investigator to avoid imposing pre-conceived patterns of thought on data and identify the main dimensions of analysis from the field (Glaser, 2001). In this research, emergent interviews served as initial driver for data generation and contributed to:

1. Capturing participants' concerns in their own perspective and terminology;
2. Creating common ground: allowing a common language to be developed, making sure that terms are mutually understood and meanings are shared; *and*
3. Identifying local protocols with respect to role, age and gender. For instance, it was important to understand if women do not speak or do not touch certain subjects in the presence of men; or if the youth are held by respect to avoid contradicting the elderly.

With respect to the design of emergent interviews, according to Glaser (2001) the protocols should be based on open-ended and conversational questioning routes, employed with a small set of participants. A more systematic approach is taken by Carlson and McCaslin (2003). The authors advocate the use of meta-inquiry in the beginning stages of a grounded theory study in a similar manner as that advocated by Glaser, however with a more structured questioning route, including framing, main and probing questions (p. 549).

The design of the emergent interview in this research has taken a middle-path between Glaser's (2001) and Patton's (2002) open-ended approach *and* Carlson and McCaslin's (2003) more systematic take. The design was based on an initial framing question that

synthesized the research focus, and a selection of sensitising concepts. The framing question was:

> *How does/would the community use communication technologies in social interaction, knowledge production, expression, and communication activities?*

Sensitising concepts are

> "loosely operationalized notions such as victim, stress, stigma, and learning organization that can provide some initial direction to a study as a fieldworker inquires into how the concept is given meaning in a particular place or set of circumstances."
>
> - Patton, 2002: 27

As argued by Patton (2002: 343), sensitising concepts and the meta-goal of the investigation enable fluidity in conducting interviews without deviating from the research focus. Some sensitising concepts I used were derived from the main framing question: 'collective communication goals', 'communication needs', 'collectivity', 'knowledge production', 'communication technologies', 'social interaction'. Others were related to the minority status of the communities, including for instance 'marginality' and 'discrimination', or (especially in the second community) the regionally well-known extreme poverty status. Some of these concepts became important landmarks in the research, while others were dropped either for proving irrelevant or for having too little explanatory power.

With respect to the administration protocol, all emergent interviews were conducted in group settings. This has been dictated by the nature of the interaction spontaneously emerging on the field. Groups naturally formed during my visits. No rigid sampling based on age, gender, and interests was done for the emergent interviews, however it was important to reach sufficient people representative of the community composition in each site. Precise details on groups composition and number of emergent interviews in each site are given in chapters 4 and 5.

Participant observation

As the principle technique of cultural anthropology, participant observation requires at the same time the investigator's participation in a socio-cultural context and impartial observational skills (Freidenberg, 1998; Tedlock, 2000). The focus on participation and observation made it a particularly adequate method for data generation in this research project, which implied involvement in and study of a little known context complemented by the design and running of a participatory action research project. Participant observation was used as an "omnibus field strategy" (Patton, 2002: 265), functioning as aggregator and interpretive frame for all activities conducted throughout the fieldwork, including direct

observation of events happening out of my direct control, but also observation of events in which I was involved in my role of researcher (e.g. interviews, focus groups) and facilitation of intervention-bound activities (e.g. content production).

The dimensions of analysis for direct observation were developed starting from sensitising concepts, as described above. These served to guide observation toward classes of phenomena or attributes of the participants' speech, attitude and behaviour. For instance, the sensitising concepts derived from the framing question outlined above initially motioned attention on the presence of communication technologies in houses or their use by people I encountered.

As fieldwork progressed and new data generation tools were employed, participant observation came to include salient data retrieved not only from direct observation of events unfolding and the spontaneously set emergent interviews, but also the other data generation tools used and activities undertaken. *Field notes* were used for keeping track of the data retrieved from different sources, based on a common template (Annex 1) which had separate entries for:

1. Time/place and participants
2. Objectives, activities undertaken, and data generation tools used
3. Recorded or visualised content (theme, type, and participants)
4. Reflective notes
5. Design notes
6. Orientation for future data generation and activity design
7. Detailed field notes.

This format allowed easy identification of core activities done and data collected during each visit, and was a fundamental aid during the data analysis process. Reflective notes, of an interpretive nature, were given a separate place, to make sure there was no overlap with detailed factual descriptions of events, activities and data generation actions performed. Notes on the design of the intervention were also kept in a separate section, so that they could be easily identified. Field notes functioned as well as a reminder tool, so that new field visits and activities could be planned taking into account what has been done and what remained to be done based on what had been accomplished in previous visits.

Field notes were taken during each field visit where I could use my notebook, or, where this was not possible, immediately afterwards. I jotted field notes where possible also during interviews and focus groups, even if these were taped, to point to essential data emerging therein. Most of these notes were direct quotations from participants, which were later integrated in a typed narrative account of the field visit activities.

Overall, participant observation functioned as an information aggregator and a perspective-

taking technique, which was a quality and also a challenge for the quality of results. It allowed me to see things globally from a unique viewpoint, and order the very high amount of data gathered. Yet this viewpoint was unilateral and subjective. A critical review of early field notes demonstrated to what extent my perspective was not always reflecting a fair understanding of events, responses and meanings conveyed by participants. The capacity to account for and interpret small details grew, and even the language I was using changed and simplified throughout repeated field visits, which allowed me to move from the position of an outsider to that of friendly guest, or friend. Though never fully an insider, my confidence with a set of participants grew into a relaxed and open relationship. Participant observation carried value not only through their product (the field notes produced based on observations) but also as a process. Participation in community ritual events was, for instance, a way to get an insider's perspective on community life, but also a "gesture of commitment" (Wax and Wax, 1980: 30) which deepened the quality of my relations with the people on-site. The attitude and effort required for joint participation, facilitation, and attentive observation were in themselves stimulating and contributed to a critical assessment of the fieldwork process unfolding which proved rewarding in the analytical process, and especially when results were interpreted for an academic audience.

Semi-structured interviews

The semi-structured interview is a type of qualitative interviewing standing mid-way between pre-determined, structured forms such as questionnaires and completely conversational forms such as unstructured interviews (Ayres, 2008: 810). It is based on an interview guide including open-ended questions prepared in advance by the investigator, yet prone to be shaped in interaction with the respondent while the interview is being conducted (Ayres, 2008: 810; Wengraf, 2004: 3).

In this study, semi-structured interviews were used principally for gaining factual data and the perspectives of authorities and opinions leaders on aspects related to the communication project. In addition, semi-structured interviews with local people were conducted in the Podoleni study. Two interview guides were prepared for local authorities: for Romani experts or representatives, and for officials at the local City Hall. The interview guide for the expert on Roma issues (Annex 2) was designed to elicit information on the general situation of the Romani community on five fields:

1. Socio-demographic and economic data, including questions on demographics, work and employment, literacy and education, cultural activities, community organisations, religion, and access to information;
2. History, ethnicity, and cultural traditions;
3. Roma integration and development issues, covering issues, priorities and steps

taken for the integration of the Roma and community development;

4 Access to information and communication with the Roma; *and*
5 The role of the local expert for the Roma.

The interview with the local City Hall authorities (Annex 3) was designed to deliver contextual information on the commune/village, including Roma and Romanians, as well as specific information on the Romani community from the viewpoint of the authorities. The interview guide had two broad fields:

1 General data on the commune/village: demographics, economics (work and employment); development actions and priorities; transport and infrastructure; leisure time, socio-cultural activities and centres; literacy and education; access to information; communication, citizenship and participation; and religion.
2 Specific information on the Romani community, spanning: interethnic relations and Roma integration issues; organizations and projects targeting specifically the Roma; communication with the Roma.

In the Podoleni site, semi-structured interviews with local people were used to gather factual information on media usage patterns, as well as members' subjective accounts of local cultural identity, knowledge, and traditions, and social interaction patterns. The interview guide was developed based on the results retrieved from the analysis of the emergent interviews and continued to be slightly adjusted to incorporate new concerns or drop fields that were found to bring too little or trivial information to the research. The final guide (Annex 4) included entries on:

1 Personal data and education;
2 Media usage, focusing on traditional and digital media owned, usage frequency and usage patterns;
3 Cultural identity and traditions, insisting on the value assigned, knowledge possessed and communication of local history and customs; *and*
4 Social interaction, focusing on the role of ethnicity and proximity in the social life of respondents.

Cultural probes

The use of cultural probes has a short, yet rich and debated history of usage in social research and Human-Computer Interaction (HCI) design. A probe can be defined as "an instrument that is deployed to find out about the unknown - to hopefully return with useful or interesting data" (Hutchinson et al., 2003: 18). They were firstly proposed by Bill Gaver and colleagues (1999) as means for exploring people's environments and everyday lives and integrating members' viewpoints in experimental design projects.

> "The cultural probes—these packages of maps, postcards, and other materials—were designed to provoke inspirational responses from elderly people in diverse communities. Like astronomic or surgical probes, we left them behind when we had gone and waited for them to return fragmentary data over time."
>
> - Gaver et al., 1999: 22

Cultural probes rely on the delivery of a probes kit to participants in a study or users for whom a design solution is being conceived. The probes kit typically includes a set of tools that trigger participants to explore their environment, reflect on everyday life activities and jot down or capture thoughts, impressions and glimpses of their context and daily routines in a manner that is at the same time spontaneous and creative. They are likely to include a series of "capture artefacts" (Graham et al., 2007) which can be digital - such as Dictaphones or disposable cameras, or low technology - such as post-its or notebooks. Importantly, the composition of a probes kits is designed to fit the environment in which they are being deployed (Crabtree et al., 2003; Graham et al., 2007; McDougall and Fels; 2010) so that context-specific responses are generated from participants' interaction with artefacts (Graham et al., 2007: 30).

Probes can be used both as interpretive material in social research and as resource for design, their conceptualization being shaped by the stance of different disciplines ranging from engineering to design, social science, and ethnography (Graham et al., 2007: 30). In this research cultural probes were employed from a stance bridging an ethnographic and a design perspective. As ethnographic tools, probes were used to encourage local people to explore, reflect upon, and represent in digital form the aspects of their environments and lives that they deemed interesting, compelling, or relevant for the on-going project. The aim was to allow the formulation of insights into the local culture from an insider's point of view (Gaver et al., 1999). As design resources, probes were primarily meant to inform the design of the intervention (program and activity design), and second to provide insights for the communication solution to be developed (product design).

The probes kit was conceived to enhance free exploration of the local context with minimum guidance on my behalf. The base kit included a video-camera with a tripod, a photo camera and a Dictaphone. The kit was given to the main contact family in each site. No instructions were provided inside the kit. Their purpose was discussed when the kit was handed over and participants were trained to use the devices. This approach stands out from others in the literature, which include both low (e.g. notebooks and pen) and digital technology (e.g. disposable cameras), and in addition provide detailed instructions for usage and carefully crafted tasks to accomplish (see for instance Crabtree et al., 2003; Graham et al., 2007; McDougall and Fels; 2010; van Leeuwen et al., 2011). By contrast, my approach was to entrust the kit unconditionally as a set of basic tools that could enable exploration and representation activities guided by the people's, rather than my ideas. I was interested in

what people were going to capture, but also in the interactional dynamics created around the usage of the devices. In this respect, the usage made of probes stands half way between cultural probes (as advocated by Crabtree et al., 2003; Gaver, 1999; Graham et al., 2007), and technology probes (Hutchinson et al., 2003). While cultural probes are used as inspiration for design and means for comprehending the users' environment, technology probes are more directly concerned with new technology design by observing users' interaction in real life contexts:

> "Technology probes are a particular type of probe that combine the social science goal of collecting information about the use and the users of the technology in a real-world setting, the engineering goal of field-testing the technology, and the design goal of inspiring users and designers to think of new kinds of technology to support their needs and desires. A well-designed technology probe should balance these different disciplinary influences."
>
> - Hutchinson et al., 2003: 18

My approach resembled the technology probes technique for the accent placed on observing people's unbiased and unguided interaction with devices. The fact that I have entrusted the probes with families, rather than individuals, is another feature of resemblance with technology probes as used by Hutchinson et al. (2003) in the interLiving project. However, as a feature of difference from technology probes, my interest was not to design new technology from an engineering stance, but use the insights generated from the analysis of technology usage for informing the design of a communication solution and the process of developing it with local people. Also, I encouraged mobility in the use of the kit, as I was interested to understand how people were going to use the kit together, the social networks through which it was going to be circulated, and how individual and collective visions were being negotiated and complemented in this process.

One of the debates in the probes literature is on what exactly makes the data to be analysed in probes (Crabtree et al., 2003). In this study, the entire process by which the probes were deployed, produced and reviewed, as well as the material probes themselves, were sources of data. *First*, people's interaction with the devices was analysed for understanding the dynamics of cooperation among members. The analysis was done based on members' retrospective accounts in individual and collective meetings in which the probes were visualised and discussed. I inquired about the people who used the devices, their relations with the people who had been initially entrusted the probes kit, and on how they had been trained to use them if they were not part of the group that had been provided training by myself. At this level, the analysis was meant to come up with interaction and cooperation patterns that could be further taken into account in the design of the content production activities.

Second, the content of the probes was analysed for mapping out the most significant local

themes that could potentially become the subjects for the communication artefacts to be produced as part of the project. These themes were documented and gathered in a list of content themes that was further used as thematic guide for the content production experience. The thematic analysis was based on data retrieved from group discussions around the visualisation of probes, and the digital content produced. Content analysis served to map out local themes as represented in the materials produced, while collective discussions gave insights into member's perspectives and reasoning for the choices of subject. During collective discussions, I inquired on the reasons why for choosing to capture certain aspects and events, what they meant for the people who produced them, and how they were connected with other collective features and events. Probes were also important for understanding what type of media people preferred to use, and further dig into the reasons for this choice during group discussions.

A facet of probes usage which became evident during their employ was that they functioned as engagement tools for people, and glues for the exploratory, design, and implementation phases in the initiative. They became means for seamlessly linking the exploratory and design phases of the project to the content production experience and defining in an organic manner the roles that people could fill as participants in content production.

In addition, engagement with probes served to familiarize people with technology and enhanced their informed participation in design decisions. As argued by Graham and Rouncefield (2008), engaging with cultural probes implies members' participation at various levels, from investigative or exploratory participation to reflective, imaginative and playful participation. This participation can build up to enabling higher forms of participation in design. Crabtree et al. (2003) make a similar claim that when used in combination with workshops, probes can facilitate people's participation in design and therefore build organically towards cooperative design forms. Coupled with the observation on the insights into the local culture they provide, this quality points to the capacity of probes to be effective mediators among investigators and local people in technology-based participatory research projects: on the one hand they afford a glimpse into the locale for investigators, and on the other they allow people to gain experiential knowledge on technology usage.

Focus groups

Focus groups were one of the most rewarding and easy to integrate data generation techniques, as in both communities there was a propensity for group interaction around my visits. The defining feature of focus groups as a qualitative research technique stands in the use of group interaction and discussion as a source for data generation (Litosseliti, 2003; Kitzinger, 1994; Morgan, 1996; 2008). They are differentiated as well from other group-based discussions such as naturally occurring conversations by the accent placed on the

role of the investigator in defining the discussion topics and moderating the discussion (Morgan, 1996: 130-131; Patton, 2002: 385-386). Focus groups are particularly adequate techniques for research involving illiterate communities (Litosseliti, 2003: 16) or members of marginalised groups and minority cultures, due to the natural flow of conversation stimulated when people with similar background are brought together (Morgan, 2008: 352).

Focus groups were used in this research as a collective endeavour for surfacing the processes and issues relevant for the study, and mapping the considerations based on which action could be taken in the frame of the communication intervention. This approach resembles Paulo Freire's use of focus groups with low literate groups in Brazil, for mapping the possibilities for collective, emancipatory work and enlarging people's vision with respect to the scope of their own actions (Kamberelis and Dimitriadis, 2005).

Focus groups were used for two different purposes. The first concentrated on understanding the nexus among communication technology and collective expression and communication in community life before the project. This focus group type was related to the first research objective. The second was used for eliciting requirements for the design of the communication solution and the process of shaping it collectively, and therefore provided answers for the third research objective. The approach for the definition of each is further described below.

Exploratory focus groups

Focus groups were employed during the exploratory phase of the field research for understanding the role that communication technology played in the collective practices by which knowledge was produced, communicated (with contemporaries) and transmitted (in time, to future generations).

Morgan and Scannell (1998) propose that focus group organization should take into account early in the planning process the degree of structure that is desired for the interview guide as well as for the moderating style. A structured approach reflects the interests of the research team and implies that the investigators know well what they are prone to discover and can develop a list of clear, pre-determined questions employed as such during moderation. An unstructured approach is fit when investigators need focus groups to clarify what has to be known and solicit participants' perspective on the research themes (p. 43-48). Such an unstructured approach was taken in the present study, starting from broadly defined topics and aiming to better shape them through interaction with and among focus group participants.

The focus group guide has been developed starting from the framing question:

> *What is the role of information and communication technology (traditional and digital) in the local community's collective expression, knowledge production, and communication practices?*

This question was operationalized in two thematic areas:

- Traditional culture and collective knowledge: what did people know of their collective group history and culture and how they came about to know what they knew and from whom?
- The role of communication technologies in information reception and transmission.

Questions were further developed based on Krueger's (1998) taxonomy of five types of questions:

1. Opening, for introducing participants;
2. Introductory, usually broad and open-ended questions which relate participants to the topic of investigation;
3. Transition, used to prepare the ground for a new key question;
4. Key questions, the drivers for the investigation, prone to yield most of the information from the focus group; *and*
5. Ending questions, which can sum-up what has been said asking for comments, allow participants to clarify their position on the topic in the light of what has been discussed, or relate the focus group responses to the overall study purpose, asking comments for the adequacy of the approach taken (p. 21-30).

The design of the focus group guide was re-shaped after interpretation of results from each iteration, following GTM theoretical sampling principles. Some questions were added for probing patterns identified from the analysis of past focus groups, while some other questions which were deemed to give little or trivial information were dropped. The final questioning route is presented in Annex 5. The probing questions listed in the guide were developed and introduced throughout the process of modifying the questioning route after each focus group held.

Focus groups for activity design

While they remain centred on data generation, the use of focus groups for design bears some differences from exploratory focus groups as described above. In this instance, focus groups were used as tools for the wants and needs analysis, focused on generating requirements for the communication solution (Courage and Baxter, 2005). The aim was to solicit members' viewpoints on precise design dimensions that would make the backbone of the intervention to be run and the communication product to be developed.

The focus group guide was structured to elicit data regarding the communication product to be developed (product design), as well as local people's involvement in creating it (activity design). Questions were revised, added, and refined throughout a series of focus groups, integrating members' responses and also data retrieved throughout the analysis of cultural probes.

Annex 6 presents an aggregated view of the questioning route used across a series of focus groups. The questions evolved to incorporate and further probe participants' input as follows:

- In a first focus group, preliminary questions on community traditions, features, and present-day concerns were used to direct the discussion towards identifying the possible subject matter pools on which our work could draw. They were then followed by envisioning questions, in which we tried to pinpoint a vision for the communication solution ('Envisioning questions' in Annex 6).
- Subsequent focus groups worked on the answers yielded in the first one and gradually brought the vision for the communication solution to a more precise outline. For instance, when a public audience was selected for the communication messages, the questions regarding possible content were targeted to understand what type of content was acceptable for public outreach. They served as well to identify the type of involvement that members could have in developing the communication solution. Questions were grouped in four areas: 1) subject matter, 2) roles, 3) expectation and return, *and* 4) privacy and data protection.

This evolutional approach allowed the dimensions of analysis to be gradually shaped, probed and discussed in several rounds by community members until they came to yield data that was used in the decision-making sessions for the intervention design.

2.6 Intervention-bound Methods

The technology intervention carried out with the two Romani communities was oriented towards the production of local content and its publishing online in two community websites. The model for content production and the approach to the website design are further described below.

The content production model

The content production experience was based on a model developed through the merge of the PAR cycle and an existing content creation model, customized based on the vision and guidelines defined in each site in the first, exploratory phase, and further refined through application. The root content creation model used was the Inquiry Cycle, developed by the

Community Informatics Research Center at the University of Illinois at Urbana-Champaign for supporting inquiry-based learning, in particular involving communities (Bruce, 2002; Bruce and Bishop, 2008). The model is based on insights from pragmatist education, in particular the work of the American educator John Dewey. The inquiry cycle can best be described as an inquiry and learning tool for group settings centred on the learner's experience. It advocates the use of creative, hands-on activities as well as sharing and discussion as catalysers for learning; creation does not necessarily imply development of concrete artefacts, but rather of meaning (Bruce and Bishop, 2008: 710-711). Its five main steps, *Ask-Investigate-Create-Discuss-Reflect,* are centred on the creative act, but oriented toward a learning or educational goal.

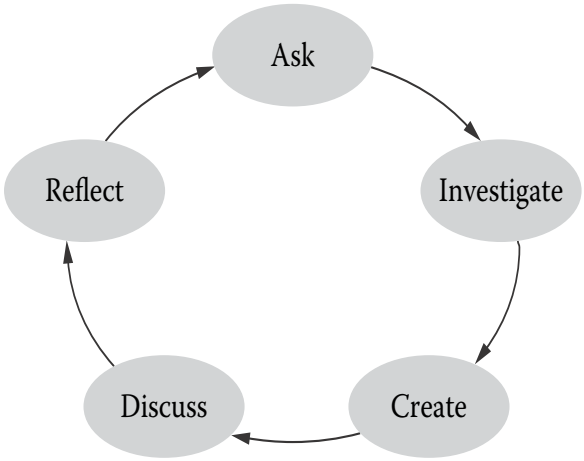

Figure 2.7. The Inquiry Cycle, the basis of the content production models used. Source: Bruce and Bishop, 2008: 710.

In the application in this study, the learning dimension has been considered important, yet the focus has fell on the effectiveness of the *creative* process. The phase preceding the creative act - *Ask, Investigate* - and the phases succeeding it - *Discuss* and *Reflect* - have been found to hold particular value in fostering externalisations of local concerns and stories from community members. *First*, this sequence of activities could drive attention to the raw matter of the content to be produced - the community and the values, traditions and concerns of its members. Inquiry anticipating creation sessions could compel members to pay attention to the dimensions of their cultural milieu that could become the subject of their creative acts. *Second*, the alternation among inquiry, creative acts, and discussion sessions could favour distance-taking and the development of critical thinking. The enactment of this cycle caused a natural chain in which subjects treated motioned the connection with other subjects, or the same subjects were seen in a different light and re-interpreted. This naturally

determined the content creation process to move toward directions which were close to the true expression of the visions and concerns of community members.

The reasons above motivated the choice of the Inquiry Cycle as the base model of content creation. Its actual implementation included a series of adaptations and modifications, in response to local factors and the requirements stemmed from the initiative as it was unfolding. The final models resulting were context-specific and are described in each field site chapter.

Website design

The website design approach employed was based on an adaptation of the card sorting design method. Card sorting is a user-centred design technique used for integrating users' understandings and perspectives in the definition or refinement of the information architecture of a web portal, including "the organization of a product's structure and content, the labelling and categorizing of information, and the design of navigation and search systems" (Courage and Baxter, 2005: 415). Some authors refer to card sorting as a means to drive the definition of the information architecture through the users' mental models (Courage and Baxter, 2005; Paul, 2008). In particular, card sorting serves to elicit users' perspectives on the website terminology, relationships among content items, and categories for grouping similar content items (Hudson, 2012).

The focus on integrating users' viewpoints in the website design made this technique particularly relevant for this research. However, it should be emphasized that this study did not involve the final website users, but rather community members. The purpose was to include local people's views on how they would want their community website to be designed, and reflect their values, goals and concerns in its structure. The card sorting exercise was meant, therefore, as a helpful tool for facilitating genuine cultural representation in digital media.

Card sorting was used to open the website design sessions in each site and create a first draft of the information architecture, later to be refined through subsequent design sessions. The exercise was an instance of open card sorting, where participants make their own categories based on grouping website content samples (Hudson, 2012). In a typical open card sorting exercise participants are provided with a series of tools (content samples written on cards, and white index cards) and have the task of grouping together like items into categories and naming these categories according to their understanding (Ibid.). In the present study, some adaptations were done to integrate the card sorting exercise in the overall program and give continuity from the content production to the website design phases. An important adaptation was that apart from website content samples, the local content themes developed throughout the content production phase were used as well for

defining the website categories. The recruitment of participants and the detailed protocol for the card sorting exercise and the subsequent website design sessions are provided in each field study chapter.

2.7 Data Analysis Strategy and Procedures

2.7.1 Analytical strategies

Data analysis served two purposes:

1 To inform the design and the constant adaptation of the intervention in each field site during its implementation.
2 To develop the expected research contributions.

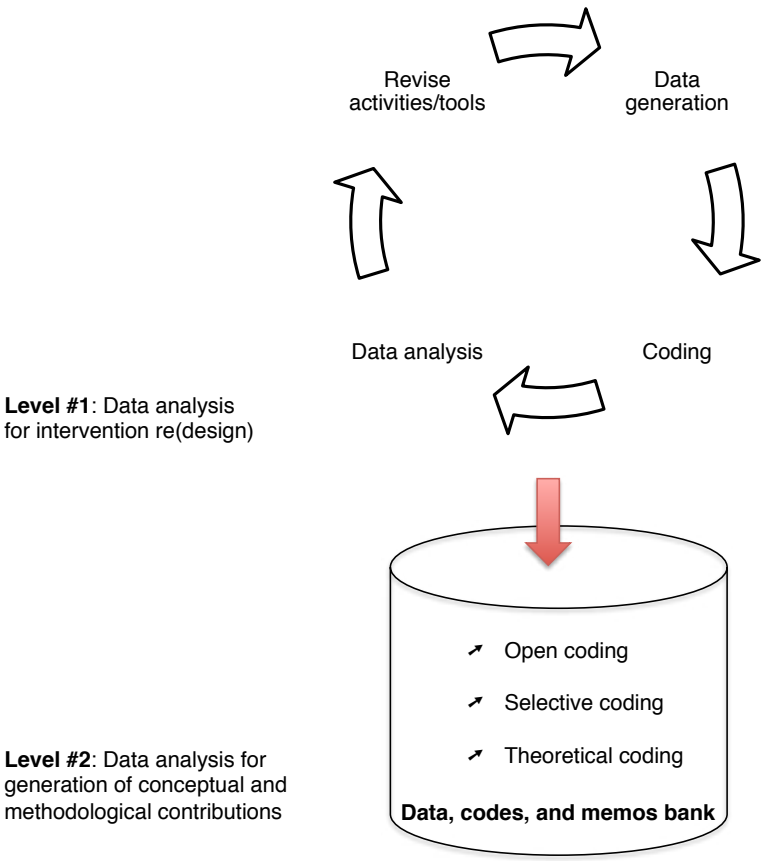

Figure 2.8. Data generation and analysis cycle highlighting the role of the two analytical strategies. Source: author.

The same data set was used for both, yet different analytical strategies were required for each. For the first goal, it was necessary to identify substantive codes from the data, analyse them and further derive insights for the design of the intervention. For the second goal, the coding and analysis process moved gradually from a substantive to a conceptual level.

Fig. 2.8. represents how the two analytical strategies were used in their complementarity:

- The first strategy activated a cycle by which data was generated through field activities, collected, coded, analysed at substantive level and therefore used to produce insights for the revision of the design or development of new activities as required.
- The second strategy was a progression alimented by each new iteration of the cycle: data, codes, and memos were gradually adding up in a database. Analysis progressed from the substantive level to the conceptual level and followed GTM procedures going through the phases of open coding, selective coding, and theoretical coding as detailed in the next sub-section.

2.7.2 Procedures

Coding procedures

Coding refers to

> "naming segments of data with a label that simultaneously categorizes, summarizes, and accounts for each piece of data."
>
> - Charmaz, 2011: 43.

To capture the dynamic quality of social processes, I have used codes in the form of gerunds. Charmaz (2011) advises to "code data *as* actions" (p.48, author's *emphasis);* using gerunds for coding captures the dynamic, processual nature of the phenomena happening on the field and forces the analyst to interpret them in terms of the relations established among dynamic phenomena. For instance I have used the code "being proud of Romani musical tradition" rather than "pride in Romani musical tradition".

The coding procedures were optimized for highlighting the adequacy of intervention actions (analytical strategy #1) and accommodating the development of the methodological outcomes (analytical strategy #2). Data were first brought to textual form, or archived and labelled in the case of audio-visual content from cultural probes. Ad litteram transcription was done for the first rounds of fieldwork data, so that an initially rich corpus of data could be used for generating the first concepts. During the later stages of fieldwork, a more synthetic transcription was done, keeping to the essential points made by participants and omitting interruptions and hesitations. To enable the development of methodological contributions,

and therefore to highlight intervention actions and effects, I have adapted coding procedures using different colours for three categories of codes:

- Blue for community and contextual features not conditioned by the intervention, encompassing collective and individual levels; for instance 'having a hierarchical social structure', 'having low media literacy', 'being illiterate';
- Red for actions organized as part of the intervention having myself as intentional agent, e.g. 'delivering technology kit', 'running a collective production session', 'visualising footage'; and
- Green for responses and actions as part of the intervention having the community as main intentional agent, e.g. 'using the camera for internal community events', 'engaging in the collective production session', 'understanding community benefits'.

This distinction allowed easy identification, separation, and relating of features and processes across the three categories. For instance, it allowed to understand if a certain pattern of technology usage (therefore a community response) was more highly determined by contextual features or by the particular way in which activities were organized as part of the intervention.

A second adaptation necessary for facilitating the development of methodological outcomes was that codes were analysed in their sequential evolution, so that the progression of the processes could be related properly to conditions. In regular GTM research, the theory developed is a static snapshot of the way processes are interrelated and mutually conditioned at a given point in time. The purpose of this study was not to develop such a unitary snapshot, but rather a series of snapshots cumulating selected processes at given moments in time, with a clear view of how they were related and how they conditioned one another. Based on the analysis of changes in the way processes were related, it was possible to develop insights with respect to inhibiting and triggering factors that influenced community responses to the intervention. It was on the basis of these insights that methodological insights have been derived.

For example, the degree of participation in production sessions was analysed across time for understanding fluctuations in a positive or negative direction. When a negative tendency was noticed, further data were collected for understanding the reasons behind it and to what extent they were related to aspects in the organization of the intervention or to contextual features. In the Podoleni site, data suggested that the reasons varied between mistrust as to my genuine interests in carrying the research; lack of acknowledgement of direct benefits; and the perception that other members involved might get additional benefits from the project. These three factors were probed and thereafter translated into methodological guidelines: ensure open communication flows for reaching as many community members as possible; negotiate and spread large awareness of the benefits derived by the community

from the intervention; ensure equal distribution of benefits and rewards and members' full acknowledgement of it.

With respect to coding and analysis tools, I have used two types of word processors (MS Word and Scrivener) and low technology (paper, pen). In the early stages, I have attempted to use a freeware QDAS, but dropped it after a few trials. Using word processors, paper, and pen allowed me to be creative and fast in transcribing, manipulating and interpreting data. Moreover, in many instances several hypotheses were followed throughout fieldwork until proved or disproved by new data, something that was easily handled by using hand-writing tools.

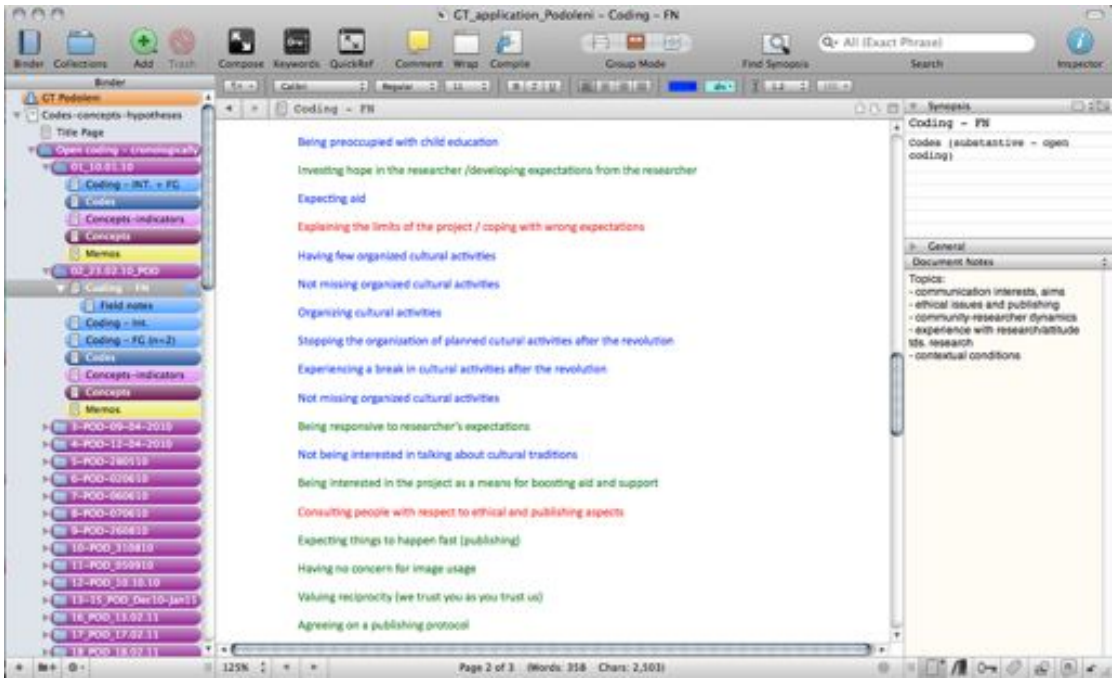

Figure 2.9. Screenshot of the codes and memos bank using the word processor Scrivener. Window of substantive codes generated in the early project visits (open coding stage). Source: author.

One significant aspect to consider when choosing the tools for coding and analysis is the enormous quantity of resulting files. For a single fieldwork day, for instance, I have kept separate files for field notes, eventual transcribed interviews and focus groups, codes generated for each, separate lists of codes in order of coding, grouped codes with associated concepts, and memos. This quantity of files was easily manageable using a commercial, yet inexpensive word processor, Scrivener[2]. The software allowed me to keep

[2] http://www.literatureandlatte.com/scrivener.php

all the data and associated codes and concept lists as well as memos in a single document, organized in folders, sub-folders, and tabs, by type and stage (see Fig. 2.9). Yet for the more advanced stages of coding and analysis, interpretation and relating of data were done using only paper and pen. Scrivener served rather as a data bank, keeping data, codes, concepts and memos together for easy retrieval.

Coding and analysis phases

Data analysis based on GTM is a progression starting from empirical data and ending with the development of the grounded theory. This process is characterized by an escalating level of abstraction: data grow into substantive codes, which are then worked into concepts, their properties, and relations or hypotheses linking them. The exact procedural outline and phases of GTM application varies across the GTM forms produced in the literature on social science research methods, however most authors distinguish between some form of initial, intermediate and advanced coding (Birks and Mills, 2011: 95). In Glaser's approach as used in this study, the process of analysis goes through *open, selective and theoretical coding.*

Open coding refers to the first stage in coding, what Glaser refers to as "running the data open" (Glaser and Holton, 2004). At this stage there is no limit to the number of concepts that are being identified. Grounded theory scholars recommend several approaches to open coding. For instance, one option is to conduct "line by line" coding, in practice generating a code for each line of transcribed data (Charmaz, 2011: 50-51). After experimenting with some approaches to coding, I opted for assigning codes to the most contained meaning-making units in the textual data, referred to as "thematic units" (Krippendorf, 1980). While pursuing open coding, Glaser recommends that the analyst should ask a series of questions for getting most out of data and for shaping her/his theoretical sensitivity:

> "What is this data a study of? What category does this incident indicate? What is actually happening in the data? What is the main concern being faced by participants? What accounts for the continual resolving of this concern?"
>
> - Glaser and Holton, 2004

Selective coding refers to the delimitation of data generation and analysis after a core variable has been identified. Glaser proposes two criteria for choosing the core category: the relations with the other categories and their properties, and its evocative power to support the formulation of theory (Glaser and Holton, 2004). The core category is

> "… central, relating to as many other categories and their properties as possible and accounting for a large portion of the variation in a pattern of behaviour. The core variable reoccurs frequently in the data and comes to be seen as a stable pattern that is more and more related to other variables."
>
> - Glaser and Holton, 2004

In this study, the core category was 'context-responsiveness', a concept that became the landmark for the conceptual and methodological framework developed as one of the main research outcomes. After the core variable was identified, data generation as well as coding focused only on data and variables that could be meaningfully related to the core variable, with a view to generating the theory. *Delimiting* applied at two levels, through a process of reduction:

- At the level of the categories. The list of categories is diminished, retaining only the core variable and the variables meaningfully linked to the core variable.
- At the level of the emerging theory. According to Glaser, when the researcher identifies an underlying uniformity in the set of categories, she can reformulate the theory through fewer and higher-level categories. The theory "solidifies", and the amount of modifications brought decreases (Glaser and Holton, 2004).

Once theoretical saturation of the categories was reached, I conducted *theoretical coding*, which refers to sorting and reviewing the memos relative to the core category, its properties, and the other categories related to it. Analysis focused at this point only on existing codes, and did not integrate new field data. The categories and their properties were arranged according to "similarities, connections and conceptual orderings." (Glaser and Holton, 2004). The result of sorting is a pattern or an outline that is further used for drafting the theory (Idem). In this study, the resulting pattern was used to draft the CoRA conceptual and methodological framework, as well as the grounded propositions around community participation in ICT developmental interventions. It is at this point that relevant literatures were extensively reviewed, as required by the emerging concepts and propositions (Glaser 1978, 2001, 2002). The conceptual propositions and the methodological framework were compared with other conceptual and methodological approaches in the relevant area of study for refining categories and their properties and checking relations established among these.

Memoing

Constant writing of memos is one of the fundamental activities when employing GTM. Glaser defines memos as "theoretical notes about the data and the conceptual connections between categories" (Glaser and Holton, 2004). Memoing was done in this study in parallel to coding and data analysis. Memo writing emerged most spontaneously when coding. Being immersed in field data facilitated making connections and theorizing, these insights being constantly jotted down by hand or in electronic format.

I have organized my electronic memos in the same document with the codes, organized according to degree of abstraction: those associated to particular sets of data organized chronologically, memos about emerging concepts and their properties, memos about the

core variable and selective coding, memos about relevant extant theories in advanced stages of theory building, and finally memos for the methodology being elaborated while the older memos were being sorted out.

A second way of writing memos was diagramming by hand. Diagramming allowed faster representation of relations among categories. Hand-drawn diagrams became essential especially during the last part of the data analysis, when complex relations began to emerge among clusters of related categories.

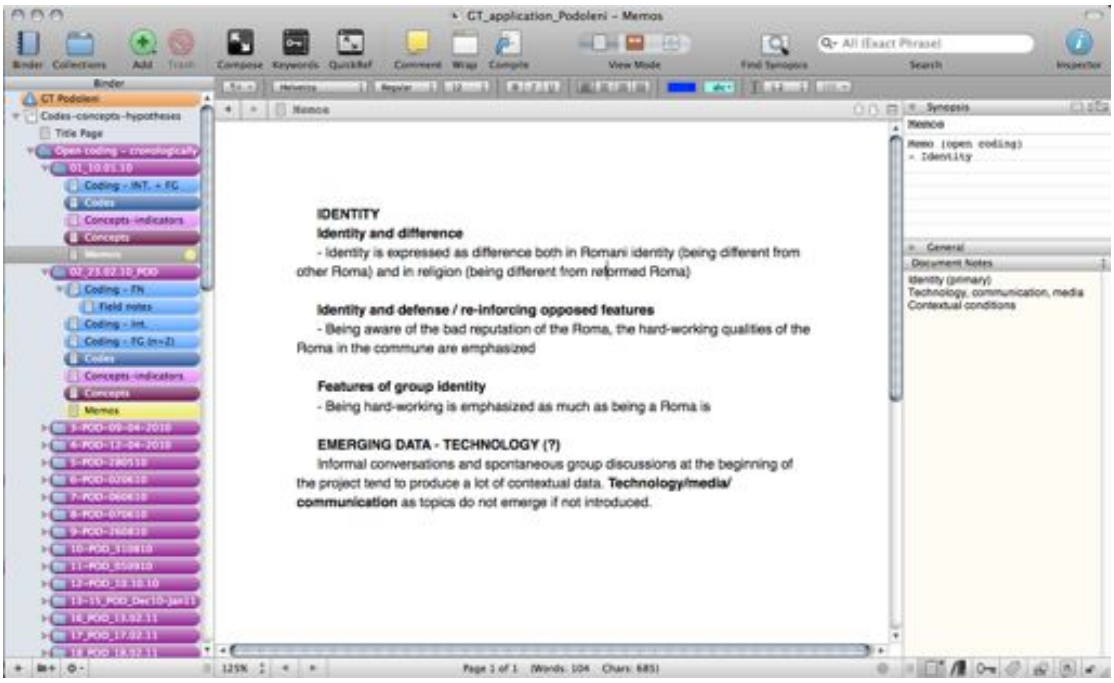

Figure 2.10. Screenshot of a memo in the codes and memos bank. Source: author.

Landmarks in developing CoRA

This part sheds light on the process of producing the Context-Responsive Action (CoRA) methodological framework, and the role that the survey of the literature had within. The most important milestones in developing CoRA were:

- The first version of the main CoRA components (core concepts and propositions linking them) was elicited during fieldwork in the Podoleni field study (first 10 months).
- The provisional version of these core components was further used to inform the design of the initiative in the Munteni field study.
- CoRA components were probed and assessed drawing on field data elicited from the parallel progression of the two field studies.

Insights from the relevant literatures were integrated at two points: in the second part of the fieldwork period in the first field study, and at the end of the fieldwork in the second study. In both cases the purpose was to bring the methodology to a workable form by ensuring the breadth, coverage and transferability of its concepts and approach, and expanding the scope of the possible contexts in which CoRA could be potentially applied. The identification of the relevant pieces of the extant literature was done respecting a series of principles:

1 Identify literature as asked by the data, identified patterns in the data, emerging concepts, and relations among these concepts.
2 Look for similarity and counter-positions in the literature surveyed.
3 Understand similarity and counter-positions by critically surveying theory and methods in relation to specific empirical contexts and conditions.

The most common cases in which literature insights were integrated in CoRA are given below, and illustrated by vignettes from the development process.

Verify emerging concepts for similarity and counter-positions.

One example was the concept of *context*, which became central to the emerging methodology. Field data suggested that 'context' has a dynamic quality and evolves throughout a technology intervention. At several points during the interventions a series of observations based on data gathered during the first, exploratory phase, became obsolete: people's knowledge, attitudes, and the relations among them and the project, and even among themselves in the scope of the project, had changed. The dimensions of this change were such that they required constant revision and adaptation of the project design. This suggested that the design of a technology intervention needed to account for this dynamic evolution of context, and do not rely only on a static snapshot of the context at a point in time. The positions exposed by Dourish (2004), as well as Nonaka and colleagues (Nonaka and Takeuchi, 1995; Nonaka et al., 2000), were found consonant with this insight. Counter-positions were represented by positivistic approaches to defining 'context' in representational terms, suggesting that context is an outer reality separate from and unaffected by people's actions and attitudes.

Verify emerging concepts for breadth, dimensions, and conditions for transferability.

This was the case for concepts that required in-depth description and operationalization. One illustrative examples was 'reciprocal learning', indicating a process of knowledge acquisition that could replace the idea of unilateral information acquisition by researchers pursued, for instance, in typical ethnographic research. Data indicated that the advancement of the project relied on joint insights and inputs from myself and the local people as asked by each activity and action in the initiative. Three sources of data emerged as important: 1) the local context, 2) technological options and project practicalities, and 3) an emerging

dimension from the exploration of the two: communication solutions applied to the local context. Kensing and Munk-Madsen's (1993) model of user-developer communication in participatory design yielded a similar vision. Insights from this model helped to shape the conceptualisation of the knowledge dimensions in the exploratory phase of the timeline suggested in CoRA.

Survey the literature for emerging concepts of vague terminology.

For some emerging concepts verified through repeated patterns in data, it was difficult to define exactly their limits, and to understand the features to insist upon when establishing causal relations. An example is the concept of 'perceived self-efficacy'. Already from the first field study it became evident that people's engagement was conditioned to a great extent by the way they perceived their own capacity to contribute to it significantly. The concept of 'perceived self-efficacy' (Bandura, 1998, 2000) was identified as one prone to capture the nuances of this attitude that blended self-perceived capacities coupled with confidence in ability to reach project outcomes. Moreover, Bandura also differentiated between individual and collective self-efficacy (Bandura, 2000), concepts which allowed a clearer and more sound coverage of the data patterns identified with respect to individual vs. community dynamics.

Check relations among concepts.

This was the most extensive part of the literature review. The relations established between concepts as indicated by field data were checked with models from the literature. In this part, the purpose was to check the plausibility of causal relations established among concepts and understand to what extent the causal relations verified in the field studies would be verified in other contexts and the conditions for their transferability. Examples are: the relation between learning and effective intervention in decision-making (Hearn et al., 2009); the importance of preparatory stages as a pre-requisite to the employ of participatory techniques (as advocated by Ethnographic Action Research, Tacchi et al., 2003); the manifold relations that can be established among the project vision and the adequacy of project activities in reaching designed goals (Dick, 1997, 1998).

2.8 Ethical Issues

> "(E)thical guides are not checklists but rather perspectives. They are a way of seeing research contexts. They are a way of viewing responsibilities and relationships in those contexts."
>
> - Kellehear, 1989: 70

Allan Kellehear (1989) raises two important points with respect to ethics in social research:

1. First, he advocates an approach to incorporating ethics in research as dictated by the particular problem addressed by the research, the socio-cultural and political context in which it is carried, and the participants involved. This is done by avoiding fixed pre-planning, allowing the right ethical approach to stem from the process of conducting research.
2. Second, he indicates that ethics and methodology are tied and complement each other. The choice of a research problem to study and of a methodological approach carries with it a series of ethical issues that need to be dealt with (p. 71).

The approach taken in this study was inspired by similar considerations. It sought to conceive and implement ethical measures as asked by the context, the people, and the type of research conducted. At the same time, it sought to take the right steps for meeting academic ethical standards. To properly match the two, the process started with a literature survey oriented toward the identification of a series of core aspects around ethical issues that needed to be taken into account in carrying out research in minority communities. These elements have been constituted in reference points that were further checked and verified during fieldwork, meeting local data and proceeding through negotiation until a practical approach was shaped. This section covers the ethical approach adopted in this study in three parts: the first provides an overview of the most important considerations that shaped the approach to ethics in this study. This first part is not a set of guidelines, but rather a list of points to consider critically, often set in contradiction and therefore prone to be met and solved through fieldwork. The second part is an account of the ethical measures taken during fieldwork for the two communities involved. The third part goes more in-depth in detailing the community response to ethical measures, and highlights some of the challenges that had to be met.

2.8.1 Ethical issues in participatory research with minority communities

Community-based research with minority groups requires "a move from deductive, empirical university and academia-driven models to a more holistic, community action-oriented approach to research that is Aboriginal-driven and takes into account the uniqueness of each community" (Patterson et al., 2006: 49). This shift applies as well to research ethics. Some authors argue that ethical regulations and protocols in social science academic research do little to capture the intricacy and complexity of community-based work, especially in its participatory forms (Edwards et al., 2008; Flicker et al, 2007; Lincoln, 2001), or when minority cultures are involved (Bishop, 2005; Castellano, 2004; Smith, 2005). Even when articulated and applied thoughtfully, they may break, come against or simply fail to meet local protocols as to what is just and unjust to do in research. Community-based work, especially in its participatory forms, asks for the development of measures that are community-driven and aligned to local interests and socio-cultural protocols (Edwards et al., 2008; Flicker et al., 2007; Lincoln et al., 2001; Patterson et al., 2006; Smith, 2005).

To properly position ethical issues in participatory community-based research, it is necessary to pinpoint the meta-ethics, or "the assumptions individuals make about their moral theories and their ethical decision-making", grounded in the particular ontological and epistemological position embraced (Preissle, 2008: 275). The meta-ethics of participatory research is thus fundamentally linked to the assumptions of the participatory inquiry paradigm. Its tenets can be outlined around two aspects: the degree of applicability of ethical frameworks to decisions and conduct - from absolutist to relativist positions, and the human unit for decision-making - individual vs. collective (Preissle, 2008: 275-276). With respect to the applicability of frameworks, some authors argue that each local community raises context-specific ethical issues, which cannot be solved by the top-down application of generic guidelines and protocols (Smith, 2005; Patterson et al., 2006). Other authors maintain however that ethical frameworks may in the least align specific tribal or communal ethical measures to the principles of participatory research (Macauley et al., 1998), or avoid breakages from participatory ethical principles when investigators and communities lay down their own ethical codes (Flicker et al., 2007). Ethical codes of conduct can sketch general principles to be taken into account and moulded for the requirements raised by specific communities. Guidelines and codes of conduct have been drafted to protect the rights of minority cultures, at local, regional or national levels by the states, regional bodies, associations and ethical boards in countries with a significant minority presence, such as Canada, Australia, USA, and New Zealand. These may take the form of guidelines for conducting research with minority groups, pointing to essential aspects around community involvement in research and data ownership (e.g. NHMRC, 1991), or model research codes that can be used as

inspiration or adapted by specific tribes or communities (e.g. American Indian Law Center, 1994).

With respect to the unit for decision-making, two poles are represented by individualism and collectivism. The individualist position embeds assumptions about individual rights and the inviolability of individual property and free will, operationalized in measures such as individual consent forms (Marshall and Rossman, 2006: 89; Smith, 1999: 118). In some contexts, however, decisions over important matters are considered to be the prerogative of the community and therefore embedded in a collective decision-making unit (Preissle, 2008: 276). Participatory research, moreover, needs to locate the unit for decision-making in accordance with the key participatory principle of co-research, implying shared decisional power between researchers and research participants (Macaulay et al., 1998: 105). This meta-principle should guide the development of ethical frameworks and guidelines by locating the source of decision-making in the interaction among researchers and participants.

One important question and red thread in navigating these issues when advancing a practical community-based research project is: *to what extent can academic and community-driven ethics be at odds, especially in participatory projects?* Some authors hold it that ethical issues in participatory community-based research do not counter nor affect the scientific valence of the process, as the first have to do with "meeting moral standards" and as such should be separate from the measures for establishing scientific rigor in research (Buchanan et al., 2007: 159). Others argue, however, that when a participatory approach is taken to community-based research, academic standards may come in conflict with community expectations about the study and its design (Minkler, 2005). One evident point of divergence is at the level of the assumptions integrated in the meta-ethics of research, for instance as derivative of the individualist and collectivist position with respect to knowledge ownership, free will, and decision-making.

Second, academic and community-driven ethics take conflicting approaches with respect to community *involvement* in research design. Academic research reduces ethics to protocols that ensure respect for the autonomy of participants, avoidance of negative effects, confidentiality, and privacy (Flicker et al., 2007: 478). Given the respect of these principles, the role of participants goes no further than that of data providers, and as such they have no say in the design of the research. In participatory research, community members detain decisional power starting from the design of the research, the formulation of research questions, and the choice of methods. An illustrative example of how academic rigor and community choices might clash in these respects is provided by a community-based study with a Native American population in Canada. In the preparatory stages of the research, people were against the researcher's proposal to use a questionnaire as data generation instrument, which would be "putting their thoughts in boxes" (Chataway, 1997: 759; Minkler,

2005). Through discussion and negotiation the tool was accepted, yet not out of conviction for the scientific value of the data gathered using this instrument, but rather "because you are doing so much for our community" (Chataway, 1997: 759). This is an example of how a broader approach to ethics, cherishing community involvement in research design, can clash with academic standards of rigor and the researcher's freedom of choice over the methodological choice to achieve it. Community involvement in research also challenges other aspects, for instance with respect to data ownership, confidentiality, and intellectual property.

> "The concept of ownership challenges the academic notion of intellectual property; the concept of control challenges the academic notion of freedom; and principles guiding community access to research data may be unfamiliar to REBs (n. Research Ethics Boards). With respect to access, REBs are particularly concerned about protecting the confidentiality of research participants and thus, and thus community access to data may be seen as a risky proposition that fails to safeguard confidentiality."
>
> - Patterson et al., 2006: 49-50

A third point of divergence is between a principle-based and a relational approach to ethics. Academic research ethics are centred on a combination of justice-based ethics (dwelling on respect of individual human rights and the principles of fairness), deontological ethics (regulating responsibilities in respecting human rights and harm avoidance), and consequence-based ethics (focused on avoiding negative consequences of research) (Preissle, 2008: 274-275). Ethical codes are derived from *principles* located in these approaches, and applied top-down in developing specific guidelines. Community-driven research may take, instead, a *relational* rather than principle-based approach to treating ethical issues:

> "For indigenous and other marginalised communities, research ethics is at a very basic level about establishing, maintaining, and nurturing reciprocal and respectful relationships, not just among people as individuals but also with people as individuals, as collectives, and as members of communities, and with humans who live in and with other entities in the environment."
>
> - Smith, 2005: 97

Bishop (2005) speaks of establishing *whânau* (family) relationships as the fundamental pillar of Kaupapa Māori research. The establishment of *whânau* resides in building relations of trust and reciprocity among researchers and a Māori community, creating a frame for appropriate communication flows, agreement over outcomes pursued, and the development of shared understandings (Idem: 119). The relational approach to ethics may counteract some standard research measures, for instance signed agreements and consent forms. Fine et al. (2000) comment, for instance, on the uneven power relations that a consent form can

surface in community research, by forcing the accountability of people through signatures, as opposed to willing sharing of data. Appropriate relations are nurtured by the respect of protocols that are context-specific and culturally-bound. Knowledge sharing may be, for instance, regulated by specific community protocols.

> "When you seek knowledge from an Elder, you offer tobacco or other appropriate gifts to symbolize that you are accepting the ethical obligations that go with received knowledge. In each case, the exchange confirms a relationship that continues beyond the time and place of the exchange. Knowledge is not a commodity that can be purchased and exploited at will."
>
> - Castellano, 2004: 104

To close the overview of divergences in academic and participatory community-based research, there remains an essential question to be asked: *how can academic standards, participatory principles, and community protocols be met in developing equitable ethical measures?* Edwards et al. (2008) propose the concept of ethical validity as a fair measure of meeting ethics standards in community-based research. Ethical validity is met when the research meets the ethical principles of all stakeholders (Idem: 19). Hunter et al. (2011) propose that the consideration of ethical issues should be permeating the entire process of designing and carrying out a community-based research project, facilitating the negotiation of roles and responsibilities and building relationships and trust in time. Flicker et al. (2007) recommend that ethical review boards should be involved in shaping community-based participatory projects by reviewing their quality in accordance with participatory principles and taking into account the interests of the communities involved. Speaking from an indigenous perspective, broader frames for conducting research can be conceived which place community interests at the centre of any research action. Kaupapa Māori is an example of a holistic research approach that regulates ethical measures from a Māori worldview centred on relationship-building and the respect of communal protocols (Bishop, 1999, 2005; Smith, 1999, 2005).

2.8.2 Ethical approach and instruments

The delineation of a sound ethical approach in community-based work dwells on "a constant learning and changing process that is oral in nature, flexible, and open-ended" (Patterson et al., 2006: 49). In the two field studies, this process was fuelled by an attempt to embed ethics in the development of mutual trust, solid relationships, and open communication flows. Further, it was marked by the proposal, negotiation, and revision in cycles of a series of products meant to meet collective as well as individual rights and interests.

Ethical approach

The ethical approach of this study was based on a series of shared understandings and principles operationalized in shaping a relationship with participants in which roles and responsibilities could be mapped (Fig. 2.11).

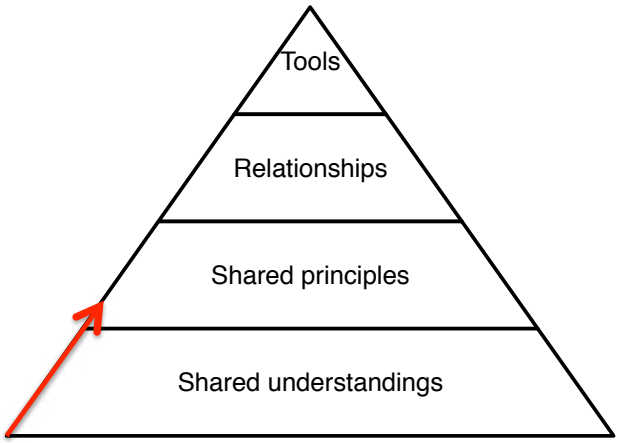

Figure 2.11. The progressive layers of the ethical approach used in this study. Source: author.

At a first level, it was necessary to develop a mutual *understanding* with respect to the goal of the research and the benefits that each party derived. In this respect, it should be considered that participants had not been involved in any long-term research project beforehand. One important aspect was to properly convey what was research as a general practice and in specifics in the present study. From here, people could infer the benefits carried out by myself as a doctoral researcher and the importance of the study in general for the research community. In addition, the study needed to be positioned properly in a participatory and developmental perspective, by which not only myself and the community of researchers, but also the local community had to derive a series of tangible benefits. The fact that this was a project meant to make a positive difference for the people was not an information to convey, it had to be presented, rationalized and negotiated.

At a second level, a series of *principles* by which activities were to unfold had to be pinpointed, with respect to data treatment, information flows, and usage of the outcomes. These included the principles of full prior informed consent, open communication around the project goals and the purpose of its activities, and shared decision-making.

At a third level *relationships* with the community were established dwelling on the embrace of shared understandings and principles. Relationships constituted the broad framework in which the patterns of roles and associated responsibilities of all parties were negotiated and mapped. Ethical tools have been developed in order to give a precise outline to the protocols

agreed, and mark them down for myself as well as for the community members. In addition, these tools have been considered necessary for meeting academic requirements for research ethics. Community agreements and consent forms were the main tools used. As it will be detailed in the final part of this chapter section, it was however at the level of the relationships created, rather than the tools used, that the ethics of conducting this project truly dwelled.

Community agreements

Collective interests were covered by drafting a community agreement that had the purpose to present the project goals, activities and required involvement on both the researcher's and the community side in a clear and understandable way. The agreement was set among the two parties involved in the project - TEC-Lab, the research laboratory to which I am affiliated, and the community of Romani people in each village - each represented by the people involved (myself and my supervisor for TEC-Lab, and the community representative). In its final version (Annex 8), the agreement included fields on:

- Project purpose;
- Project activities (research-driven as well as content production activities);
- Patterns of participation by community members (in data gathering as well as content production activities);
- Outcomes (both scientific and communication products);
- ethical principles adhered to (full prior informed consent, mutual trust, communication of project outcomes);
- Ethical measures (clauses of confidentiality for research publications vs. full name mention in published materials);
- Commitments on the researchers' (responsible communication of community image, respect of ethical issues, efficient conduct of project workflow, keeping community informed on project outcomes) and the community's side (recommend capable people for involvement, keep informed on project progress); *and*
- Termination and duration (with the understanding that the community could withdraw at any time, or renew interest until the project was completed).

In both community sites, the agreement was developed as a confirmation and reflection of project goals that had already been negotiated and agreed verbally with community representatives. In the Podoleni study, the agreement was drafted and negotiated across a six-months period. A first version of the agreement was drafted by myself when the project was reaching the end of the exploratory phase, and the scope and goal of the intervention were clear and met community consensus. This version was first discussed with the main contact family, who were asked to circulate it as well in the community. In a second step, a

revised proposal was discussed with one of the community representatives, and a hard copy was left in between two fieldwork periods for giving time to read and revise the proposal. The discussion highlighted the nature of the agreement as an outline of project goals and amiable commitments that did not put the representative and community under any obligation by signing. The revised and agreed proposal was further checked for adequacy with the University Legal Office, until a final version emerged. In a final meeting, the local councillor for the Roma gave his approval in his quality of community representative, and the agreement was signed in two languages, Romanian and English. The forms were signed as well by myself and by my supervisor and then returned in the community, who retained a copy of the agreement in the two languages.

In the Munteni study, a first version of the agreement was drafted on the model of the Podoleni agreement, with changes incurred by the scope and goals of the project in this site. This first version was developed when the goal of the project and its action line were clarified, and then discussed over a 4-months period. In a first round, it was discussed with the community leader. During the discussion I emphasized the fact that the agreement was a description and outline of project activities, useful for describing the project in clear terms. It was not a contract, and the community was not any under obligation if the agreement was signed. The hard copy was left with the leader in between two fieldwork periods and discussion re-started upon my coming back on the field. The community leader signed the agreement, which was signed as well by myself and later by my supervisor, each party keeping a version in two languages.

Individual consent forms

The rights of individual participants in the project were covered by individual consent forms (Annex 9). The forms were drafted during fieldwork in the first field study and then employed with few modifications in the second study. As different from the collective agreement where the negotiation was straightforward and included minimum revisions, the process of discussing and revising the consent forms in the first site was much lengthier. Discussion and revision rounds started when fieldwork was in its first months, and spread over around six months, with repeated versions and discussions until a mutually satisfactory form emerged. One important aspect that had to be properly tackled in consent forms was around the double purpose of the project: research and production of communication artefacts. The communication solution agreed with members involved online publishing of testimonials on the community website, with full mention of the names of all people that participated as storytellers, interviewees, and producers. On the other hand, data gathered for research had to be treated confidentially. To render clear the difference among research and publishing purposes, and how people's identity was treated differently for each purpose, the final version of the consent form contained an introduction stating the purpose of the research

project, and then proceeded in two parts:

1 Part A. regarded the consent for using materials for research and educational purposes, with anonymous data usage, while
2 Part B. regarded the permission to use materials for publishing in the frame of the project, with full name mention on the community website and associated publishing platforms.

A participant could sign one or both parts, depending on her/his involvement in the project. The process of asking for consent included a brief description of the two parts of the agreement and the most important points in each. The fact that the publishing agreement could be withdrawn at any time was highlighted (see paragraph 4 in Annex 9). Each participant was made aware that s/he had time to read through and wait before signing, for instance until one of my future visits, or he could read and sign at that moment if s/he wished so. The form was signed in two copies, of which one was given to the participant, while I kept one.

In Podoleni written consent forms were a viable way for meeting informed consent, data protection and confidentiality clauses, as all project participants were literate. Yet in the second field context, the commune of Munteni, many of the participants were illiterate or semi-literate. In this case individual consent was solicited only orally. Participants were explained the purpose of the information and materials provided in the frame of the project and were asked for consent for either publishing or research purposes, and their agreement was therefore audio or video taped.

2.8.3 Community response and ensuing challenges

There are some aspects from the process of handling ethics in the two communities that deserve closer attention. The points raised below have been singled out for the important role they played in shaping the relationship with the two communities with respect to ethical issues. They serve as well to show how some of the issues raised in the literature on community-based research have been verified or counteracted in this study. It should be noted that in drafting this list of points I embraced an approach to ethics that goes beyond the justice-based and deontological dimensions, and regards broadly the power dynamics instantiated between myself and the community in shaping the research project.

1 The individual and the collective
2 Trust and signatures
3 Benefits and relationship-building
4 Affecting community dynamics

1 The individual and the collective

The measures taken sought to cover both individual and collective rights in a complementary manner. In both communities, however, the representatives indicated that once they had approved the collective community agreements, no other approvals and signatures were necessary from individual members. Their agreement covered the entire community, signing yet other papers was deemed simply unnecessary. After I explained that individual consent forms were required for my academic work, representatives acquiesced with the measure. Signing individual forms was not violating any protocol, it was simply regarded as pointless since collective agreement had been given. Their position is indicative of an approach to the collective vs. individual that deviates from some reports in the literature. One critical ethical aspect signalled in the literature is that in collectivist communities knowledge is not an individual asset and therefore cannot be granted by the individual alone (Marshall and Rossman, 2006: 89; Smith, 1999: 118). In the two field studies, the collective was indeed considered to enclose the individual, yet there were no concerns with respect to leakage of knowledge. Rather, the two representatives indicated an issue of *collective consensus* and *trust*. Collective consensus implied that their agreement was given in collective terms and covered the approval of all members. Second, it was an issue of trust as by signing the collective agreement they implicitly allowed me to treat directly and unconditionally with community members in all future activities. Since they judged the purpose of my project to be right they trusted that the data I would gather, and the activities to be proposed would be appropriate.

2 Trust and signatures

One of the points where community protocols clashed visibly with what was right to do in academic terms was the matter of written consent forms. In the first fieldwork months in Podoleni, ethical issues had been discussed at length orally, before speaking of the necessity of written and signed agreements. In these first discussions I presented the project scope in terms of potential community benefits that could be derived, and made people aware of their right to control the data and materials they provided and be informed on how these were going to be used. These issues were discussed informally in conversations, as well as in organized focus groups. *Trust* emerged during these discussions as the most important foundation for the project.

> "If you had trust to come here amongst us, we trust that what you want to do is right for us."
>
> - Emergent group interview respondent, Podoleni, M, young

While I deemed trust to be important, I also tried to make certain that it was not based only on enthusiasm for the appealable part of the project (e.g. video and photo shooting, technology), and endeavoured to present in as much as possible objective terms the

responsibilities and potential risks associated with participation. It was at this point that I introduced a first version of the consent forms, in a discussion with the main contact family. This first version was written in distant legal terms, and focused on the irrevocable agreement to cede one's data and materials to the researcher for research, educational and publishing purposes, under specific conditions associated with each use. This caused members to wonder if there were hidden benefits that I was deriving from the project and the data that was entrusted to me through the signature of the forms. Some people had participated before in surveys and knew that signatures were required for the data they provided. Signatures were perceived differently, however, in the long-term project I was carrying. First, they were completely at odds with the open relationship I was gradually establishing. People welcomed me in their homes, talked openly with me, and were happy to provide information in complete confidence. In this frame, asking for signatures appeared as an abrupt breakage of trust. Second, consent forms caused mistrust as their impartial and irrevocable tone made data look precious, and signing them incurred an irreversible donation of one's contribution to the project.

It took time to counter doubts through discussions spreading long after the initial check of the consent forms. These discussions served on the one hand to re-instate trust, and on the other to gradually integrate misunderstandings, doubts and questions in improved versions of the consent form. Forms were maintained as the main ethical measure for protection of individual rights mainly with the understanding that they were necessary for me as a researcher to prove the fairness of my work in academic circles. While they had the advantage of outlining clearly for participants the project goals, the role of their contribution and data treatment according to research and publishing purposes, they remained an artificial tool, accepted only insofar as it was required externally by institutional rules.

3 Benefits and relationship-building

Participatory community-based research emphasizes not only a series of principles to adhere to, but also implies that people's participation in research is motivated by the acknowledgement of benefits aligned to these principles. In the two communities, it was found that the reasons driving people's interest and participation were much more complex, and reverted not only on the acknowledgement of community benefits, but rather around the relationship established with myself nurtured through courtesies and attentions.

In Podoleni, the acknowledgement of collective community benefits was a much more feeble reason for engagement than being involved in a trustful relationship. The project met initially much enthusiasm and high participation, yet in time participation was distilled to a smaller group that remained engaged all throughout the project. Relations remained amiable with all community members, yet some people shied away from attending meetings. When questioning the reasons with one of the members of the main contact family, she confirmed

that some people became mistrustful as they could not understand what I was gaining from the project, and suspected I might had had reasons of my own for investing so much effort. Second, they were suspect of the cherished relationship I had with the main contact family and thought the family was deriving benefits from the project incommensurate with what the others were getting out of it.

In the Munteni site, on the other hand, people and especially the community leader, perceived my own benefit as higher than their collective return from project participation. Being aware of the attention and curiosity they constantly got from outsiders for their traditional lifestyle and customs, people associated my interest in the project to the same reasons for their almost exotic, traditionally Romani, presence. Their benefits of conducting the project were not, on the other hand, a sufficient condition for taking part. While the leader and other members were happy to have a community website speaking about their traditional professions, the main drive of participation was the relationship established with myself, dwelling on a sense of reciprocity nurtured in time through friendly interaction and courtesies.

The gift, gratitude, and reciprocity were important elements to take into account for relationship building in both communities. In both sites, during my visits I was often invited to share food or offered at least a beverage, which was the minimum of required courtesy for guests. On my side, small gifts to the hosts were accepted as a sign of gratitude for their time. The nature of these gifts differed according to needs. My main contacts in both sites often advised me when I was paying visits to other people on what courtesies I should bring. For instance, when organizing large-scale events in Podoleni, I used to bring refreshments for all people involved. When soliciting people for an interview, I would bring some personal attention usually in food and beverages, but for elderly or ill people the gift could be as well useful medicine. In Munteni, characterized by even more extreme poverty, I often made gifts of second-hand clothes and brought sweets for the high numbers of children always surrounding me. It was found important to offer gifts thoughtfully, trying to avoid disparities and unevenness, which were immediately perceived.

4 Affecting community dynamics

Project participation, the roles taken, and the system of rewards or simply courtesy gift exchanges proved to affect the community dynamics. This is an important aspect of ethics, as it has to do with consequences that can dwell in the community long after the project has ended. In both sites, it was found that any perceived unevenness in treatment and courtesy gift offers could create animosity that would build up in tension and affected the relations established. At ethical level, effects on project participation (e.g. decreased engagement levels) should be distinguished from the influence on the community and relations among local people (e.g. building up tension among members). For instance, in Podoleni the very

close relationship cherished with the main contact family caused some people to become suspicious and withdraw. This impacted on project participation, yet it did not affect in any way relations among the people. In Munteni, on the other hand, the allocation of the cameras for content production risked to affect how people related to one another in their regular lives. The community had strong equalitarian values and perceived camera ownership as a symbol of power and status raising. While initially the intention was to encourage collective usage of a small number of cameras, later it appeared that people would not share or lend cameras outside family circles. This triggered an ethical dilemma with respect to the right way of allocating cameras among families. Requests for cameras were pouring from all participants, and in some instances it seemed that the project could disrupt communal relations. For minimizing this risk, camera distribution has been done following the indications of the community leader. This choice made people apparently content as they could not question their leader's authority, yet it could still be perceived that cameras were seen as preferential gifts, and hence a source of unequal treatment.

2.9 Conclusion

The design of this research was a process constantly in the making, shaped on the one hand by the methodological principles it embraced and on the other by the constraints and stimuli on the field. The two grand methodological forms that informed it are both characterized by a concern with dynamism, change, evolution, emergence, and inductive reasoning. The participatory inquiry paradigm provided the ontological and epistemological tenets which gave validity and legitimacy to this dynamic and evolving quality of the research design. In a participatory worldview, knowledge is co-created in the interaction among agents or between an agent and the world. The purpose of research as a knowledge pursuit endeavour is not to petrify and archive this knowledge, but to produce, circulate, and distribute it so that it benefits the parties directly involved in research, as well as the world at large. The operational participatory methodology used in this study – participatory action research – provided the means to fuel knowledge in the design and development of a participatory content production experience involving two minority communities. The observation and analysis of this initiative was yet again a source of knowledge used to develop the main scientific outcomes of this study.

In this process, *knowledge* acquired different types of instrumentality: it was instrumental for myself for understanding the context of research, to the design of the field intervention, to local people for understanding technology and its potential use for their communities, and ultimately for drafting the academic outcomes that made the backbone of this dissertation. The greatest challenge in crafting the research design was to understand precisely at each

point how to support knowledge generation, how to use it, and yet again how to give it the right form for the audience it addressed. This process was marked and driven by the second methodological pillar used – grounded theory methodology. GTM is a very flexible and yet highly precise tool for keeping track of high amounts of information and using them in the adequate way for producing knowledge.

> "Classic GT is a highly structured but eminently flexible methodology. Its data collection and analysis procedures are explicit and the pacing of these procedures is, at once, simultaneous, sequential, subsequent, scheduled and serendipitous, forming an integrated methodological "whole" that enables the emergence of conceptual theory as distinct from the thematic analysis characteristic of QDA research."
>
> - Glaser and Holton, 2004

GTM functioned as a net linking the empirical realm of the fieldwork with the abstract realm of concepts through precise connections among field data patterns and the concepts and hypotheses pointing at these. It provided clear guidelines for conducting data generation and analysis from the first data rounds until the development of the research contributions.

PAR and GTM work well together as they both place the views, vision, interests, and goals at the centre of the inquiry. Participatory research is for the people with the people, while GTM is a tool for translating people's perspectives and local processes into abstract conceptualizations with minimum disruptive bias on the side of the researcher. PAR and GTM also share a concern with the invisibility of the investigator's univocal will and perspective. The role of the investigator as agent of singular interpretation and top-down decision-making is belittled, yet the part played as organizer, animator, collector, and provider is a much more soliciting and demanding task. Acting as an investigator, a facilitator, and a moderator, sometimes all at once, sometimes passing from one to the other in moments, was one of the most challenging aspects of the field research.

3 Research Context

"Roma are arguably the most impoverished and marginalised ethnic minority group on the European continent. … Racial discrimination is only one of the reasons underlying this spiral of decline, but it is indisputably a major factor. Though poverty, social exclusion, and unequal opportunities affect other population groups in Europe, including segments of each country's respective ethnic majority, the scale, gravity, and uniformity with which those injustices afflict Roma are unparalleled."

- Goldston, 2010: 314-315

3.1 Synopsis

'The Roma' is an umbrella term covering a large number of heterogeneous groups spread in particular throughout Europe, but also on other continents including Australia, Asia, and the Americas. While each of these groups presents social and cultural distinction, there are several elements that tie them and indicate a possible common ethnic identity. One is their language, Romani or Romanes, an Indo-European language found to bear remarkable similarity to the ancient Sanskrit language and to present-day Indian dialects. A second element is their traditional nomadic lifestyle. While most of these groups are now settled, their ancestors used to be peripatetic communities with no fixed abode. Based on these elements, there are two grand theories attempting to explain who are the Roma. The first posits that the Roma are of Indian ethnic origin, the proof being the Indian origin of the languages they speak. The second theory denies any common ethnic origin, and argues instead that Romani identity has been shaped by their nomadic lifestyle. In this optic, the Roma speakers of the Indian-origin language are included in the same category with other nomadic population such as the Swiss and German Jenische, labelled broadly 'Travellers'.

Historically and at present the Roma have been the object of stigmatization, discrimination, marginalisation, and even violent outbursts. Rather than being pacified and solved in a socio-political climate increasingly marked by respect for human rights and acceptance of difference, the Roma continue to be excluded and discriminated by majority populations and even by state administrations, in particular in European countries.

This chapter describes the Roma as an ethnic minority, overviewing the two theoretical approaches explaining their identity. It proceeds with an overview of the situation of the European Roma, focusing on their social exclusion and stigmatization and steps taken to overcome them. It concludes that the most affected social segment is made of the regular

people, in particular when living in remote or socially isolated contexts such as rural areas. Their views seldom make it out of their circle, and many of the developmental measures meant to improve their status fail to make a positive difference.

The chapter proceeds with a short description of the current situation of the Roma in Romania, in preamble to the introduction of the two communities involved in this study. The problems faced by Romanian Roma are escalated by the difficulties of a transition from a Communist regime to a democratic system after 1989. The focus of this research is on rural Roma, who are affected in addition by social isolation, invisibility, and lack of economic opportunities. The chapter closes with a description of the two communities involved, living in two villages of South-Eastern Romania. The two communities present common features, encompassing high poverty levels, low literacy and digital literacy, and very strong internal group ties. Yet they are also different in many respects: The community in the village of Podoleni has given up nomadism a long time ago, is more assimilated and its values and goals are related to access to education and socio-economic integration. The community in Munteni has been settled only in the 1950s, continues to travel by tent for half of the year, maintains a strong cultural tradition and makes a living by selling metal objects crafted by masters using traditional means, just like hundreds of years ago.

3.2 The Roma as Ethnic Minority

The Romani people, popularly known as 'Gypsies', present an unusual instance of a minority, insofar as they are characterized at the same time by intrinsic multiculturalism and multi-territoriality (Gheorghe and Acton, 2001: 55-56). Unlike other diasporas or minorities, they do not claim belonging to a unique, shared, cultural system and a territory, and are not tied by a universally accepted history (Gay y Blasco, 2002: 173). The Roma are

> "a huge diaspora embracing five continents, sharing the citizenship of a multitude of states, while lacking a territory of its own. The Gypsy 'archipelago' is formed by a mosaic of various groups speaking both different dialects of Romani as an oral language and a variety of languages of the surrounding societies."
>
> - Gheorghe and Acton, 2001: 55

The unity of the Romani people is a central running theme in studies on the Roma, and has been justified, albeit debated, on cultural, biological, and language grounds (Gay y Blasco, 2002: 173). Matras (2004) suggests that before engaging in an attempt to define the grounds for Romani unity a distinction should be done between two separate groups, both commonly covered by the term 'Gypsy': 'Gypsy 1' refers to peripatetic communities characterized by a nomadic lifestyle, and they may encompass equally the Sinti, the Manush, the Swiss and

German Jenische, or the Irish Travellers. Their common features are the nomadic lifestyle as well as the socio-economic relations established with the stable populations. 'Gypsy 2' refers to those groups that speak a form of the Romani language. These are currently referred to by the umbrella-term 'Roma', and include groups such as Romanichal, Sinti, and Manush. While there have been attempts to find general features uniting these groups by showing commonalities in their cultures or forms of social organization, none of this has proved as powerful as the language feature, Matras argues (p. 53-54).

The use of the terms 'Gypsy' and 'Roma' shifts in between these meanings, one concerned with identity definition based on lifestyle and the other based on cultural and ethnic distinction. It should be noted that in most global reports published by European transnational organisations as well as the official documentation of the European Commission the term 'Roma' is used to refer in a broad way to travelling groups of Europe assigning the label based on their situation of marginalisation and social exclusion rather than their cultural identity. For instance, the European Commission declares to use the term 'Roma'

> "(…) as an umbrella term including also other groups of people who share more or less similar cultural characteristics and a history of persistent marginalisation in European societies, such as the Sinti, Travellers, Kalé etc. The European Commission is aware that the extension of the term "Roma" to all these groups is contentious, and it has no intention to "assimilate" the members of these other groups to the Roma themselves in cultural terms. Nonetheless, it considers the use of "Roma" as an umbrella term practical and justifiable within the context of a policy document which is dealing above all with issues of social exclusion and discrimination, not with specific issues of cultural identity."
>
> - European Commission, 2010a: 3

This study opts for *identity definition based on ethnic belonging*, and focuses on those populations that Matras (2004) calls 'Gypsy 2', 'Rom', or 'Roma', therefore those that speak a dialectal form of the Romani language. These people have been given varied names throughout the history of their whereabouts in Europe starting from the early arrivals. Two terms encountered wide circulation and became the root forms for the names popularly assigned to the Roma in European countries: *Tsingani*, from which denominations such as *Zigeuner, Cingano, ţigan*, and *Cikan* were derived; and Egyptian which gave rise to the popular terms *Gypsy, Gitano, and Gitan* (Hancock, 2007: 1). The term *Tsingani* comes from the Byzantine Greek word *atsínganoi* or *atzínganoi* (ατσίγγανοι), ascribed to a heretic sect, *athínganoi* (Fraser, 2008: 56) and meaning *untouchable*, or *don't touch* people (Hancock, 2007: 1). As to why the same term was attributed to Gypsies is debatable: Fraser (2008) suggests that the name of the sect *athínganoi* was attributed also to the early Gypsies for their reputation of fortune-tellers and alleged magician practices (p. 56). Hancock (2007)

suggests that the name was given as the early Gypsies avoided contact with other groups and kept their distance (p. 1). The term *Egyptian* became a label for the Gypsies for the mistaken assumption that they came from Egypt. This assumption can have several explanations: it could be associated with the fact that in mediaeval Europe this term was applied to all foreign populations irrespective of provenance, or by the fact that on their migratory route to Europe the Gypsies settled for a while in 'Little Egypt', a spot on the Adriatic Coast. But there are hypotheses that some Roma actually did come from Egypt, where they had been sent by force by Ottoman Turks to escape later and head for Europe (Hancock, 2007: 1-2). Apart from these two terms and their derivatives, other names have been labelled upon the Roma in history: *Bohemians* in France, *Hungaros* in Spain, *Mustalainen* or *Blacks* in Finland (Liégeois, 2005: 46-7).

At present the most widely accepted terms for referring globally to these populations are derived from the root-word 'rom', which meant originally 'married Romani male', and then 'husband' (Hancock, 2007: xix). The nouns used for referring to the entire ethnic group are 'Roma', 'Romani' (with 'Romanies' in plural), and 'Rroma', while adjectives can take the forms 'Romani', 'Romany', and 'Romani' (Idem: xix-xxi). The term used for the language varied from 'Romani' used as noun to 'Romanes'. The chosen forms in this study, in accordance with the usage accepted by transnational organisations and Romani organisations is 'Roma' as a noun indicating the entire group (e.g. 'The Roma'), 'Romani' as a noun for the traditional language (e.g. 'speaking Romani'), and 'Romani' as an adjective (as in 'Romani women').

The term covers a varied mosaic of different groups, such as Romanichals, Kalderash (also spelled Kalderaš and Kalderaša), Lovari, Sinti (also 'Sinte'), Manush (Manuš), Kalé, etc. (Liégeois, 2005: 13). Each group spreads across various countries, and several different groups can live in a single country (Tcherenkov and Laederich, 2004: 217). Yet the Roma have been labelled as well as a *transnational* minority (e.g. Tcherenkov and Laederich, 2004: 217; Gheorghe and Acton, 2001) and a '*pan-European* ethnic minority' (Goldston, 2010) in scholarly literature as well as a '*non-territorial* minority' (Council of Europe, 1993). The question is: *On what grounds can we speak of a Romani ethnic minority transversal to state borders, given the rich inner diversity of the population?* To answer this question, two theoretical directions arguing for and against Romani transnational unity are overviewed.

The common ethnic origin argument

The most poignant argument on the ethnic unity of the Romani people resides in the attribution of a common language, ancestry, and place of origin for the disparate groups of Roma now scattered across the world (Mayall, 2004). Theories on the origins and whereabouts of the Roma commonly draw on linguistic, biological, and historical evidence.

The literatures drawing on each and on corroborated studies abound in theories and counter-theories, and conclusive answers have yet to be found. The fixed point of reference in the various debates is represented by the observation that the various dialectal forms of the Romani language all have in common remarkable similarities with Indian languages, which implies that a unitary linguistic origin can be supposed (Fraser, 2008; Liégeois, 2005; Matras, 2004). From here, however, roads part: if the Roma speak a language with Indian roots, does this imply that they come from India? And if yes, what was their status in India? Why did they leave the country, when, and on what routes? Was there a mass migration, or several waves? Which groups share the same ethnicity and can be rightfully included under the Roma label and where are they located at present? These are some of the questions amply treated in the Romani studies literature. Written historical accounts could have provided the most conclusive answers on these questions, yet they are unavailable for the early history of the Roma, or if available there can be no certainty that they were speaking about the Roma and not other groups (Fraser, 2008: 43). The bulk of the theories on the Roma's initial status and lifestyle in India, migration times, reasons, and routes are fuelled by the analysis of the language evolution and its comparison with Indian languages. Yet, as it will be detailed below, most theories based exclusively on linguistic evidence include a great deal of speculative reasoning linking language evolution features to socio-cultural features and historical events allegedly determining the migration of the Roma.

Attention to the relatedness between Romani and Indian languages was first drawn in the second half of the eighteenth century, when a Hungarian student in theology remarked similarities between words used by Indian students at the University of Leiden and the language spoken by Gypsy workers on his parents' estate (Hancock, 2007; Liégeois, 2005). Linguists pursued the lead further and in the following years several studies comparing Romani to Indian languages were conducted. The first systematic study which brought proof of the Indian origin of Romani was conducted by Rüdiger and published in 1782. Rüdiger compared samples of Romani from a native speaker with samples of Hindustani from a manual drafted by a missionary, and analysed similarities and differences in vocabulary, morphology and syntax proving that they were undoubtedly related (Matras, 2004). The publication was followed closely by the study by the German scholar H. M. G. Grellman, published in 1783 (Achim, 2004; Matras, 2004). Further linguistic studies tried to understand if by analysing Romani in comparison with Indian languages it was possible to know from what part of India the Roma migrated, and at what time (Fraser, 2008). By analysing loan words from other languages such as Persian, Armenian, and Greek, scholars also sought they could infer precise spots in the migratory routes taken by the Roma on their way to Europe (Matras, 2004). Several theories of Roma origin and migration paths have been sketched based on linguistic evidence. While none of the theories advanced has met unanimous consensus, some of them gained attention and spread in the Romani studies

literature. Two theoretical directions gained particular attention in the 20th century (Fraser, 2008): the first, represented by John Sampson, claimed that Romani language is of Dardic, or North-Western origin. Consequently, for Sampson the Roma must have originated as well from the North-Western provinces of India, and left them around the 9th century AD. In a second thesis, Romani is related to the languages of Central India, represented nowadays by modern Hindi. Sir Ralph Turner, then director of the School of Oriental and African Studies in London, claimed that the Roma fled these territories little before 9th century AD (p. 28-29).

Some theories ventured to suggest a specific socio-cultural status or a caste for the early Roma while they were still living in India, and, corroborating accounts of historical events, hypothesized on the reasons for their exodus. Augustus Pott argued that the Roma came from Northern India, where they used to speak one language, while dialects were formed only after their initial migration (Liégeois, 2005: 35). His position, embraced as well by the scholar Franz Miklosich, was that the Roma are descendants of the Domba Indian cast of nomadic populations who earned their living through commerce (Matras, 2004: 61-62). Further, Pott hypothesized that the Roma could be related to a contemporary population, the Dom living in the Middle East. The Dom bore some remarkable similarities with the Roma: their language, Domari, was also of Indian origin, they had similar socio-cultural patterns, and they were also a peripatetic community. These observations led Pott and Miklosich to assume that the Dom and the Roma were once part of a single migratory population, who took different routes during their passage through the Middle East (Ibid.). Miklosich used linguistic analysis to systematically reconstruct the migration path of the Roma from India to Europe. By identifying loan words from Persian, Armenian, and mediaeval Greek in Romani dialects, he concluded that the Roma passed through Persia and Armenia before coming to Europe, and have been present for a long time on Greek territories (Achim, 2004: 8).

The idea that the Roma of Europe might be related to other groups of Roma in the Orient was pursued by other scholars as well. Apart from Domari language, Lomavren, spoken by the Lom group living in Armenia presented appreciable similarities to Romani. All three languages - Romani, Domari, and Lomavren - employ related words to point to their own people - 'rom', 'dom', and 'lom' respectively (Fraser, 2008: 34), and similar words for strangers or non-group members - *gadjo*, *kacca*, *kadja* (Matras, 2004: 62). The terms 'rom', 'dom', and 'lom' can all be shown to relate to the Sanskrit word *dōmba* (which indicates a member of an inferior Indian caste earning a living from singing and music), taking into account the phonetic changes operated in the evolution of the languages (Fraser, 2008: 34). Based on this evidence, John Sampson advanced the theory that just as the three languages were branches of an original language, also the three groups were part of one original migration, and split during their travels throughout Iranian lands (Matras, 2004: 62; Fraser, 2008: 46-47).

The supposition that the ancestors of the Roma were members of the inferior Indian caste of the Dom was refused by some scholars, and alternative theories have been advanced. Some postulate that the Roma descend from the Kshatriyas, the Indian caste of the warriors. This hypothesis was advanced by some Indian writers, who argued that the Roma descend from the Indian warriors Jat and Rajput (Fraser, 2008: 35). The same hypothesis was put forward by Kochanowski (1968), who suggested that the ancestors of the Roma were Kshatriyas from the Sindh region and Rajput warriors. This theory was refuted by the linguist Matras (2004) for being based on insufficient evidence reduced to Roma's love of horses, the fact that the Roma served as well in military troupes in Europe, and supposed blood group comparisons (p. 71). In more recent years, Jan Hancock (2007) tried to back up the warrior origin theory by bringing in more solid evidence. Hancock refused both the Dom caste origin as well as the alleged relatedness among the Roma and the modern Dom and Lom populations, arguing that the latter groups have been formed as result of different migrations from India. The warrior origin, on the other hand, can be explained by corroborating linguistic evidence, genetic studies, and an account of historical events happening at the time the Roma supposedly fled India. Hancock notices that war-related terminology in Romani language, such as 'soldier', and 'sword' are of Indian origin. Moreover, he brings in evidence from a genetics study which indicated that the Roma have a genetic luggage common to Jat Sikhs and Rajputs as well as Panjabi Hindus. Having established on linguistic grounds that the Roma fled India before 1000 AD, Hancock hypothesizes that the ancestors of the Roma are the Rajputs, who were defeated during the Ghaznavid invasion between 1000 and 1027 AD. The Roma might descend from the Rajputs as well as the army camp followers, called *shiviranuchara*, whose job was to attend to and entertain the soldiers (p. 6-14).

While the relatedness between Romani language and Indian languages is accepted by the majority of scholars, the parallels drawn between the language evolution and the exact origin and migration routes of the Romani people are still to be considered a matter of speculation (Fraser, 2008: 17; Hancock, 2007: 3). Linguistic studies on their own are unable to provide firm and irrefutable evidence on the precise place in India that the Roma originate from, nor about the time and the reasons for their mass migration. As Fraser (2008) points out, there is no intrinsic relation between language and race, or language and ethnicity. Ethnic groups have been known to embrace a completely different language in their historical evolution (p. 30).

Studies in physical anthropology were used in parallel with linguistics to trace the origins and the evolution of the Roma. Early physical anthropology studies, relying on the comparative study of body parts measures for various populations, brought little more than suggestions with respect to the racial belonging of the Roma (Fraser, 2008: 30). More recent date techniques based on genetic analysis seem to yield more precise findings. Hancock (2007)

cites two genetic studies which compared Romani genetic material with European and Indian one. One of the studies, whose results were published in 1983, indicates that genetic evidence place the Roma (more specifically the Slovak Roma, from where the sample was drawn), closer to modern-day Indians than to Europeans. The second, using blood group comparison and published in 1976, goes further to suggest that the Roma's ancestry differs significantly from the Europeans and places them close to the one of the Northern Indian populations, especially the warrior classes (p. 70-1). Hancock used these evidences to support his theory of a warrior class ancestry for the Roma, as exposed above.

Written historical evidence would be more prone to fill the gaps left by both linguistic and physical anthropology studies in documenting the early history of the Roma. However, the earliest account that can be attributed beyond doubt to the Roma attests them when they were already present on the European territories (Fraser, 2008: 56; Achim, 2004: 9). Historical evidence from the time of their migration is missing, or if present there is no consensus that it referred indeed to the Roma. The Romani studies literature reports two documents that can shed light on the reasons and details of the Roma's migration, both referring to the same incident happened in Persia. The first account has been told by the Arab historian Hamza of Isfahan around the year 950 AD. The story goes that Bahram Gur (who reigned until 438 AD), the Shah of Persia, had asked and received in gift 12'000 musicians, called 'Zott', by his father-in-law the Indian king Shankal, for entertaining his people. The descendants of the Zott were still living in Persia in small numbers at the time of the account, Hamza told. In a second document, the event is narrated with slightly different details in the Persian 'Book of Kings' ('Shah Nameh'), by the Persian poet Firdousi, who calls them 'Luri' and says there where 10'000 of them. (accounts related cf. Fraser, 2008: 42-3. See also Liégeois, 2005: 29-33). Despite the scholarly attention to these two documents, Romani studies authors (e.g. Fraser, 2008; Hancock, 2004; Liégeois, 2005) agree that it is difficult to place the exodus of the Roma from India under the reign of Bahram Gur, following the details of the Persian story. However, the fact that the Roma did pass through and spend a considerable time in Persia is verified on linguistic grounds by the high number of words of Persian origin in their language (Achim, 2004; Fraser, 2008; Matras, 2004). Also, the Roma are still called 'zott', 'luri', or 'luli' in Persian language (Fraser, 2008: 43; Liégeois, 2005: 30). It can therefore be acceptable to assume that the story of the Zott or Luri has a trace of truth in it, even if not historically correct. One implication of these pieces of evidence is that there could have been not only a massive one, but a wave of several migrations from India, passing through Persian territories (Liégeois, 2005: 33).

To conclude, the evidences brought jointly by linguistic, biological, and historical evidence indicate that a common Indian origin for the Roma can be assumed. No conclusive answers have been found, however, with respect to the details of their ancestors' status, lifestyle, as well as the reasons and the time for their migration.

The *Travellers* identity

The gaps and open questions left by missing evidence with respect to the origin of the Roma have entitled other Romani studies scholars to assume that there is no common ethnicity for the Roma other than that built around their nomadic lifestyle. The renowned British anthropologist Judith Okely and the Dutch scholars Leo Lucassen, Wim Willems, and Annemarie Cottaar are the principal proponents of this theoretical position. For these scholars, it is the itinerant way of life and the relation with surrounding populations that has shaped Romani or Gypsy identity.

Okely (1983) refuses the thesis that the Roma as well as Romani language are of Indian descent as mere speculation based on inconclusive evidence and the attempt to create an exotic aura around these nomadic populations. Her explanation for the existence of Indian origin words in Romani vocabularies is that these are in fact borrowings integrated during the travels of the Roma along the commercial routes between Orient and Occident. Instead, for Okely (2010), Gypsy culture gained inner coherence in relation to or opposition to the surrounding cultures (p. 40). The Dutch scholars Lucassen, Willems, and Cottaar (1998) put forward a similar thesis. The scholars refuse the theory that the Roma or Gypsy make one population with a common Indian origin as speculative and to a large extent built on piecing together selected pieces of evidence while disregarding competing proofs. The authors also refuse the view that Gypsy ethnicity can be established based on self-ascription (recognition of the identity from inside the group). Their own view is that the group's ethnic identity has been shaped in relation with and interaction with settled populations, especially as a result of stigmatizing practices.

Similarly, Judit Durst (2010) claims that in speaking of 'Romani ethnic groups', ethnicity should be tackled as a relational variable, rather than an intrinsic characteristic of homogeneous cultural groups. In this optic, the Gypsy become Gypsy not only on the basis of intrinsic features, but in a broader interethnic context and in relation to non-Gypsy populations (p. 13-4; 27).

An important common point for the positions outlined above is that they refer globally to all peripatetic communities wandering around Europe. For instance, Lucassen et al. (1998) clarify at the beginning of their monograph that they identify as 'Gypsies' all the groups that lead a nomadic lifestyle and have been labelled as 'Gypsies', often in a stigmatizing way, by European populations. The term 'Gypsy' in these scholarly writings is preferred to the one of 'Romani' precisely because it carries with it an outsider's labelling: the 'Gypsy' tag, with the history of its wrong assumption that Roma come from Egypt and imbued with negative stereotyping, is a reflection of how the identity of these nomadic people has been forged in constant interaction with and by outsiders. In a systematic deconstruction of the thesis that there is no intrinsic ethnicity for the Roma, Matras (2004) clarifies that the Roma, speakers of

the Romani language, should be distinguished from the togetherness of migrant communities that at one point in time have been called 'Gypsy'. For instance, no Romani studies scholar with a knowledge of the literature would claim that the Swiss and German Jenische come from India. The Indian origin is attributed only to those people who speak a form of Romani language. It can be concluded that once this distinction is done, then the construction of Romani/Gypsy ethnicity can be seen from an integrative optic that accepts the common ethnic origin frame without denying the effects of nomadism and constant interaction with settled populations on shaping group identity.

3.3 Meeting the Roma Problem: From Silence to Voice

The level of poverty, social exclusion, discrimination, stigmatization, and unequal access to work and education for the Roma of Europe is such that these various issues are compacted in a talk of 'the Roma problem' (Imre, 2006; Vermeersch, 2002). A 2007 report by the European Network against Racism (ENAR) on the situation of the Roma in 12 European countries presents a multifaceted overview of the Roma problem in which multiple discrimination, negative stereotyping and anti-Gypsyism have been shown to affect employment, education, health, house ownership, equal access to goods and services, and incite to racist violence (Halász, 2007: 5-6). The real dimensions of the inequality faced by the Roma are hard to assess firstly due to lack of precise ethnic data; there are a variety of groups labelled as 'Roma', and moreover census information is in many cases inaccurate since many members are unwilling to declare they are Roma (European Commission, 2010b; Goldston, 2010: 314). The estimate is that there are between 10 and 12 millions of Roma in Europe, considering a widened definition of the group including speakers of Romani such as the Romanichal and peripatetic communities such as the Jenische and the Irish Travellers (European Commission, 2010b).

For the purpose of the present study, it is important to explore two particular aspects of the Roma problem - social exclusion and negative stereotyping or stigmatization - and assess how they relate to and condition 'voice' as the exercise to speak on one's own behalf, participate in the public discourse sphere, and assert cultural identity.

Social exclusion, alongside discrimination and poverty, is one of the most serious problems affecting the Roma in Europe (Council of Europe, 1969, 1975; Council of the European Union, 2008; ECRI, 2011, European Commission, 2010a,b). The concept of 'social exclusion' was first coined in the work of René Lenoir, 'Les exclus: Un Français sur dix', published in 1974, in which it was used as an umbrella term pointing to the position of marginalised social

segments such as the poor, but also the handicapped, the suicidal, or addicts (De Haan, 2001; Estivill, 2003: 5). The concept has gained popularity starting from the 1970s and used especially for drafting recommendations and policy documents at European level, gradually coming to replace the term 'poverty' in anti-poverty programmes (De Haan, 2001). The realities that it indicates are, however, not new, and have been treated in past times under terms such as 'marginalization, poverty, deprivation, precariousness and vulnerability' (Estivill, 2003: 2). The main advantage of the concept for describing the position of the Romani minority stands in the capacity to capture a multi-dimensional state of deprivation, and link it to social science analytical traditions that can shed light on its breadth and causes (De Haan, 2001).

The Roma have been the object of social exclusion for most of their presence on the European continent, including direct and explicit targeting as outsiders by state governments and local populations alike (Bancroft, 2005: 1-2; Thelen, 2005). The darkest and most extreme manifestation of exclusion happened in Nazi Germany before and during the Second World War. The Roma in Germany and states under German control had the same fate as the Jews and the disabled, ranging from forced sterilization, castration, deportation in death camps, and mass murder. The fate shared under Nazi Germany by the Roma and the Jews and other similar historical parallels entitled some authors to compare the fate of the ethnic Jews and the ethnic Roma. Thelen (2005) notices how both groups are characterized by geographical dispersion and met with wide-spread prejudice, for which the terms 'Anti-Semitism' and 'Anti-Gypsyism' have been coined. Yet, the size of Anti-Gypsyism has been by far more pronounced. The fact that the term Anti-Semitism has been coined in the 18th century, while the term Anti-Gypsyism has only been coined in the second half of the 20th century indicates that prejudice against Roma has been so wide-spread, that there has been no need to single it out and label it as an isolated phenomenon. Also, while the dimensions of the Jewish genocide have been amply documented and resulted in public manifestations of refusal and condemnation, until recently very little has been revealed in public about the similar fate the Roma had under the Nazi (p. 21-22). This and other manifestations of overt out casting are an indication that the Roma have been and are still looked upon as inferior, destructive, unhealthy social elements (Idem: 19).

There are various theories that attempt to explain the phenomenon of social exclusion in its historical and contemporary dimensions with special reference to the Roma. Some theories relate exclusion to poverty, treating them as partially overlapping or complementary concepts (De Haan, 2001; Estivill, 2003: 1; Mancinelli, 2007). A core theory used by some Romani studies scholars to explain Roma's social exclusion and poverty is *the culture of poverty theory* (Lewis, 1968, 1998), which posits that groups that have been living for prolonged periods of time in poverty develop a subculture, or a way of life that enables them to cope with their impoverished state and often marginal position. For Lewis, the culture of poverty is

specific of given socio-cultural contexts. Not all poor have developed and live in a culture of poverty. The culture of poverty is likely to develop for a group living in a capitalist economy where welfare is highly regarded as a social value and in which lower classes constantly face unemployment, marginalisation, or perform unskilled underpaid labour. The culture of poverty is therefore an adaptive and reactive mechanism of the poor living in a capitalist economy. It allows them to come to grasps with their condition and find solutions outside the socio-economic organisation imposed by the dominant society. The culture of poverty is transmitted intergenerationally and perpetuated in a group. People living in a culture of poverty are suspicious of the state administration and its institutions, mistrust law and the ruling classes, avoid integration in mainstream economic activities, and do not engage with social, cultural and economic institutions such as banks, museums and labour unions. Instead, members develop their own devices and mechanisms for getting by, separate from the mainstream. They have a pronounced orientation toward living in the present, usually do not accumulate savings, and get by from one day or one season to the next.

Some Romani studies scholars deemed the culture of poverty theory particularly relevant for describing the situation of the Roma. The processes it conceptualizes can be read as mechanisms for coping with poverty and marginalisation, but also as devices for strengthening group cohesion. Stewart (1997a,b, 1999), who conducted extensive ethnographic research with a Romani community in Hungary, remarked how the Roma developed internal devices for facing marginalisation and as a result continued to thrive as a solid, cohesive community despite living at the outskirts of society. These mechanisms are summed up in the term 'Romanes' which indicates the language but also "the Gypsy way of doing things" (Stewart, 1997a: 89). 'Romanes' ties people through values, shared activities and a common outlook on life. The community is fenced out from the *gaźo* (foreign) world. Inside, members care and provide for each other and engage in social activities that have the function to strengthen communal bounds and identity not by relating to a shared past, but by interaction in the present moment. Members developed as well a way of getting by financially without entering the mainstream economic system. *Romani butji*, or *Gypsy activity'/'Gypsy work* is a way of earning money without entering the labour and production system, through activities such as scavenging, horse trading, fortune telling, and begging. *Romani butji* and the pronounced orientation toward celebrating the present are two features that the Romani lifestyle described by Stewart has in common with Lewis' culture of poverty theory. Stewart's work pictures how social exclusion is lived from the internal viewpoint of a Romani community, and how it functions as a driving mechanism for stronger communal bounds and ever increased distance from the outside, *gaźo* world. As such, it gives an enlightened outlook on how social exclusion, rather than being an inhibiting factor for cultural continuity, serves to reinforce communal values, ethics, and practices.

A different angle for understanding socio-economic exclusion is given by a structuralist

viewpoint, in which the causes of exclusion and poverty are to be found in the system, and not in intrinsic group characteristics. Systemic explanations for poverty are particularly edifying when applied to situations of change and transition that affect work and production flows. For the Roma, there are two important moments in the European history that affected their place in the socio-economic system: the first is industrialization, and the second is the fall of the communist regime in South-Eastern Europe. Traditionally the nomadic Roma played an economic role by performing jobs adapt for their nomadic lifestyle and selling manufactured products (Lucassen et al., 1998). Due to industrialization, the traditional jobs performed by the wandering Roma became irrelevant and left them unprepared to face different work market demands (Council of Europe, 1969; Tcherenkov and Laederich, 2004: 218-19). A similar situation has been in place for the Roma of South-Eastern Europe at the fall of the communist regime. Many Roma were unprepared and unskilled to face the transition to a capitalist economy.

Ladanyi and Szelényi (2006) developed a theory of the underclass, seen as a special case of socio-economic exclusion, with specific applicability to the situation of the Roma in post-communist European countries. The authors employ a joint structuralist and behavioural perspective to explain the making and the perpetuation of an underclass. From a structuralist viewpoint, poverty is caused by changes in economic structures, such as the transition from a centralized to a capitalist economy. The socio-economic system is therefore seen as the primary cause for poverty and further for the changes in values, behaviour, and culture as a result of living in poverty. Yet from a behavioural perspective the authors give credit to Lewis' culture of poverty theory and recognize that group intrinsic characteristics may have a determining part in the perpetuation and intergenerational transmission of poverty. The authors' most edifying insight is that there is not an inevitable link between ethnicity and underclass formation, in other words that the Roma are not poor because they are born Roma. An empirical study conducted by the authors in post-communist countries shows how the passage to a capitalist economy and liberal political system have contributed to the creation of the Roma underclass (p. 3).

Whether a behavioural or a structuralist perspective on Roma poverty and exclusion is employed is of fundamental importance when devising practical measures for proposing socio-economic inclusion measures. The first directs policy measures on changing the group culture internally, for instance through education programs, while the second pays attention to how changes in the socio-economic structure can facilitate the integration of the disadvantaged. Historical cases provide as well lessons with respect to factors that can boost or impede minority inclusion. An important factor is to avoid falling into assimilationist approaches (Tcherenkov and Laederich, 2004). In the past, most documented policies for Roma inclusion in European societal systems were driven by an assimilation logic: it was assumed that by cancelling all form of Romani cultural distinction, values and group ethos,

the Roma could finally become integral part of a social system and contribute to its development (Lucassen et al., 1998). Assimilation policies were employed by several European states. In the 18th century the Roma have been transformed into 'Uj Magyar' (New Hungarians) in the Austro-Hungarian empire and 'Nuevos Castilianos' (New Castilians) in Spain (Hancock, 2001: vii). In the 20th century the communist regimes in South-Eastern European countries forced the Roma to settle down, enter the socialist labour system, and merge into the working classes (Goldston, 2010; Stewart, 1997). None of these policies had the intended effects. In former Communist countries such as Romania despite integrationist policies of the former Communist regime the Roma are still perceived as outsiders, are highly discriminated and face increasingly difficult life conditions (Cazan and Nita, 2007).

The lack of success of assimilation policies draws attention to several factors. One is that culture does matter when trying to promote social inclusion for an ethnic minority (Malloy, 2005). No matter the efficacy of the measures employed to eradicate cultural specificity and ethos, these will resists or outburst. Second, assimilation policies have little success in promoting social inclusion if they are unable to deal with the discrimination, stigmatization and prejudice carried by the majority population (Tcherenkov and Laederich, 2004: 220-1). These aspects are amply illustrated by the situation of the Roma in former Communist regimes. In Hungary (where strict assimilation policies have been pursued even before Communism), most of the Roma have been scarred by the prohibition to speak their language and perform their cultural practices, yet failed to enjoy social integration and continued to exist as a distinct, non-integrated group sticking together and facing increasing waves of prejudice and discrimination (Stewart, 1997).

Apart from the historical lessons, it has to be taken into account that the present phenomena of social exclusion for the Roma needs a different type of attention and different types of instruments for being combatted. Overt racist or discriminatory behaviour is sanctioned by laws and the public opinion, however today's Roma are still largely seen and treated as social outcasts, in a way that can be called "21st Century racism" (Bancroft, 2005: 2). Finally, the European dimension of the phenomenon needs to be considered in conjunction with its national dimension. The existence of the European Union, with its own symbols and stock and communication flows needs to be taken into account when dealing with Roma inclusion (Idem: 1-2).

At present, there is agreement that in order to be effective, measures for minority inclusion need to act transversal to several dimensions of deprivation and exclusion (Mancinelli, 2007; Tcherenkov and Laederich, 2004). In a 2010 report, the European Commission lists four priority areas for Roma inclusion in European Union member states: employment, education, health, and housing (European Commission, 2010a). Current approaches to Roma inclusion stress the importance of two factors: cultural affirmation (Malloy, 2005) and Roma's participation in the determination of policies that affect them (European Commission, 2010a).

The increasing importance of these two factors can be identified in the policies and recommendations issued by European Union bodies from as early as 1969. In 1969, the Council of Europe issued a recommendation that encouraged members states to provide the necessary laws and facilitate the creation of the needed infrastructure for allowing traveller communities to benefit from education and work opportunities without giving up their travelling lifestyle (Council of Europe, 1969). A resolution issued in 1975 regarding nomadic populations of Europe insisted moreover on the importance of stopping discriminatory practices by information campaigns, on allowing travellers to safeguard and maintain their cultural heritage, and argued for the importance of including representatives of the nomadic populations in decisions affecting them (Council of Europe, 1975). The 1993 Recommendation on Gypsies in Europe states the importance of revitalising Gypsy culture through the study of Gypsy music, the foundation of museums on Gypsy culture, the study and teaching of the language, and the organisation of European travelling exhibitions (Council of Europe, 1993). Further, the Recommendation states that Gypsy representatives need to take part in the conceptualisation of measures and programmes that aim to improve their situation.

In European Union member countries, Romani communities are involved in decision-making on matters that affect them through advisory bodies (European Commission, 2010a). At trans-national level, several bodies work jointly for the rights of the Roma. In particular:

- The Roma Education Fund (www.romaeducationfund.hu) aims to ensure equal rights to education for the Roma and bridge existing gaps between Roma and majority populations in European countries (e.g. treating issues such as segregation in schools).
- The European Roma Rights Centre – ERRC (www.errc.org) is a law organisation that works for the protection of Roma rights and combatting racism and discrimination.
- The International Romani Union (www.internationalromaniunion.org) is concerned with promoting Romani cultural affirmation and promoting Roma's interests in mediating with authorities.
- The European Roma Policy Coalition (http://romapolicy.eu) brings together European Roma organisations for joint work on ensuring Roma rights and equal participation of Roma in socio-economic and political processes.
- European Roma Grassroots Organisations Network (www.ergonetwork.org) is committed to ensuring that Roma enjoy equal opportunities in European countries and to this purpose it connects grassroots organisations across Europe.

A series of transnational programs and platforms have been launched to ensure cooperation and joint work at European level, in particular:

- The European Platform for Roma Inclusion has been launched in 2009 by The European Commission. Its aim is to ensure communication and synergies in action taking between national governments, EU bodies, and representatives of the civil society with respect to Roma issues.
- The Decade of Roma inclusion 2005-2015 (www.romadecade.org) is an initiative supported by government as well as transnational organisations and NGOs in order to produce synergies and accelerate the rhythm of Roma inclusion in European countries.

An important problem is with reaching at and including the voices of the grassroots Roma. In particular, the Roma living in rural areas are unaware of their rights, of the bodies that represent them, and to whom they can refer to if facing discrimination (European Commission, 2010a). The challenge with existing measures and policies is with effectively reaching these groups so that on the one hand they are informed on their rights and on the other they are able to voice their opinions and be better able to take advantage of the opportunities that are in store for them.

3.4 The Romani Communities Involved

Two Romani communities were involved in this research, both located in rural South-Eastern Romania, in the county of Galati: the Roma in the village of Podoleni, commune[3] Barcea, and the Kalderash Roma in the commune of Munteni. The two communities share an important set of characteristics, in particular with respect to socio-economic status and the position with respect to the stable population. Just as many other rural Romani communities, they face poverty and separation from the rest of the Romanian in physical location as well as social relations. Before describing the two communities, the forthcoming section overviews a series of features that describe broadly the situation of the rural Roma in Romania.

[3] The main administrative units in the Romanian rural areas are called “communes”, defined in an ordinance from 1968 (Great National Assembly, 1968) as: “(t)he administrative-territorial unity which upholds the rural population united through community of interest and traditions, being composed of one or several villages, depending on the economic, socio-cultural, geographic and demographic conditions.” A rural commune can have several affiliated villages.

Figure 3.1. Map of Romania. Source: maps.google.com

3.4.1 Common features: rurality and poverty

As (Gherghinescu, 2008) argues, the Roma living in rural areas of Romania are much more predisposed to social exclusion and face a higher poverty risk than those living in urban areas. *Rurality* and *poverty* are features that have shaped and continue to shape the life of these communities, in addition to their ethnic minority status. The author lists seven elements that heighten the risk of poverty and social exclusion for rural Roma:

1 Age and education: there is an inverse correspondence between education and poverty levels;
2 Types of activities performed: involvement in non-agricultural activities (usually taken by the Roma) is often connected with high poverty;
3 Location, including factors such as isolation and low agro-touristic potential;
4 Capital, especially with respect to low physical and human capital;
5 Gender, indicating the dependency of rural women on men;
6 Ethnicity: the Roma have fewer options for professional qualification and hence access on the labour market; *and*
7 Infrastructure, access and utilities: many rural communes are not well connected by roads and have poor transport infrastructure (2008: 371).

These seven factors need to be contextualized in the very specific rural Romanian climate. Romania is a predominantly rural country. According to the 2011 population census, 47,5% of the Romanians were living in the rural areas (National Institute of Statistics, 2012). A much greater percentage of the overall physical territory is rural; applying the OECD methodology where "rural" characterizes any surface having a population density below 150 persons/sq. km., Romania has a total rural territory of 93,6%, composed of 2.732 communes, with 13.042 affiliated villages (Ministry of Agriculture and Rural Development, 2006). Despite the high territorial and human disposition of rurality, the contribution of agriculture, the principal rural economic activity, to the country's GDP remains quite low, from 10,8% in 2000 to 6,3% in 2009 (Ministry of agriculture and rural development, 2010).

With respect to poverty levels, according to World Bank assessments, 47,8% of the rural Romanians were positioned below the national poverty line in the year 2000, earning less than one dollar per day (World Bank, 2007). This figure decreased, reaching 44,7% in 2001, 42,4% in 2002, 38,0% in 2003 and 22,3% in 2006 (Idem). A 2007 survey can shed light on aspects of Romanian rurality determining or being determined by poverty, spanning education, sanitation, social services and productivity (Agency for Governmental Strategies, 2007). According to this study conducted on a representative sample of 1511 adults living in rural areas, 88,7% families have no insurance for their houses, and 83,7% have not insured their crops; only 24% have sanitary facilities inside the house; 25,2% indicate that their villages have sewage, and little over half (55,8%) declare that they have running drinkable water. Just 25,1% have a family physician located in the same locality. The study shows as well that most of the respondents do not make the best of the most profitable rural activities, agriculture and farming: over three quarters (79,2%) consume all of their animal and plant production in their household and gave none for selling. With respect to future prospects and initiatives for economic betterment, most of the respondents do not intend to start over an agriculture exploitation (87,6%) or a business (85,5%) in the upcoming 2 years. With regard to computer access, 15,5% families have a computer in their homes.

The position of the Roma in this reality is further worsened by lack of professional qualifications, discrimination, and segregation. Some of the reasons may be found in historical factors, and in particular the transition from the centralized communist economic mode of production to the capitalist economy after 1989. During communism the Roma in Romania as well as in other communist countries have undergone a policy of assimilation that aimed to crush their cultural identity and include them in the levelled working class (Goldston, 2010). As Achim (1998) argues, for many Roma the communist policies brought certain advantages: many Roma were hired in the state administrative apparatus, the militia, and the city halls. Since they were poor, they were considered to be of 'healthy social origins' and therefore their promotion was encouraged (p. 190). Roma whom industrialization left without professional qualifications and a market for their traditional arts and crafts could now

be employed in factories, rural agricultural collectives, or get city jobs as encouraged by the communist policies. Yet, the socio-economic changes following the fall of communism in 1989 contributed to worsening Roma's life conditions, and moreover incited an increasing wave of racist behaviour and discrimination in speech and even in violent acts (Goldston, 2010).

During the last two decades, attention to the Roma problem in Romania continued to increase, and motioned a series of governmental programs to improve their life conditions. One of the most important integrated programs was implemented based on a strategy policy issued by the Romanian Government at the start of the new millennium (Romanian Government, 2001). The drafting and implementation of this strategy was one of the conditions for Romania's accession to the EU (Preoteasa and el., 2009). The strategy covered 10 years (2001–2010) with actions in 10 priority directions: community development and public administration; housing; social security; health; economic standard; justice and public order; child protection; education; culture and cults; communication and civic participation. The strategy gave particular attention to two core Roma issues: discrimination and poverty.

One of the most important effects of implementing this strategy were seen at regional and local level, with the foundation of the County Bureaus for the Roma (Birourile Judetene pentru Romi - BJR) and the new role of the expert for Roma issues, or Romani mediator. The BJR were founded as part of regional prefectures in order to plan and implement the strategic measures for Roma inclusion in the corresponding region. The BJR further created the mixed work groups for facilitating the conception and implementation of regional action plans (Preoteasa et al., 2009). At local level, cities and rural communes city halls with a significant Romani population hire Roma experts, who act at the same time as interface between the Romani communities and the authorities, and are responsible with identifying local problems and participating in taking relevant course of action.

A report on the impacts of this strategy (Preoteasa et al. 2009), states that it has been weighed positively for a series of merits, among which the participatory methodology chosen, including Roma people in all the stages from formulation to implementation; and the decentralized approach to its implementation. The strategy however did not have a proper methodology apart from outlining roles, responsibilities and deadlines for action completion for the relevant social actors involved. Moreover, the implementation of the strategy took place during a time of political change, and modifications in the governmental structure and human resources that significantly slowed the pace of implementation of the strategy actions. At present, an important role in promoting Roma inclusion is held by The National Agency for the Roma (ANR), founded through a Governmental Ordinance in 2004. The Agency has as main purpose to coordinate public policies that regard the Roma minority.

3.4.2 The Romani community in Podoleni

The village of Podoleni is part of the territorial administration of Barcea, a commune in Galati county, South-Eastern Romania, located in the Plain of Tecuci, on the valley of the river Barlad. The commune is connected by road and railway with the municipality of Tecuci (10 km) and the municipality of Galati (70 km).

Figure 3.2. Map of the Podoleni village and Barcea commune. Source: maps.google.com

In 2007, 639 Romani people were registered in the village of Podoleni, accounting for 47.08% of the total village population (Table 2.1). It is to be noted however that unofficial numbers range much higher. According to City Hall officials, in 2011 there were an estimate of more than 1000 Roma living in the Podoleni village and the Barcea commune. This misalignment is owed to the fact that many Roma do not declare their ethnic origin in official census surveys.

Most Roma inhabitants are living in a dedicated area of the village, separate from the Romanian villagers. This feature can be explained by historical factors. According to local documentation, the Roma in the village descend from a group of Romani professional masons who came in the village to build a church, and then settled. The Romani community grew gradually around this group. In later years, the Romanians who had houses in the area preferred to sell them to other Roma, and move in the part of the village where most Romanians were living.

Table 3.1. Population by ethnic belonging in the commune Barcea and affiliated villages, 2007. Source: Barcea City Hall, 2009.

Area	Total	Romanian	Hungarian	Roma	Other
Commune Barcea	6036	5306	1	727	2
Village Barcea	4679	4589	0	88	2
Village Podoleni	1357	717	1	639	0

The Roma in Podoleni are part of the hearth Roma, a designation for the Roma populations that have been settled (in the sense of giving up nomadic lifestyle) several hundreds of years ago. Since they have been tied to the land for so many years, the cultural influence from the settled population has been such that today very little of the traditional Romani cultural elements remained. The most distinctive features of the Romani legacy are the Romani language and the musical tradition. Conversations inside the group are carried out in Romani language, and Romanian is spoken with the other villagers and taught in schools. A second characteristic feature of the Roma is their musical tradition. Music by voice and by instrument (in particular trumpet, accordion, and drums) is transmitted intergenerationally, taught and learnt by the ear without formal schooling methods. While conducting the research, there were a few families in the village renowned for their musical skills, who could perform by voice or accompanied by trumpet, accordion, and drums. Apart from being a tradition, music playing is an important revenue source for musicians.

Apart from these two features, the cultural traditions of the Roma are similar to the ones of the Romanians, mostly based on Christian elements. The ritual life follows the most important traditional Christian festivities such as Easter and Christmas, and the rites of passage in an individual's life, such as Baptism, birthdays, weddings, and funerals.

With respect to work and employment, the most wide-spread profession is masonry, inherited from the Roma who first settled in the village premises. Music is also a revenue-making activity for musicians, who can be called to perform at events and festivities. When no constructions jobs are available, most Roma earn their living by day jobs in agriculture, gardening, and forestry. This reflects the economic orientation of all inhabitants. Podoleni is an agricultural village. The main economic activities carried in the village are based on vegetables and cereals growth, animal breeding, and commerce based on animal and plant products. There is a limited number of small and medium enterprises for retail trading, transportation, and agricultural activities. Yet for the Roma, and equally for many Romanians, existing job revenues are only enough to help them get by from one day to the other. Most Roma earn incomes that situate them below the poverty line.

Figure 3.3. The orchestra of Podoleni. Source: author

Formal education is ensured in the commune Barcea until completion of the secondary grade (eight classes). There are four schools in the commune Barcea, one of which is located in the Podoleni village, and four kindergartens. In recent years there has been an upper trend in pursuing education for Roma youth, who travel to the nearby city of Tecuci to attend high-school. The fact that education and literacy are becoming increasingly important is demonstrated also by the number of adults who attend literacy programs for adults (the state-managed program 'The second chance').

With respect to leisure and cultural activities, there is a cultural centre for holding public events, with 250 places, and a library where recently access to computers has been provided. In what media and communication are concerned, in 2009, around 650 people had a telephone connection through the main Romanian telephone operator, Romtelecom (Barcea City Hall, 2009). The same provider offered Internet connection, that at the time of carrying this research was slowly penetrating as well among Romani inhabitants.

Figure 3.4. Houses built in an area in danger of flooding. Source: photo by local man.

With respect to civic and political engagement, the Roma in Barcea and Podoleni are represented by a local expert for the Roma, chosen by them from the members, and a local councillor for the Roma, who is part of the City Hall Council and elected every four years. Both have a mediating function, on the one hand their role is to inform people about laws, programs, and their rights, and on the other to put through to authorities the issues encountered by community members.

The Roma in Podoleni do not face directly the problems generally reported for the rural Roma, such as racism and discrimination. Relations with Romanian villagers are peaceful and cordial, and the Roma enjoy a good-standing reputation as hard-working, honest, and hospitable people. The issues faced by the Roma in the village are rather related to poverty and underdevelopment. One important issue is the lack of housing places and poor housing conditions. Many Roma have built houses on a large area in perpetual danger of flooding. In other cases, families with a high number of members share the same house.

The Barcea Urbanization Plan (Barcea City Hall, 2009) lists the most important issues related to socio-economic and infrastructural development in the village of Podoleni as well

as the commune Barcea to which it is affiliated:

- Socio-economic issues include: a sub-dimensioned medical system for the villages needs, old population, lack of working places, and lack of qualified personnel for utilitarian services.
- Infrastructural and resource issues include: old road infrastructure; water sources are inadequately managed; lack of sewage systems.
- Environmental problems regard the inadequacy of the water supply systems.

According to the same report, the development priority areas which require urgent investments are:

- For the roads and spatial infrastructure, creating new spaces for homes, repairing roads, bridges and asphalting, landscaping and creating sports grounds;
- For education, founding a high-school in Barcea;
- For bettering health services, founding a medical dispensary in Podoleni, and founding a nursery with 80 places in Barcea;
- Cultural priorities include building a cinema space with 150 places and renovating the cultural centre; *and*
- For media and communication services, the aim is to invest in the modernization of the communication infrastructure.

3.4.3 The Kalderash Roma in Munteni

The second community involved in the study is located at cca. 20 km from Podoleni, in the commune of Munteni. The latest available statistical figures indicate an official number of 516 Roma out of 9894 total inhabitants in the commune, while unofficial figures estimate there are 793 Roma (National Institute of Statistics, 2002).

The Roma in Munteni are part of the traditional sub-group of the Kalderash or Coppersmiths, denomination devised for their traditional profession, that of metal workers. In Romania, the Kalderash maintained a nomadic lifestyle until the first decade of the communist regime, when the state authorities settled them by force. At that time, many Roma were displaced and redistributed across the country to avoid high concentrations of Roma in certain cities, and all nomadic Roma were obliged to give up their life in tents and caravans and live in houses (Achim, 2004). Yet, just as in the case of the Roma in Munteni, the Kalderash resisted sedentarization in their own way. As Achim (2004) points out, in the early years of settlement the Roma would still stay in a tent raised in their courtyard, and use the houses provided by the state as stables for the horses. Even if they could be no longer exclusively

nomadic, they would spend winters in the village and the early months on the roads.

Figure 3.5. Map of the commune Munteni. Source: maps.google.com

When the research has been conducted, the Roma in Munteni were still leading a semi-nomadic lifestyle. They travelled from early spring to late autumn around the country and came to stay in the village for the cold late autumn and winter months. Semi-nomadism and metal work are the two most characteristic features of the Roma in Munteni, mutually determining one another. For the grand majority, metal work is the principal source of revenue. Almost every family has a male metal worker that is the main income provider. The range of objects produced goes from small objects such as cups to large cauldrons for spirits brewing. Yet in order to sell their products, the Roma need to travel at time in far regions of Romania, where they can find customers. In the absence of other sources of revenue, failure to sell during the summers means they will have no money during the winters. Other small jobs are performed, such as roof painting, and scrap metal deals or soap making, yet none of these is sufficient to generate sufficient income.

Just as they resisted complete sedentarization, the Roma in Munteni resisted as well cultural assimilation. Social norms and cultural traditions blend Romanian and Christian elements, yet the Romani legacy is much stronger than in the case of the Roma in Podoleni. Traditional norms define the patterns of social interaction as well as the type of behaviour expected from members according to gender and age. Marriage takes place in their teens, and the bride and groom are promised to each other by their parents when they are still at a very small age. The betrothal ceremony can be done when the two spouses are still children, and then wait for the right age to marry. Just like in the past, the young bride is bought for golden coins. Similarly, gender roles are defined by traditional patriarchal models.

Figure 3.6. Tents in a clearing during one of the spring travels. Source: author.

Figure 3.7. Metal worker with young boy working for a commissioned cauldron. Source: photo by local young woman.

With respect to literacy and education, most Roma are semi-literate and many illiterate, in particular women. While there is the possibility to attend primary and secondary school in the commune, school attendance is impeded by several factors, in particular the young age of marriage, semi-nomadic lifestyle, and not lastly poverty. Many families do not afford to buy the clothes and materials needed to send their children to school. Yet, as demonstrated by attendance by the program of literacy for adults 'The second chance', interest for education and literacy is increasing in the commune. For instance, in the 2007/08 edition 77 people attended the program (CIDIEDD, 2009).

The Roma in Munteni have their own traditional leader, called *bulibașa*. While his position has no legal bearing, he is recognized by people as their leader and he plays an important role in mediating jobs for the metal workers. When the research was conducted, the traditional *bulibașa* filled as well the role of the local expert for the Roma, who represented the interests of his people for the local authorities.

Similarly to the Roma in Podoleni, the issues encountered by the Roma in Munteni are related to poverty. Significant problems with respect to discrimination and racism have not been reported in recent years. Yet poverty is a issue that conditions many other facets of the social and personal development, the most important of these being education. Poverty impacts on the education levels of the Roma both directly (people cannot send their children to school due to low resources) and indirectly (people's travels in search for customers, conditioned by poverty, also affect school attendance for the children who need to accompany their families).

3.5 Conclusion

This chapter introduced the minority group selected for advancing this research study. It described the Roma as a particular minority culture, with debatable ethnic origin and made of several heterogeneous groups spread in and outside Europe. It gave particular attention to the European Roma, and tracked the dimensions of the socio-economic exclusion and discrimination they have been and are subjected to at present. It has been argued that despite increasing attention to improving the situation of the Roma at European level, grassroots Roma continue to face discrimination and social and informational isolation, in particular in rural areas.

The two communities involved in research are representative cases of socio-informational isolation and voicelessness. Moreover, both communities are affected by poverty and inability to transcend limitations to development posed by their socio-economic context. As such, they stand for sensitive contexts for conducting research. As has been argued in the

preceding chapter, conducting long-term research with minorities, in particular when the groups are unschooled and relatively isolated, raises important questions with respect to the choice of the research methodology and the approach to advancing fieldwork. The forthcoming chapters report the fieldwork activities with the two communities, highlighting how the community-specific features reported herein imprinted particular valences to the advancement of the research and people's responses to the participatory content production initiative carried out in each site.

PART II. FIELDWORK

4 First Field Study[4]

(The community website should be) "something that will motivate the young people in Podoleni, the new generations, to think forward, to look up at good examples. A tool for the reintegration of the Roma from the inside".

- Local councillor for the Roma, Barcea City Hall, Galati county, Romania

4.1 Synopsis

The first field study involved the Romani community in the village of Podoleni, commune Barcea, Galati county and was oriented towards the design, development and assessment of a technology-based communication solution that met the goals of local people. The intervention has made the object of systematic analysis, performed using the guidelines and procedures of grounded theory methodology.

This chapter reports the field activities in chronological order, across the four phases of the initiative:

1 Community needs assessment and vision definition
2 Content production
3 Website design and development
4 Delivery and maintenance

To reflect the organic design of the intervention, in which the workflow of each phase grows sequentially from the insights of the preceding phase, methods and results are described separately for each phase.

The *Community needs assessment and vision definition* phase had as main goal to understand the main features of the local context, define a vision for the communication solution to be produced, and guidelines for the participatory process by which it could be achieved. To this purpose, it used the following tools: participant observation, emergent interviews, semi-structured interviews, focus groups, and cultural probes. The outcomes of this phase were: a community ethnography, the project vision, intervention guidelines, and content production tools (content themes and an oral history guide). In this phase, it was determined that a community website would be developed to communicate the community's values, traditions, as well as issues and problems in the attempt to step up processes of

[4] Early versions of fragments in this chapter were published in Sabiescu (2012), Sabiescu et al. (2012).

societal integration and socio-economic development.

Content production was run to produce audio-visual content reflecting the messages that community members wanted to transmit to the outside world, and in particular to the majority population. The activities were modelled based on a localized version of the Inquiry Cycle content production model (Bruce, 2002; Bruce and Bishop, 2008). Data was collected through participant observation. This phase produced a series of outcomes usable in the subsequent phase for the website design: a list of content themes, an oral history guide, and a database of audio-visual content.

During the *Website design and development* phase, a community website was designed in three design sessions with the participation of community members, and developed using the Drupal Content Management System (CMS).

During *Delivery and maintenance* the CMS was optimized for community usage and delivered to the community, together with training sessions and a sustainability kit.

4.2 Workflow

Fieldwork lasted for 27 months, from January 2010 to April 2012 and was divided in four phases (Fig. 4.1):

1 Community needs assessment and vision definition
2 Content production
3 Website design and development
4 Delivery and maintenance

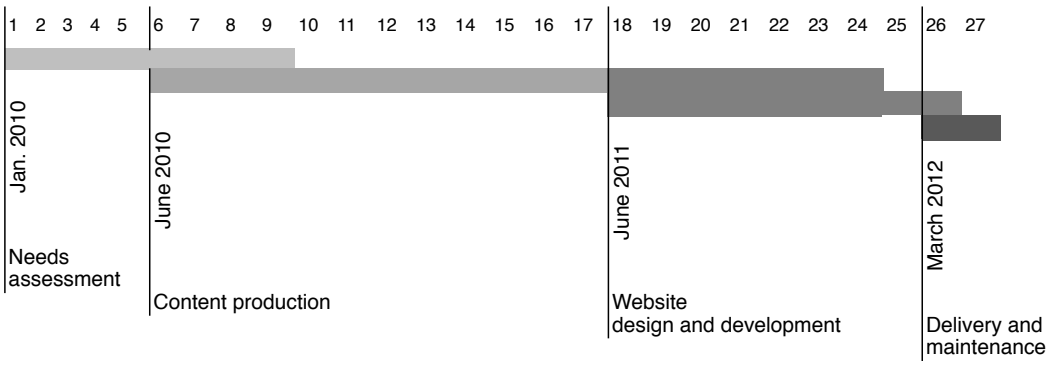

Figure 4.1. Fieldwork timeline in the Podoleni case study. Start month: January 2010. End-month: April 2012. Source: author.

Each phase served a precise *purpose* in the frame of the intervention, marked by the delivery of key *outcomes*, as follows:

- *Community needs assessment and vision definition* produced the data needed for informing the design of the intervention. The outcomes developed included: a synthetic community ethnography, a vision for the communication solution and the process of reaching it, and a series of guidelines for developing the communication solution. This phase produced as well tools usable during the next project phase: a list of content themes for guiding the content production work and an oral history guide used as roadmap during content production interviewing and stories elicitation.
- *Content production* was focused on the participatory production of local content. Its outcomes were: a database of digital content used as raw material for producing publishable content, the final list of content themes which were further used during the website design sessions in the next phase, and the final version of the oral history guide, to be used as part of the training kit delivered to the community in the last project phase.
- *Website design and development* was concerned with the design and technical implementation of the communication artefact. Its outcomes were: design elements defined in cooperation with local people, and the community website.
- *Delivery and maintenance* included the actions for delivering the website to the community and ensuring an efficient local management on project end. Its main outcomes were: a customized CMS translated in Romanian and optimized for community usage, and a training kit which included guidelines for content production, editing and publishing on the community website.

The *methods and tools* employed in each phase can be synthesized as follows:

- *Community needs assessment and vision definition* used different methods for its two strategic directions: community analysis and the definition of the project vision. For the community analysis, ethnographic data generation instruments have been used: emergent and semi-structured interviews, focus groups, and participant observation. The definition of the project vision has been done with the involvement of local people through focus groups and cultural probes.
- *Content production* activities were guided by an adapted version of a content creation model, The Inquiry Cycle (Bruce, 2002; Bruce and Bishop, 2008). Data generation continued in this phase through participant observation, for assessing the efficacy of the production model employed and modifying it to fit local response, and for carrying on the GTM process.
- *Website design and development* employed card sorting and group discussions with a decision-making component. Data generation was based on participant

observation.

- *Delivery and maintenance* included training activities and group discussions for delivering the website and the CMS to the community and enabling members to manage it on project end.

Table 4.1. Intervention workflow with aims, methods/tools and outcomes by phase in the Podoleni case. Source: author.

Phase	Goal	Methods/tools	Outcomes
1. Community needs assessment and vision definition	Understand local context Define a vision and guidelines for the intervention	*Data generation*: observation, emergent interviews, semi-structured interviews, focus groups, cultural probes	Community ethnography Project vision Intervention guidelines Content production tools (content themes, oral history guide)
2. Content production	Produce local content	*Data generation:* participant observation *Intervention-bound*: modified Inquiry cycle	Content themes Oral history guide Database of audio-visual content
3. Website design and development	Design and produce the communication solution	*Data generation:* participant observation *Intervention-bound:* card sorting	Website design elements Community website
4. Delivery and maintenance	Deliver solution and enable sustainable management beyond project completion	*Data generation:* participant observation *Intervention-bound:* training, group discussions	Technical kit (customized CMS, YouTube channel, training guide)

A note regarding the chronology of these phases is that there is not a definite border marking transition among them. Phases flowed into one another, and there has been a great degree of going back on one's steps to redefine goals, objectives, strategies and planning to account for the emergence of new understandings and the identification of new interests. In particular, the first project phase continued throughout part of the content production phase. This allowed people to understand better what the project implied, and shape the vision to answer these new understandings. The goals, tools, and outcomes associated with each phase are synthesized in Table 4.1.

4.3 Community Needs Assessment and Vision Definition

4.3.1 Methods

Different types of tools have been employed in this phase for the two strategic directions:

- Community analysis
- Definition of the project vision

Further, the data generation tools for each of the two directions is described.

Instruments and sampling for community analysis

The process started with the retrieval of an initial data corpus through emergent interviews, which was analysed and used for developing the protocols of subsequent data generation instruments (participant observation tracked by the use of field notes, semi-structured interviews, and focus groups).

Emergent group interviews

Emergent interviews (n=7) have been carried out in groups ranging from three to seven participants. They were organized with the help of the main contact family and taken in their house during the first fieldwork visits. Each interview lasted from 30 minutes to one hour and were audio-taped, while part of them were also video-taped.

While there was no pre-defined sampling based on age or gender, I have tried to cover a representative sample across gender and ages. Part of the interviews were taken exclusively with elderly people, including men and women (n=2) while the rest of the interviews included young, adult, and elderly people of mixed gender. Participants were called upon following discussions with the main contact family. Apart from the people directly solicited, in most interviews other people joined spontaneously to hear about the project and participate.

Discussions were triggered by an initial framing question and evolved in directions which covered: community present-day life, cultural traditions (including music performance), Romani identity, community issues and problems and usage of communication media.

Participant observation

Participant observation provided information on community lifestyle and social interaction patterns that complemented the results of interviews and focus groups. With the guidance of the main contact family, I have visited the Romani area of the village, visited people's homes and engaged in conversations. Many of the visits took place in the house of the main contact

family, which was a welcoming spot for other local people. The family nurtured strong ties with the other members and enjoyed a good standing in the community. Local people were invited in upon my visit for participating in organized research activities or simply sitting in, listening or conversing. Hand-written field notes were taken during each fieldwork visit, and elaborated and type-written that same day upon my return from the field (template available in Annex 1). Field notes aggregated information from participation in community events, informal conversations, as well as notes taken during the administration of the data generation instruments. Importantly, the writing of field notes did not stop once this first exploratory phase was achieved, but continued all throughout the project implementation.

Semi-structured interviews

Three types of semi-structured interviews have been employed, for Romani representatives, local authorities, and local people.

Semi-structured interviews have been taken to the local councillor for the Roma and the expert on Roma problems. The interviews were based on the same guide (Annex 2) and both were audio-recorded after permission granted. The local expert for the Roma was interviewed in the Barcea commune City Hall, in one sitting of cca. 40 minutes. The local councillor for the Roma was interviewed in two sittings of cca. 1 hour each.

The commune vice-mayor was interviewed based on the topic guide designed to elicit the views of local authorities (Annex 3). The interview took place in his office in the Barcea commune City Hall and lasted for cca. 30 minutes. Notes were taken during the interview, as agreement for audio-recording was not granted. Apart from this interview, I have had shorter conversations and inquiries with other members of the local administration employing precise questions regarding the situation of the Roma, including a short conversation with the mayor and a local politician of Romani origin.

30 semi-structured interviews with local people have been conducted. The distribution of respondents based on age and gender was:

- 11 F, 19 M
- Young, below 26, n=4; Adult, 26-45, n=6; Middle-aged, 46-59; n=12; Elderly, over 60, n=8.

Most interviews were conducted in the house of the main contact family, where participants were invited to join. Participants were selected following GTM procedures of theoretical sampling. Based on the results of data analysis conducted in waves I modified accordingly the interview guide (Annex 4 shows the final version of the guide), and provided indications to members of the contact family on people that I needed to interview. The majority of interviews were audio-recorded and part of them were video-recorded as well. When

interviews were not recorded, detailed field notes were taken on the interview guide prints. The administration procedure included an introductory statement where participants were explained the goal of the research, the reasons for taking the interview and the usage that would be made of the data. Agreement to audio-record or video-record the interview was solicited. At the end of the interview the participant was solicited permission for using the data in research, and provided explanation that data treatment was based on aggregated analysis and names would not be mentioned.

Focus groups

Four focus groups have been conducted. The first two were used to gain in-depth information on the socio-cultural practices, while the last two covered the entire questioning route (the final version of the focus group guide is presented in Annex 5). All focus groups have been run in the house of the main contact family. The selection of participants has been done through the mediation of the family. Before each focus group the purpose of the session was discussed with the main contact family, and people were called in.

A similar format was kept for all focus groups. The introduction included a short overview of the project purpose and myself, as well as the purpose of the focus group. The list of topics and the questioning route were held nearby, however an open agenda was pursued. People were encouraged to voice over their opinions connected to the themes, but discussions that slightly deviated from the topics were also accommodated. Participants who did not take active part in discussion were prompted at times with direct questions.

The first focus group was held in a large group (12 people) and had a balanced age distribution, with a concentration on male participation (3-M-young, 1-F-adult, 4-M-adult, and 4-M-elderly). The focus group was concentrated on the social and cultural profile of the participants and the community. The most active role in the discussion has been taken by the small group of elderly men, whom the youngsters considered most entitled to speak about their community's cultural profile. Since it was the first organized group discussion, the answers were very rich and very debated, so that the questioning route was subjected to many detours and changes of subject. This format provided to be a means for understanding local dynamics through first-hand accounts of participants in a setting that encouraged group interaction and lively debate.

For *the second focus group* a balanced participation was sought not only in terms of age, but also with respect to gender. Overall, nine people participated (1-F-young, 2-M-young, 1-F-adult, 3-F-elderly, and 3-M-elderly). An open agenda was pursued, and discussions detours to local traditions, past events, or present-day concerns were not blocked, but accommodated and used as a source of information about the community's socio-cultural profile.

The third focus group was a mini focus group held in a smaller group of four persons. Participants were members of the main contact family. This format was employed as it allowed to grasp intergenerational differences in answer patterns in an environment that was secure and easy-going for participants. The entire topic guide has been applied, including the parts on socio-cultural practices and media usage (Annex 5).

Figure 4.2. Focus group with eight participants. Source: author.

The fourth focus group was organized with eight male participants (1-M-young, 7-M-adults). This focus group covered the entire topic guide, and was a means to come back on previous information gathered, and understand more in-depth reasons why and motivations behind participants' answers.

Instruments and sampling for the definition of the project vision

The main data generation instruments used for defining the project vision were cultural probes and focus groups.

Cultural probes

Cultural probes were gathered from a small group, including members of the key contact family and their neighbours and relatives. A *recording kit* containing a digital photo camera, an audio recorder and a video camera with a tripod was handed in, and people received basic technical training for using them. Members were encouraged to record stories, events,

traditional rites or any significant happenings. Data was elicited from

- short interviews one-on-one and in group, when participants showed the footage recorded and
- the analysis of the footage recorded, looking at the subject matter covered.

Discussions on cultural probes (n=5) took place in the house of the main contact family. Footage was downloaded on the computer and played, while I inquired with respect to production details, producers involved and the reasons why for choosing those particular subjects.

Focus groups

Four focus groups were run. Participants were selected and invited to participate through the mediation of the main contact family and run in their house. Sampling was based on age and gender, and the role that people had in the community. A balanced participation in terms of age range was thought, and the involvement of opinion leaders.

Each session started with an introduction on the purpose of the project and the focus group. Participants were made aware that the research project was meant to bring benefit to the Romani community in Podoleni. Their contribution was therefore essential for understanding and mapping a course of action wherefrom the community could derive benefit. The topic guide initially followed the base model presented in Annex 6, and was refined sequentially after each focus group, integrating participants' answers from previous focus groups. The purpose was to gather opinions on the dimensions listed and introduce them in subsequent discussions, gradually shrinking the scope of possibilities until a solution could be found that met participants' consensus. In this process, results from the analysis of cultural probes were also included. For instance, when the overwhelming majority opted for a communication solution that would give public visibility to the community (i.e. community website), questions in further focus groups were adapted around this choice.

The first two focus groups were concentrated on subject matter, and were used as tools for diving into potential areas of interest for content production. The first focus group had eight participants (1-M-young, 1-F-adult, 2-M-adult, 4-M-elderly), while the second had seven participants (1-F-young, 1-F-adult, 1-F-old, 2-M-young, 2-M-old). The third focus group was run in a smaller format, and had four participants (1-F-young, 1-Fadult, 1-Madult, 1-M-young). Apart from the topic guide, the discussion was triggered by the presentation of a provisional version of local content themes, drafted on the basis of the first two focus groups and the cultural probes. The fourth focus group was run in continuation of the fourth focus group on media and culture (see previous section), and included the same eight male participants. The topic guide used integrated the results from previous focus groups; participants were solicited final feedback on dimensions that had been discussed and agreed in previous

sessions. The final version of the list of local content themes was presented and used to trigger feedback on potential storytellers in the forthcoming content production phase.

4.3.2 Outcomes

Outcome #1: Community ethnography

The insights derived from the analysis of the local context were grouped in 12 thematic areas:

1 Identity
2 Socio-cultural profile
3 Participation in social and cultural practices
4 Culture: value, knowledge and enactment
5 Economic profile
6 Citizenship and civic participation
7 Education, literacy and digital literacy
8 Access to information and media usage
9 The role of media in daily life
10 The broader socio-economic context
11 Community needs, goals, problems and values
12 Directions for growth and development

1 Identity

Identity features were derived from the interpretation of self-representation patterns retrieved from members' accounts with respect to themselves as community members and the community as a whole. Six main layers were highlighted:

Being Roma. The identity of the group first resided on the acknowledgement of being part of the Romani ethnic group. The main feature of the Romani legacy was *speaking Romani*. All village Roma spoke Romani, and the language was used in most intra-community communication. Members, especially the elderly, considered the continuity of the language of utmost importance.

Identity with the Romani sub-group: being settled Roma. The Romani community in Podoleni is part of the Roma who have been settled (therefore giving up nomadic lifestyle) several centuries ago. The historical time of settlement is a defining feature for Romani groups in Romania, and used to differentiate between 'traditional Roma' (who have been nomadic until later in the 20th century, and of whom some groups are still semi-nomadic) and 'settled' or

‘Romanized’ Roma. All the community members acknowledged the importance of being part of the ‘settled Roma’, a historical feature, but also an identity mark which enabled distinction from other Romani sub-groups.

Identity through difference from other Roma. At a subtler level, the identity of the Romani community in Podoleni was affirmed by insisting on the differentiation from other Romani sub-groups. Members repeatedly indicated how they were different from traditional Roma in lifestyle, social and cultural moors, living standards, values and life goals. This was a way to re-affirm their distinct identity, but also to refute global patterns of identification. Unaware strangers tend to think of all Roma as a homogenous group. By constantly underlining difference from other Romani sub-groups, and especially traditional Roma, the community in Podoleni tried to put forward its own, distinctive features. This was also a means to elude discriminatory portrayals. For the Romanian public opinion, the Roma have been invested with a bad reputation which was very strong at the time I conducted the research. In order to, or even before ascertaining their own identity, the Roma in Podoleni needed to first clarify what they were *not*, and dissipate eventual negative stereotypes.

> “Romanians think all of us are the same. If someone does something wrong, everybody says, ‘Look, he’s a Gypsy!’”
>
> - Focus group participant, M, middle-aged

Identity through closeness to the Romanian majority: Being Romanized Roma. The settled Roma of Romania, called also ‘Romanized Roma’, are the most integrated ones, closer to the mainstream Romanian socio-cultural profile. It is on virtue of this quality that they are also called ‘Romanized Roma’. By pointing to this feature the Roma in Podoleni indicated not only a historical feature, but also a series of qualities that were associated with being Romanized Roma: being trustworthy, hard-working, reliable, and ultimately more integrated, closer to the majority.

Identity through Romani legacy features: Being musicians. Underneath all the above layers, which functioned as means for distinguishing *these* Roma from other Roma, and to relate the group with fellow Romani groups, the self-characterization made by the Roma in Podoleni was focused on the core feature of their Romani legacy: being musicians. The Roma in Podoleni were recognized regionally for having a strong musical tradition. Many Roma knew how to play an instrument, and used music performance as an additional source of income. Others possessed the musical skills and would occasionally play, even if they did not profess anymore. In the past the community had a fanfare (musician performers group made of trumpet players) which was recognized regionally as a brand distinction for the Romani community in Podoleni.

Identity through moral qualities: Being hard-working and honest Roma. Lastly, the people identified themselves through a series of moral qualities on which all community members

took pride. The outstanding moral qualities were ‘being hard-working’ and ‘ being honest’. People included the desire to work, the joy of work among the most defining features of their community. One focus group participant remarked:

> “What is typical of us? Work! And music!”
>
> - Focus group participant, M, elderly

It is to be noticed how the two principal moral qualities – being hard-working and honest – differ from the stereotypical portrayals on the Roma, so much circulated in Romania as well as in Europe. The centrality of these qualities also confirms why for affirming their identity people needed to emphasize first what they were *not.*

2 Socio-cultural profile

The community was characterized by strong internal ties, manifested in a lively social life, with a pronounced orientation toward intra-community relations. These aspects call for a parallel with Tönnies’ definition of *Gemeinschaft*, community, as different from *Gesellschaft*, society (Tönnies, 2002). The community in Podoleni cannot be described as a pure type of *Gemeinschaft*, yet it has a high concentration of features Tönnies attributes to pure *Gemeinschaften*.

First, there was a noticeable orientation towards collectivity, manifested not as a denial of individual goals, but as a diminishing of the private individual sphere. Social relations were naturally open, with very low barriers between separate individuals and their families. People visited each other’s homes freely and without planning and announcing. During my visits at my main contact family, many people dropped by to participate in events or just listen in. This spirit also manifested as solidarity when community members experienced bad events. For instance, twice during my fieldwork it happened that a young child would die. For both cases, the entire Romani community participated at the funeral and raised money to help the families who could not afford the funeral rites costs. In the case of one baby girl, brought down by a powerful illness, ten people in the village quickly gathered and went personally to donate blood in the city of Galati, when the news spread that the hospital did not have blood for transfusions. These were occasions when people proved to stand by each other, take sympathy in the others’ misfortunes and be eager to provide the help and assistance needed.

Second, during my fieldwork I found a remarkable consistency in members’ outlook on life, their roles as individuals and collectivity, and the role attributed to particular life achievements. This worldview was further declined in common beliefs and common interests, as well as common values and moors. At times people would even use the same metaphors or expressions when describing their view of a phenomenon. For instance, all regarded Communism times to be a golden age, in which the basic material needs were covered,

people had a place to work and life was levelled and plentiful. The surprising aspect was that many people described the good aspects of Communism under the same terms. They would insist, for example, on the fact that everybody had a job, by pointing humorously and in almost the same sequence of words that:

> "Those days, if they found you on the street, they asked what you were doing. And if you didn't have a job, they would throw you into jail. But afterwards, they would give you a job!"
>
> - Interview respondent, F, elderly

With respect to moors, people assigned a fundamental role to tradition and to keeping up with tradition. When asked about Christianity in comparison with the new Christian sects, many people underlined that they kept to their creed because it was inherited as such from the ancestors. Inheriting and carrying over the religious tradition was considered just as important as faith in God.

> "I was baptized and raised a Christian orthodox, I will die a Christian orthodox. How can I change this?"
>
> - Interview, F, middle-aged

Third, strong social ties were nurtured due to a series of factors out of which *proximity* and *kinship relations* should be underlined. People shared a common physical space, separate from the Romanian villagers. Also, the community members with which I interacted most were all living in the same neighbourhood, of some 54 houses, called colloquially Roma's Street, now Mihail Kogalniceanu street. In this space, most people were Roma, and moreover most of them were also relatives, by blood or by marriage. People were therefore closely tied on virtue of being Romani, neighbours, and relatives. I have had the occasion to mark down intricate kinship relations in which virtually everybody was in some way related to somebody else living in the neighbourhood. For many people and especially the youth, social life and relations were determined more by proximity and kinship rather than ethnic background. Living in the same area appeared to play an important part for the strength of intra-community ties.

Other community features discredit, however, the assumption that we can speak of a pure type of *Gemeinschaft*. One strong feature was that people had strong individual goals, even if these were mostly governed by collectively accepted principles. For instance, people in their majority attributed a high value to education, and oriented it toward the welfare of their children. If children were to pursue higher education and eventually leave the village, most parents would acquiesce, even if the community ecology would of course have to suffer from losing young talented and educated members.

Going back to Tönnies' definition, we can then look at the Romani community as a hybrid type of *Gemeinschaft* with strong collective orientation, common worldview, beliefs, interests

and moors, and strong social ties, yet punctuated with features in which individual welfare and goals were considered higher than community good.

3 Participation in social and cultural practices

'Social practices' are taken to encompass the social activities performed in the daily life of community members. 'Cultural practices' encompass the events that are ritualized and passed down traditionally, whether of laic or religious nature.

With respect to *social practices*, the bulk of social interaction took place inside the community. As argued above, this was not due only to sharing an ethnic background, but also to proximity (sharing the same space) and wide-spread kinship relations. In daily life, occasions for social interaction were seldom planned. People freely visited their neighbours during the day, without announcing beforehand. Many times during my visits people entered a house with no prior notice and with various reasons, from asking a particular food ingredient to a medicine, or simply passing by.

Yet special moments and places of social interaction can be identified. The preferred moments were afternoons and evenings during regular days, or any day time during holidays. People gathered in small groups in front of the courtyards, commenting on news, happenings and the day's events. Many houses had benches placed in front of their courtyard fences for just this type of occasion. Other meeting places were the village bar, where Roma men meet at times.

This predominantly Roma to Roma social interaction is not to be regarded as a sign of tension with the rest of the villagers, of Romanian origin. Relations with Romanians were in general cordial. Several people, especially youth, reported that they had Romanian as well as Roma friends. With respect to *cultural practices*, community members honoured a series of communal events and festivities, most of them of religious nature. The core cultural events, celebrated by all, were Christmas and Easter and associated rites, such as The Easter of the Dead, celebration days dedicated to Virgin Mary, and saints' holy days, such as Saint George and Saint John the Baptist. People prepared traditional foods according to the type of event celebrated and performed traditional rites, which could include Church attendance, particular ways of greeting, making food gifts and honouring the dead in the local cemetery.

Figure 4.3. A woman on a bench in front of her house. Source: photo by young male participant.

Figure 4.4. Village men with a child. Source: author.

Other cultural events included wedding ceremonies, baptisms, anniversaries and funerals. Many of these events were celebrated with large community participation, in the homes and courtyards of the celebrated people or couples. When the space was not enough to accommodate all participants, the festivities could spread on the village streets.

Figure 4.5. People offer food for blessings while celebrating the Easter of the Dead in the local cemetery. Source: photo by local woman.

Cultural practices were the main means of cultural transmission in the community. The value placed on respecting rites and continuing to do as one's parents and ancestors had done was high and unquestioned. At the same time, cultural practices were also means of nurturing social interaction and strengthen ties among the community members: people met and chatted in the village Church, visited on Sundays or for specific religious ceremonies, at the local cemetery, where they traditionally honoured the dead a few times per year, for religious events, or at the local cultural centre, for organized events. Cultural practices were therefore ritualized occasions that linked people in time (and performed a transmission function) and in space (and performed a social connection function among members).

Figure 4.6. Trumpet player. Most ritual events are accompanied by music. Source: author.

4 Culture: value, knowledge and enactment

Apart from evidence on socio-cultural practices, it was important to understand the value that people placed on culture and how it could be related to the communication project: First, what collective goals were most poignant in relation to culture, e.g. cultural transmission, preservation, or communication to the outside? Second, were there factors to take into account, such as gender or age-based protocols? To answer these questions, the concept of 'culture' was operationalized in three thematic dimensions: 1) cultural traditions of Romani ancestry (including Romani language), 2) history of the Roma in Podoleni, and 3) history and culture of the wider Romani population. For each of these, data generation and analysis looked at value assigned and knowledge possessed.

With respect to the *value* assigned, all people declared that knowing about Roma traditions, keeping them alive and transmitting them to their kids was very important. Knowing about the history of the Roma in Podoleni, and the history and culture of the wider Roma population was also considered very important, for themselves as well as for future generations. The majority of people also deemed important the continuity of the Romani

language (only one young woman interviewed deemed language continuity not important).

Despite this high interest, people manifested a very low degree of preoccupation in keeping themselves documented and informed on any aspects that had to do with the history and culture of the Roma or of the village. Self-reported *knowledge levels* on the history of the Romani community in Podoleni were generally low, with more than half of the interview respondents declaring to know little or nothing of the community's history. The family and the elderly were mostly mentioned as sources for the knowledge possessed. For people who declared to know much about the community history, most mentioned informative sources were the village elderly. More in-depth information gathered in focus groups revealed that knowledge on the community history covered the lifespan of the living generations and those recently passed away, based on the accounts transmitted orally from the lives and the lips of those still living. The elderly had little factual information on the beginnings and early history of the community, and seemed certain only of the accounts they had heard themselves while being children and young. When prompted to go back further in time, most respondents declared that they did not know, as there was nobody alive who could have offered that information. The information about the settling of the Roma in the village was possessed by educated people who learnt facts from the village monograph.

With regard to the *history and culture of the Roma around the world*, the self-reported knowledge levels varied between: more than half declaring that they knew little or nothing; and slightly less than half declaring that they knew much. The sources of this information for people with high knowledge came from television and discussions with friends. Discussions carried out in focus groups revealed, however, that factual history was mostly focused on the accounts of the deportation of the Roma during the Second World War, and facts about the contemporary traditional Romani communities living in the same region as the Roma in Podoleni.

The high value placed on culture and the perpetuation of the Romani legacy, and the high participation in cultural practices needed to be interpreted in the light of the little interest manifested for getting verified information on the community past history and the culture of the Roma in the world. The explanation for this apparent conflict has been found in the pronounced present and future oriented profile of participants. The Roma in Podoleni were not preoccupied with the past. Though they deemed culture and Romani tradition to be important, they did not document themselves on it, or reflected upon it and the role it had. Cultural tradition was enacted by continuously repeating the cultural practices that they had inherited from their parents and ancestors. Members manifested deep respect and commitment to continuing to perform and carry out these practices. This characteristic can be succinctly reflected in the phrase 'living in the now', a preoccupation with the present and the immediate future that did not preclude nor obscure tradition. Rather than being reflected

upon, tradition was perpetuated through constant enactment and commitment to carry out what had been transmitted by parents and ancestors.

5 Economic profile

The Romani community in Podoleni was characterized by a high degree of poverty, mostly due to the low economic potential of the commune Barcea and the village. This condition needs to be read in conjunction with the people's sincere and committed desire to work. The most wide-spread professional qualification was in construction work, there were however very few jobs available, and for the remaining people the only possibility of earning revenues was to perform day labour in agriculture and gardening. The few people who were musicians could round up their revenues through music performances, however the demand for these at local and regional events was insecure and could not make for a steady revenue. The fact that the grand majority of people did not have fixed jobs causes general apprehension for the day of tomorrow and the unstable economic situation.

'Poverty' as characteristic local feature appeared in members' accounts with alarming regularity. In the light of poverty, other preoccupations, including cultural safeguarding, had a much lower bearing. All people regarded the past Communist regime as a period of tranquillity and economic stability, when everyone had a secure job and the minimum required for living. Members' aspiration for economic welfare went in their majority toward this state of stability in which the immediate life needs were covered.

With respect to members' vision about getting out of poverty, two aspects need to be mentioned. On the one hand, people realized that the only way to escape poverty was to find secure jobs and work hard to maintain themselves. On the other hand, also due to Roma integration measures that will be discussed below, people expected help and solutions to come from outside the community. Since no way out of poverty could be found from the inside, they were trustful that only from the outside a solution to all problems could come, either through a program or project that could ensure sustained job provision, or simply through immediate material help in goods and services.

The local authorities attributed the poverty state to the economic crisis manifested all throughout Romania. In the vision of the local mayor, the crisis was not more pronounced for Roma rather than Romanian citizens. Life conditions were levelled and did not vary on ethnic grounds. However, it is to be mentioned that the village part inhabited by the Romani community had a much poorer infrastructure (especially for transportation routes and connections and housing places) than the rest of the village.

6 Citizenship and civic participation

When inquired about steps taken to improve the situation of the Roma, the mayor of the commune Barcea answered that the commune and villages members were regarded as equal, and development measures were taken for all citizens, irrespective of their ethnic background. The fact that the Roma and Romanian in the commune Barcea as well as in the Podoleni village enjoyed equal citizen rights has been as well verified by other data retrieved during the ethnographic research.

Citizens in the commune Barcea and the village of Podoleni were constantly informed on laws, measures and programs that affected them, especially through meetings organized a few times per year, or whenever news need to be communicated from the City Hall. These meetings took place in open air, with the presence of a large part of the villagers. People from the City Hall gave discourses and people were free to speak and present their opinions on the subjects tackled. It was one of the main means for keeping the community informed on laws, programs, and projects that affected them.

In addition, the interests of the Romani community were served by regional and local associations and City Hall special employees. A special expert on Roma problems was appointed and served the interests of the community in the commune City Hall, and a local councillor to the City Hall had been elected from the Romani people. These two figures were involved in solving Roma issues and worked for the adequate fulfilment of Roma interests. The person who filled the position of local councillor for the Roma during the fieldwork period had made a lifelong mission from enhancing the development of the Romani community. He had an open-minded vision for the role of the youth in bringing up development for the entire commune and the importance of education. Driven especially by him, people became more aware of their rights as citizens and participated more numerous in the various meetings where the entire village was summoned.

Toward the end of the fieldwork period, a movement more specifically targeting Roma interests was beginning to become visible. With the support of the Union of the Romani Communities in Romania, a group of local Roma began to take more active steps in issues that could ensure long-term development: from information on the political role of the Roma and the ways of serving one's civic interests, to support for Romani children who wanted to pursue high-school and university education.

7 Education, literacy and digital literacy

With respect to education levels, most members had completed at least the elementary school, and many of them completed as well the secondary school cycle. Further education, to high school or even university was also encouraged in the Romani community. People

took great pride in seeing their youth attend high school and university studies. Despite the value placed on education, most young people could not pursue studies beyond the compulsory eight grades. In order to attend high school the youth needed to commute daily or to stay in boarding schools in the nearby cities of Tecuci and Galati. Additional daily living costs made further education impossible to sustain for the majority of local people with children in school.

Literacy, as ability to read and write, was wide-spread in the community. There were limited cases of illiteracy, mostly among the elderly but also middle-aged people, who should have completed their primary education in troubled times or with other priorities to be fulfilled. For these people the scholarly program 'The second chance' (Ro. 'Sansa a doua') offered instruction for completing the primary cycle in the Barcea commune premises, while completion of the secondary school (grades 5 to 8) was possible in a commune located at a 20-minute drive. Despite widespread literacy as ability, reading and writing were scarcely practiced. People interviewed declared that they rarely read newspapers, magazines, or books, and also rarely wrote.

With respect to *multimedia literacy* (the ability to use several information devices to access and create information and for communication), a limited number of people have reported or demonstrated ability to use several devices for accessing information (television browsing), for communicating (mobile phone usage) and for creating information (photo and video camera usage). Few people owned recording devices, such as photo camera or video camera. Some used smart phones for taking videos and photos. However, for most people, especially youth and middle-aged, television and the mobile phone were the only information and communication devices, while for most of the elderly, television was the only broadcast medium they knew how to use.

With respect to *computer literacy* (ability to use computers for reception, creation, and delivery of information), ascending levels were verified for the latest generations, while for middle aged and elderly people digital literacy levels were very low or null. Some families with children and youth had computers, most of them acquired through a subsidised program for encouraging computer usage in homes. These computers were mostly used by children and youth who had attended school in recent years, when Technology and Informatics classes started to be introduced in school curricula.

8 Access to information and communication media

For most people, television was the preferred device for getting access to information. Most houses had a TV set, used daily by the inhabitants. Interview respondents declared unanimously that television was their preferred device for keeping themselves informed. The reasons for their preference varied. For most television was easy to use, had varied

programs, was highly informative and always at hand. One focus group participant remarked that television was truthful, while newspapers lie: when one reads a newspaper, he cannot check that it is telling the truth, but on television one can just switch the channel and he is going to see if the same news are reported in the same way on different channels, he explained.

Radio was rarely or never used. Some car owners listened to the radio while driving, and preferred to listen to music rather than news and information. Newspapers and magazines were used very rarely or never. Internet was slowly penetrating in the community at the time when the research was being conducted. Few Roma (around 15, when the inquiry was carried out) had Internet access, through the main telephone provider, Romtelecom.

With respect to the *type of information* accessed, people were interested in news, politics and movies. When asked whether they used to watch informative programs on the Roma, the majority of the respondents answered positively, while the frequency of watching varied: almost half of them watched them very rarely, while for another half the frequency varied from a few times per week to a few times per month. People who had Internet access used it mainly for downloading or streaming movies and music, and for communication services such as email and instant messaging. Communication, rather than information access, was one of the main benefits perceived for Internet usage, especially for people who had relatives working temporarily abroad. People who did not have Internet access would have liked to use it mainly for accessing email and instant messaging services for communicating with people, especially abroad, and only second for news and information.

With respect to communication devices, mobile phone usage was widely spread, especially for the young, adult and middle-age segments. Interview respondents declared to use the mobile phone daily, for social interaction as well as for work. Musicians, for instance, settled their performance appointments via mobile phone. Traditional telephones were used much less. Interview respondents who had a fixed phone line declared that they did not need to use it daily, but only a few times per week.

9 The role of media in daily life

If literacy was wide-spread, as stressed above, this is to be taken as a skill, rather than a practice. Most people knew how to read and write, however in their regular lives they rarely used reading and writing skills. Access to information relied heavily if not exclusively on television, while with respect to communication, most of their practices and social interaction relied on face to face oral communication, complemented increasingly in recent times by mobile phone communication. These three communication media – television, orality in face to face communication, and mobile phone – were the most widely used for information access and communication.

Television was the daily source of information. People declared to watch television usually surrounded by family and sometimes friends. In some of the houses I visited television was always on while people performed their daily routine. People relied on it for being informed on news and national events, and second for movies and entertainment. News and events reported on television would often be commented upon in discussions in family or in village gatherings. People declared they preferred television over newspapers as information source, as they could check the truthfulness of the news across different channels.

Orality in face to face communication, was the most wide-spread means of social interaction. People would make visits to the houses of their neighbours for sharing news and information, and would chat in small groups in village streets during afternoon and evening hours. Despite mobile phone increased usage, people still used to spread news by communicating it directly in face to face conversations.

The *mobile phone* was the preferred communication alternative to face to face oral communication. For most people it was considered more useful than the fixed phone, and utilized more frequently. Just as with television, the mobile phone was considered a necessity and penetrated even very poor segments. Without needing to have a subscription, poor people could buy inexpensive packages marketed by mobile phone providers.

10 Broader socio-economic context

The project needed to take into account not only the community features, but also how these related to the wider social context and how phenomena verified at regional and national level impacted on the Roma in Podoleni. Five features were deemed important:

- The Romani minority status and discrimination;
- The Roma integration movement;
- The political role of the Roma;
- Rurality; and
- Economic crisis and the poverty spectrum.

The Romani minority status and discrimination. The Romani community in Podoleni enjoyed a good reputation at local and regional level as honest, hard-working, serious and warm-hearted people. The Romani minority in Romania was portrayed, on the other hand, in much darker lines by the majority population, and had been facing general racial discrimination. The Roma in Podoleni had to cope with the stereotypes imposed on them on ethnic grounds. In many instances, the self-presentation of Romani people in Podoleni started with introductory lines in which the discriminatory portrayal was being dismissed. Before saying who they were, people felt compelled to respond to the eventual unspoken stereotypes held by an onlooker, and state who or how they were *not*. Television news on the Roma, even if careful to respect the ethics of broadcasting, generalized the opinion that there was a Roma

problem and that it continued to grow.

When my research was carried out, one of the cases widely discussed in television regarded the forced eviction of the Romanian Roma in France, in 2010. The news alimented vivid talks as part of focus groups and group discussions with the Roma in Podoleni. People felt obliged to underline that not all Roma should be regarded as the same: there were good Roma and bad Roma, just as there were good French and bad French. People were different and needed to be judged each according to their manner and deeds, not on virtue of being part of a certain ethnic group. Episodes such as these one, reported in the news with some regularity, strengthened on the one hand the circulation of stereotypes on the Roma in the majority population, and on the other hand the Roma people's attempt to clarify their own and other honest Roma' conduct as different from the reported cases.

The Roma reintegration movement. The movement for Roma integration was in full bloom in Romania during the time of the research. It came with social and political novel laws and specific actions, funded program calls and measures meant to foster Roma social and economic integration. This multifaceted and multi-channelled campaign has been advertised through many media, including television. The Roma in Podoleni were aware that they, on virtue of being part of this minority, were also targets of this reintegration campaign. Programs for Roma integration were perceived as a source of help and assistance; the downsize of this was that it developed people's sense of helplessness and reliance on outside measures for aiding them to get out of poverty. The sincere desire of the Roma in Podoleni to work committedly was complemented by an innocent belief in aid that could come from the outside. This aid could take the shape of programs that could secure more jobs or professional qualifications, but also one-time material help such as food or clothes aid. During my fieldwork days I did not see any diminishing of the honest drive for work due to reliance on outside help. Yet a prognosis can be made that by continuing to seek solutions on the outside, the spirit of initiative in seeking long-term solutions from the inside would diminish.

The political role of the Roma. The Roma are quite a sizable minority in Romania. For political parties, they are therefore a source of votes. Shortly before electoral campaigns, political people visit communities, hold speeches, take interest in the Roma problems, and try to figure out solutions. Their visits are seldom renewed out of public voting campaigns periods. This repeated pattern in the more than 20 years that went by from the 1989 Revolution was acknowledged by the Roma in Podoleni as well. As a result, people started mistrusting politics and politicians, and felt used for personal purposes and unimportant in the eyes of political people and even the law. The incipient movement for having a self-determined Romani cell in the community of Podoleni (see point 6 above) needs to be contextualized in the mistrust caused by current and past approaches to the Roma by local

politicians.

Rural development. As detailed in the Research Context chapter, Romanian rurality was characterized by a slow pace of development. The agricultural and animal breeding sectors, on which rural communities should strive, were still under-developed. In the absence of infrastructural development and the growth of agriculture and animal breeding businesses, the possibilities for poor rural citizens to make ends meet were very scarce. The low economic potential of Podoleni and the commune Barcea need to be seen not as isolated cases, but instances of widespread phenomena and conditions. This aspect is important when formulating development prognoses and identifying directions and measures for economic growth. In the eyes of the local people, the line of division between rural and urban was clearly distinguished. Rural life was seen as backward, with less opportunities and a very slow development rhythm, while urban life contained promises for a better life standard and richer economic and social opportunities. The hopes of the people for their children were therefore in grand majority oriented toward a life in one of the nearby cities, or in another country.

Economic crisis and the poverty spectrum. The poverty of the Romani community in Podoleni needs to be contextualized in the prolonged economic crisis in which Romania plunged especially from 2009. Poverty and the fight for survival, avid quest for jobs, apprehension for tomorrow, are all problems with which many Romanian in urban as well as rural areas had to cope. Rather than being an exception, the poverty phenomenon was the rule at the time when the research was being conducted. This national economic crisis wave gave increased force to the apprehension that poverty caused among the people of Podoleni, and contributed to making it the number 1 problem, to which all other community issues came second.

11 Community problems, needs, goals, and values

The over-arching community *problem* was related to widespread poverty. The causes of poverty were lack of work places, lack of professional qualifications and in general the scarce economic potential of the commune and the village. Other communal problems were the lack of housing places. Many community houses were built in areas endangered by potential flooding. On the other hand, no other housing places were available, therefore people could either run the risk and build houses in endangered areas, or continue to live in parental houses. Many of the people I interacted with lived in houses where three or four generations were amassed.

An important community problem conditioned by the poverty levels was the difficulty to keep children in compulsory school, and further the sheer impossibility to send children for high school or university studies. Education was, at the same time, a high-ranked priority and for

many people the gateway for a better life for their children. The relation between poverty and education can therefore be characterized as a vicious circle, where poverty made further education difficult or even impossible, while low education levels perpetuated poverty.

The main *needs* of the community were related to means of escaping poverty. When inquired directly, people singled out 'work' and finding places to work as their main collective need. In the words of a focus group respondent:

> "A firm, a business, anything in here in the village, that can give us a job. We just want to work, and there is nowhere a job to be found."
>
> - Focus group participant, M, middle-aged

The communal *goals* as formulated by the majority of people inquired reverted around reaching economic welfare and ensuring education for children and future generations. The concern with education and the value given to education was verified in the majority of participants with striking consistency. A less general goal, formulated by a small group of people at the time of conducting the research, was related to ensuring more self-determination and initiative for the Romani community. Community representatives and opinion leaders aspired to develop a community initiative group that could take direct action for the welfare and development of the community.

Reaching up to these goals had to be in accordance with community *values*. Hard-work, honesty, and solidarity were the most conspicuous values. Despite poverty, people aspired to welfare for them as well as their peers and placed importance on honesty and hard work for reaching a welfare status.

Summing up, it can be concluded that as long as there continued to be poverty in the commune and village, the priorities of the people would revert on the satisfaction of the immediate needs. The communication project needed to find a way to emulate its goals around the accomplishment of existing goals and needs, or work for identifying others that had not been acknowledged or pursued in the village before.

12 Directions for growth and development

To understand how the project could be integrated in the local reality, more than a snapshot of the local context was needed. It was necessary to use the corpus of data gathered to understand or make a prognosis on how the reality was developing and what directions could be identified. Directions for development have been sketched by looking at the present state of specific phenomena and inquiring on their level of priority in the agenda of the local community, as well as by identifying and analysing incipient patterns of difference in the manifestation of those phenomena. This picture of the future was sketched only for those aspects where directions emerged with particular vigour, in particular for Romani identity and

tradition, education levels and literacy, and local initiative.

Romani language and identity evolution. When the research was conducted, Romani language was widely spoken. People questioned about the continuity of the language stated that speaking Romani was of utmost importance, and wished that their children and nephews will continue to speak it. At the same time, in practice, many Romani families started teaching Romanian rather than Romani as the first language to their kids, in the hope of helping them perform better at school and being better integrated. This is a switched pattern from past generations, in which children would first be taught Romani, and only afterwards Romanian. In my community visits I met some small children who could not speak Romani yet.

It is interesting to compare these aspects with the patterns by which Romani language ceased to be spoken in other Romani communities in Romania. In my early field research I spoke extensively with Romani people in a commune from the same region, part of the 'settled Roma' group themselves, just as the Roma of Podoleni. In that community, Romani language was no longer spoken by the majority of teenagers and children. In my discussions with a local Romani language teacher I asked how the language ceased to be spoken. Her answer was that after the deportation of the Roma in the '40s people started being afraid to recognize openly their identity. They also feared their children would be marginalised and left out. So that they ceased speaking Romani, even at home, and also stopped teaching it to their children. If we compare the two situations, we find that causes for not speaking Romani to children vary – fear vs. desire for reintegration. In practice, however, the same measures are taken in family contexts – people give less priority to or stop teaching Roman to their children. One prognosis is that if reintegration is pursued intensively under the same terms as it has been in the past, Romani language speech in Podoleni will become weaker and weaker. How much the Romani identity of the people will be affected by this is something more difficult to assess. As long as they will live in the same area, people will continue to nurture a sense of community which will probably continue to assert as well their ethnic minority status.

Education. Pursuing education was held as a high value in the community. Even when speaking of poverty, people would mention that the one thing they needed most and would have invested in most was education for their children. The mother of one of the few village children who went for university studies, a widower, made a touching testimonial. She confessed that she was illiterate. For she knew how difficult life was with illiteracy, she made enormous efforts to keep her children in school. She invested especially in her elderly son, who managed to attend university. Her efforts for keeping him in school, huge if we think of a widower with kids and revenues from day labour, were motivated by the belief that only by education one could escape the poverty cycle. Given the high standing that most people in

the community gave to education, it is to be expected that the number of children attending higher education will grow in the forthcoming years. Also, levels of literacy and digital literacy could also be developing and rising. Internet access, for instance, still a rarity when the project was on-going, is expected to penetrate more in the Romani community.

Civic participation and local initiative groups. When the project was on-going, a rising level of civic participation and local initiative was noticed for a small group of Roma people. Projects for supporting education of Roma kids were planned, and collaborations with national Romani organizations were being established. It is to be expected that the cell preoccupied with Roma development will continue to be active, attract more people and inspire other people as well to become proactive in exercising their civic rights.

Outcome #2: Project vision

The second outcome of the first phase was a project vision, formulated together with local people on the basis of the data gathered through focus groups and cultural probes. Importantly, the project was not run based on a definite plan, but based on this vision which acted as a glue for concerted efforts and activities. The vision therefore encompassed not only the final outcome, but also pointed to landmark activities and roles for reaching out to the outcome. It was a vision of the outcome *and* the process of achieving it, which defined:

1 Communication solution: objectives, audience and expected return
2 Content: themes and media
3 Roles
4 Workflow
5 Ethical issues

1 Communication solution: objectives, audience and expected return

There was unanimous agreement that the communication product that best met local needs was a community website. Other possibilities, such as for instance a platform for internal community communication, or digital archives for community safekeeping, were deemed irrelevant. The community website was conceived as a gateway for community expression, from traditions on which local people took pride, such as music, to present-day concerns, such as poverty. In its final form, the website was to become a business card for the community, a means for presenting and communicating itself to the outside, for a public audience.

Benefits and expected return were negotiated for a long time, and required a re-thinking of community goals in the light of what was accomplishable through the intervention. The community's collective goals and needs reverted on economic well-being and ensuring

access to education for its young members. A small-scale communication project had little chances of contributing to reaching hard benefits in economic terms. For bridging project planned accomplishments with community long-term goals, strategic thinking was required both on mine and the community's side. The local councillor for the Roma had the long-term vision to understand that benefits that could be raised from having a community website were not to arrive necessarily from the outside, but could be related to growth from the inside. His strategic position toward community welfare and development was apparent in the vision of the community website he formulated:

> "Something that will motivate the young people in Podoleni, the new generations, to think forward, to look up at good examples. A tool for the reintegration of the Roma from the inside."
>
> - Local councillor for the Roma

His input completed the mission of the project in terms of community benefits: the website was a business card for the community, a way of presenting itself to the world. Yet benefits were not expected to come from the outside. Community members, youth especially, could derive motivation and upward thinking from the website, subjects treated and the work that led to its maintenance.

One important aspect with respect to community benefits was related to the website sustainable management beyond project completion. Agreement was reached that the website will continue to be managed by the community after the intervention end. To make this feasible, the entire content production and organization experience had to be organized with a view to continuity: people needed to become well acquainted with the content production and publishing cycle for being able to run the process by themselves on project end.

2 Content: themes and media

The subject matter was focused on a representation of the community lifestyle, traditions, values, moments of celebration, but also its concerns (for instance poverty). Its scope was filtered by the chosen target audience, and included those subjects that members deemed adequate for transmission to a wide public. (The list of content themes is illustrated in Table 4.2).

With respect to media, video was selected as the main content production medium. Where the case, photographs would be used for enriching the information provided in a video through still visuals. Video had been the preferred form for filming events, stories and testimonials during the gathering of cultural probes. The audio recorder in the kit was never used. Even after being explained the possible uses of audio recordings, people opted for video as a more complex media form, which could capture audio *and* visuals. Still images -

photographs - had a different appeal. People loved to let themselves be photographed and delighted in receiving the prints of the photographs taken. Most people did not have photo cameras and had few photographs in their family archives, mostly taken in important social events, such as weddings. Having photographs was therefore an appeal also for safekeeping, and not only for publishing.

3 Roles

The people involved could fill two *roles*: as providers of stories and testimonials and as content producers. With respect to *storytellers*, people were selected based on the type of subject that one could cover, or the story s/he had to say. If *poverty* was the main subject treated, for instance, the storyteller could be a mother who encountered difficulties in keeping her child in school, as well as an elderly who had a difficult living on a small pension. The content providers were not named and listed beforehand. The participants questioned during the envisioning focus groups considered that any community member would agree to tell a story or be interviewed, and agreement could be solicited on a case by case basis.

With respect to *producers*, a small group of people spontaneously formed for leading content production. They were formed by members of the main contact family, and later by the local councillor for the Roma and his teenage daughter. Working with a small group was considered most straightforward and effective, as people got used to the recording devices and learnt to employ them effectively.

4 Workflow

The workflow was defined with respect to the time format and types of activities accommodated.

Time format. The content production model needed to be based on a balance between my input and the community's input in an optimal sequence of time. In addition, it was important to create the occasions for the community to produce content on its own. My fieldwork program included intensive periods on the field, usually 2-3 weeks long and alternated every 6-8 weeks, with office work in between. This alternation was chosen as pattern for the production process, which included:

- Collective production sessions: intensive periods dedicated to content production, facilitated by myself and run when I was on the village premises.
- Community-led production sessions: production led by community members when I was not on the field.

Types of activities. Content production was to be focused on creative sessions, in which stories, events, or testimonials were recorded. Apart from creation sessions, two other types

of activities were deemed important for ensuring an efficient production flow: planning and collective screenings.

Planning needed to take into account the selection of content providers, their availability and the best places for running production sessions. To be effective, planning needed to include local members who could give insights on the organization of activities, such as the adequate moments, the availability of people, etc. The main contact family, who had already assisted in the organization of previous data generation sessions and meetings, spontaneously assumed this role.

Collective screenings had been used during the analysis of cultural probes. Given their potential for generating discussion and gathering feedback, they were chosen as a session format fit for content production. Collective screenings of content footage were devised as means for showing the results of content production, but also for eliciting feedback, enticing discussions and pointing to aspects that could be improved or changed for a more effective content production process.

5 Ethical issues

As argued in the Research Design chapter, the approach to ethical issues in this project was developed bridging academic requirements with community expectations. One important aspect at the beginning of the research was to make people aware of their rights and the risks and opportunities associated with project involvement as a necessary step before agreement. In particular, participants needed to become acquainted with their rights over their image and the content they produced, and the effects and risks associated with being given online public visibility. At the same time, they needed to understand the research purposes of the project, and differentiate between the research activities where they were involved for providing data tackled anonymously, from publishing activities, which involved public use of their image.

Image usage rights, release forms, informed consent, data protection, publishing agreements, were all novel concepts for community members at the beginning of the project. Their introduction in the discussions and their negotiation met at first misunderstanding or serious questioning of the need for such measures. The unanimous attitude of people at the project onset was based on trust. Interestingly, the discussions on rights and releases, and the first release and agreement forms I brought for soliciting input caused a change from trust to mistrust. People wondered why they needed to provide signatures. The need to sign was interpreted as mistrust on my side, or even an indication that I could have developed benefits from the project other than purely for research.

Another issue which had to be clarified regarded the difference between collective agreement, covering the entire community, and individual agreements, for each participating

member. In the eyes of the main contact persons and community leaders, the collective agreement covered the accord of any community member further involved in the project. The need for individual agreements for each and every participant was seriously questioned.

Through long-term discussions, the following aspects were clarified and agreed:

- Participation in research (with anonymous data treatment) was distinguished from participation in the project as content providers (with online publicity). People could have opted for involvement in both or in only one of them.
- Aspects related to the effects and possible risks of online visibility have been discussed.
- Permission withdrawal. It was decided that people who gave their agreement for online publishing could withdraw it at any time with no liability on any side.

These aspects were captured in the preparation and approval of two sets of documents, which have been prepared, negotiated and revised in several rounds until reaching the form presented in the Annexes (individual consent form, Annex 9, and community agreement, Annex 8).

Outcome #3: Intervention guidelines

The results from the 'Community needs assessment and vision definition' phase were used for drafting a series of guidelines for the intervention, grouped in three dimensions:

1 Intervention acceptance and appropriation
2 The communication product
3 Sustainability

The purpose of these guidelines was to complement the project vision formulated by local people by providing direct indications for the manner of conducting the intervention and reaching the planned outcomes.

1 Intervention acceptance and appropriation

Guideline 1: Align project goals to community goals.

In order to drive people's participation and interest in the initiative, it had to respond or be aligned to community goals. These goals were not, for most of the people, explicit and clearly formulated; they were permeating people's lives and efforts for bettering their lives and those of their offspring. The first phase of the initiative served to first make explicit community goals, for then developing an understanding of how the project could meet them in practice.

Guideline 2: Ensure wide acknowledgement of the project scope, goals and potential benefit.

The scope and breadth of the project, as well as its potential benefit, could not be understood in their entirety by the local people. Most people had never been exposed to web communication, nor could they see themselves in the position of creators and senders of communication messages. To ensure wide-spread acknowledgement of the project scope, it was necessary to involve the local administration and opinion leaders with high standing in the community. Such figures were the local councillor for the Roma, with strong community relations and influence at the level of the political administration, and the main contact family, with a good reputation and wide-spread relations in the community. Their support was sought for spreading awareness and consensus among the rest of the local people.

2 The communication product

Guideline 3: Ensure a faithful reflection of the community's vision in the final communication product.

Throughout the first project phase, participants developed a vision of what they wanted to communicate and to whom. In practice, this process would require long-term content production, selection of publishable content, organization and publishing. A solution needed to be found for ensuring that members' vision would not get lost in the long production process, spread in time across many months. This solution needed to find as well the means to cope with members' limited exposure to web communication. It was necessary to support a direct representation of their vision in a communication medium that was unknown or very little known to them. To reach this goal, a measure of continuity was sought which went from the definition of the project vision to content production and content organization. Its main tools were the list of content themes and the oral history guide (described below).

Guideline 4: Reflect the community's vision at the level of the taxonomy for content organization.

In line with communication research with minority cultures (Srinivasan, 2006a,b), content taxonomy has been considered a just as powerful indicator of the community image as the actual content is. The taxonomy of the website had to be aligned and reflect the members' vision. This requirement needed to be considered in relation to people's very low digital literacy. The content taxonomy had to be devised in design sessions in which friendly methods of content organization could be employed. The list of content themes, drafted and shared with members from the needs assessment through content production phases, was devised as a tool for allowing people to relate the live subjects they had documented to the representation and categorization in digital media.

Guideline 5: Work toward a communication product appealable for a wide public.

The website needed not only to be true to the community, but also appealable to a wide

audience. A balanced way of blending community input and outside expertise in managing the content selection, organization, and editing process had to be conceived.

3 Sustainability

Guideline 6: Ensure that the community will be able to handle content production on project completion.

Content production was not only a means to an end - creating the content for publishing in the frame of the project. If production and publishing were to continue under the management of the local community, members needed to develop not only technical skills, but also learn the intricacies of *managing* the process. The content production format defined as part of the project vision was modelled to include collective production sessions (run in my presence) in alternation with community-led production sessions (managed in my absence). This was bound to function, in the long run, as a means for gradually building toward community agency in managing the content production experience.

Guideline 7: Ensure that the community will be able to run the website management system on project end.

This aspect directed attention toward three aspects: user-friendliness of the technological solution, people training, and the conception of clear publishing protocols. First, a user-friendly website management solution needed to be set up, for facilitating its usage by people with low digital literacy skills. Second, a dedicated group of people needed to be trained and become well acquainted with the publishing process. Third, and as an aid in training, simple and straightforward protocols for content publishing and website maintenance needed to be laid out.

Guideline 8: Ensure low website maintenance costs.

A cheap website management solution needed to be selected, with low maintenance costs, considering that people had very scarce possibilities of investing in website maintenance after the end of the initiative.

Outcome #4: Content production tools

Two tools have been produced for guiding the content production experience in the subsequent phase: a list of content themes, and an oral history guide.

The list of content themes was prepared as a tool for organizing content production in terms of subject coverage. It was drafted throughout the first project phase, negotiated and discussed with people until reaching a form that covered the main subject areas to be represented in the community website. The themes included values, aspirations, socio-

cultural traditions, identity features, and daily-life concerns (Table 4.2). At this stage, meaningful subjects were listed in no particular order and had equal importance. The list was not meant to be a final and rigid plan for content coverage, but a fluid tool, that would continue to be revised and enriched during the content production phase.

Table 4.2. List of local content themes. First version, produced at the end of the 'Community needs assessment and vision definition' phase. Source: author.

Poverty	Community history
Life conditions	The Roma deportation in the '40s
Poverty and work	Cultural traditions today
The value of work	Discrimination
Aspirations for the future	Biography (Portraits)
Education	Religion
Access to education	Music
Discrimination at school	Tradition in a family of musicians
Aspirations for Roma children	The musical tradition in Podoleni
Being a Roma	Music performances

The oral history guide was conceived as a tool for gathering stories and testimonials based on the content themes defined. It contained an index corresponding to the content themes, and a list of questions for each theme. Its role was to guide members and myself in the documentation of community stories during content production.

4.4 Content Production

4.4.1 Production Model

The content production model was based on an existing content creation model - The Inquiry Cycle (Bruce, 2002; Bruce and Bishop, 2008), adapted to the vision and guidelines elicited during the 'Community needs assessment and vision definition' phase. The original model is based on 5 steps: Ask-Investigate-Create-Discuss-Reflect. In being employed in the Podoleni study, two more steps have been added - 'Planning' and 'Observation' - while the two original steps 'Ask' and 'Investigate' were compacted in the phase 'Inquiry'. The final model employed had six steps: *Inquiry-Planning-Creation-Observation-Discussion-Reflection* (Fig. 4.7), iterated in a format which included:

- Collective production sessions: content production facilitated by myself together with the local production team, spread along 2-3 weeks and iterated every 6-8 weeks.

- Community-led production sessions: production managed by community members when I was not on the field, spread over 6-8 weeks in alternation with collective production sessions.

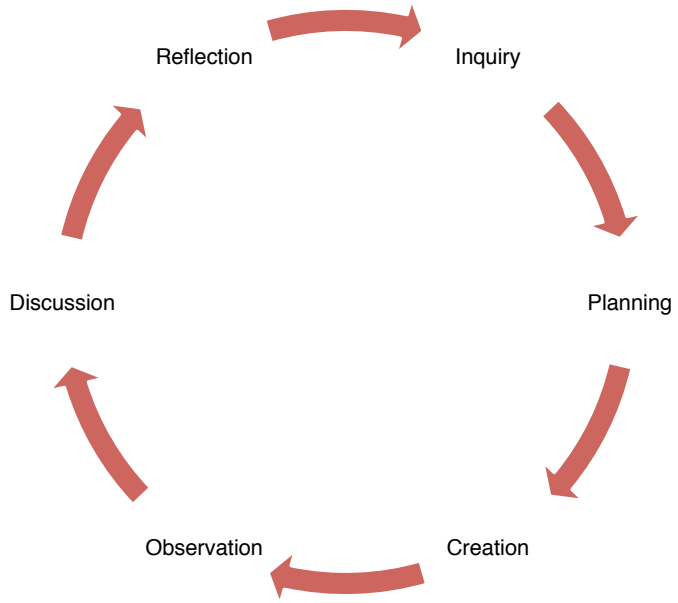

Figure 4.7. The localized, six-stepped content production model used in the Podoleni study. Source: author.

Each of the six steps are further described below.

Inquiry was used for creating a pool of possible subjects wherefrom the planning of subsequent production sessions could draw. It was done usually in the house of the main contact family, and included its members and guest villagers. Its format varied. At times discussions on latest happenings in the community brought about interesting subjects to document. At other times, the list of content themes was used as basis for discussions, and selected themes were proposed as subjects for forthcoming creation sessions. When a set of possible topics was agreed upon, inquiry sessions further covered details about places, people and time. In most cases inquiry flowed naturally into planning for content production.

Planning referred to the organization of one or a series of forthcoming production sessions. It could be done at the beginning of an intensive facilitator-led production period, or at the end, as a flexible roadmap for community-led content production in my absence. In the first case, planning was detailed and specified the people involved or the events to be recorded, the time, the place and the subject matter covered. When conducted for a forthcoming period of community-led production, planning was very light and included discussions on subjects to

document, indications regarding people who could participate and events that were coming up.

Planning was done in most cases with the assistance of the main contact family, and later with the support of the local councillor for the Roma. Their role was vital as they could easily associate subjects to places and people as well as the availability of the latter. Planning was always indicative, and always left room for change and the unexpected. During production sessions, many more people than planned would usually join and could be involved as storytellers, or the subject range initially planned could be expanded as required by the interests of the people participating.

Creation sessions were the marrow of the content production flow, and were organized in two formats: collective production sessions (with my presence and facilitation) and community-managed sessions (managed by local people in my absence).

Figure 4.8. A collective production session in the courtyard of the main contact family. Source: author.

Collective production sessions were focused on a set of themes or on a particular event. The place differed in accordance with the theme or with practical constraints. Many production sessions were held in the house and courtyard of the main contact family. The house has

served as a production hub all throughout the project. It was a welcoming and pleasant spot, and gradually in the villagers' minds it came to be associated with the initiative. Apart from it, production sessions were organized in the houses and courtyards of other people, on village streets, or in places where people worked. People were invited in accordance with the plan previously made. Most sessions were organized as social gathering events, with refreshments and lively discussions. This lively atmosphere acted as encouragement for other people to participate. Some volunteered as content providers when a certain theme appealed to them, even if their input was not planned, or proposed other themes which in most cases were accommodated or included in planning for subsequent sessions.

The content production team was composed by a core group of local people and myself. In most cases we would split roles in using the video camera and the photo camera. If we were in a stable place, the tripod was used for the video-camera.

Figure 4.9. Young man recording a music performance. Source: author.

Community-led production sessions were held by the small group of producers who included members of the main contact family, immediate neighbours and relatives and the family of the local councillor for the Roma. They were based on a less rigid planning, in which creation

was triggered either by community events going on, or by a particular theme. The list of content themes was used in these sessions for keeping track of possible subjects, while the oral history guide was used as an interview roadmap.

Observation referred to sessions in which footage and first edited content was visualised. The format differed according to the purpose each session served. At times only the people directly interested in the footage were called, at other times, and especially for edited content, more people joined. The purpose of observation sessions was to gather critical input and comments, but also to understand people's reactions and solicit their agreements for publishing.

Discussion sessions were organized in association with observation, where the viewing of footage and edited content acted as triggers. The discussion was guided by myself in the directions fit for the purpose a session served: gather critical input, obtain agreements for publishing, brainstorm on other subjects to be documented, etc.

Reflection was a result of the activities of observation and discussion. Critical reflection was encouraged by active questioning during discussions, and motivated by the drive to improve the process in further production sessions. This was particularly compelling when someone was involved in first person, as producer or as content provider. Discussions encouraged people to take critical distance, relate their activities to the outcomes achieved, and further check the adequacy of content produced for online publishing.

4.4.2 Production Workflow

The content production flow can be divided in stages, according to the way activities in each stage were related with the final outcome of the experience: creating content fit for online publishing. This goal determined an orientation of the content production experience in a clear direction, and determined a gradual change of rhythm, a pattern of subjects selection, and a motion to fill out the publishable content puzzle toward the end of the production process. The four stages were:

1. Discovery
2. Focus on core themes
3. Expanded scope on other extant themes
4. Targeted production

1 Discovery

This stage was characterized by extensive filming on subjects corresponding to extant content themes and others which appeared and were discussed and integrated. It was a time of expansion and enthusiasm, in which discovery was pursued, while the actual strategic goal of the process was partially obscured. The list of content themes was considerably enriched in this stage with respect to that resulting from ethnographic research (the list in Table 4.2 above expanded in the one illustrated in Table 4.3 below). While completely new independent themes were not added, subtle nuances and dimensions of existing themes were identified and included (e.g. the new theme 'poverty and child education' bridged the themes 'poverty' and 'education' with a focus on how poverty impacted on child education; the initial theme 'being a Roma' was renamed 'Romani identity; 'Romani language' was elicited as a distinguishing feature of 'Romani identity').

Figure 4.10. Shoe seller during a collective production session on the village streets. Source: author.

Sessions were run in the house and courtyard of the main contact family, where people were invited or dropped by, in village streets, or in the houses of other community members. One of the most engaging sessions has been run, at the suggestion of the main contact family, in

the woods of Movileni, a nearby commune where villagers worked on daily wages planting saplings. Our idea was to treat the themes ‘poverty’ and ‘work’ in an environment that was suggestive of people’s commitment to work and the harsh conditions. We arrived at lunch time with refreshments and for one hour interviewed the people who wanted to give a testimonial about the work they were doing and how they were affected by poverty. Gradually, ‘education’ emerged as a connected theme. Most people indicated that the most important negative effect of poverty was related to the difficulty to keep their children in school. We continued to interview people as well when they resumed work under the burning sun, altogether staying and filming for a couple of hours a series of rich and compelling testimonials.

Figure 4.11. Elderly women after providing testimonials regarding the forced deportation to Transnistria in the 1940s. Source: author.

The goal of the production sessions in this stage was not univocally concerned with producing publishable content. Some sessions were organized for engaging villagers and spreading awareness about the project. In sessions run on the village streets, for instance, we used a mobile video-camera and photo camera and walked the village streets at the top hour, when people were gathered in small groups in front of their courtyards. We stopped

and talked to or interviewed people, and entered the homes of some of them for longer talks.

Community-led production during this stage covered events rather than interviews and testimonials. Most approached themes were ritual events (e.g. Christmas, Baptism), personal events, and educational festivities involving school children. In most instances they were not usable for independent content chunks, but provided either clues for treating a subject in a collective session, or usable parts to be combined with footage from collective production sessions in blended videos.

2 Focus on core themes

Gradually, a series of themes started emerging as the most important: poverty, education and music. As there were constantly people who wanted to share their story in relation to these subjects, the bulk of content production was concentrated on the three themes and their dimensions.

Figure 4.12. Roma and Romanian children at a local school festivity. Source: photo by local man.

'Poverty' was treated as a generalized state affecting most people, and causing apprehension for the future. The main cause of poverty – lack of work places – was

approached by participants in relation to their honest aspiration to work hard for maintaining their families and their children. Poverty impacted on lifestyle, child education, and also conditioned people's aspirations for a better future.

'Education' was treated from different angles as a value shared by all people and as a goal for their children's future. The relation between education and poverty was the most evident pattern in people's testimonials. Its treatment was in most cases related to the effects of poverty: the difficulty to keep children in compulsory primary and secondary education, and the inability to provide children with access to further education due to high maintenance costs. Education was seen, at the same time, as the means to get out of poverty. The relations between education and poverty were therefore patterned in a vicious circle of iterative conditioning, in which poverty hindered education, while education was seen as an important stepping stone for escaping poverty.

Figure 4.13. A music performance by an accordion player. Source: author.

'Music' was, on the other hand, the subject that brightened people. It was a tradition for which they were proud, a means for entertainment and also, for musicians, a revenue source. Production sessions included recording of music performances, as well as testimonials of

musicians talking about how they learnt to play and how this practice was integrated in their lives.

3 Expanded scope on other extant themes

The interest manifested in the three themes treated in the previous phase resulted in an unbalanced thematic coverage for publishable content. Through discussions, other themes were gradually brought back in focus, for instance ‘religion’ and ‘Romani identity’ and their related dimensions.

Production during this stage was carried out at a lighter rhythm and visualisation sessions included not only footage but also edited content. Content started to be mapped on themes, so that participants could have an idea of its coverage and how much of it was usable for publishing. The list of content themes was used as a barometer for understanding how much of the process was accomplished (in terms of content covered) and how much more had to be done.

4 Targeted production

This stage went along in parallel with the website design phase. When the main categories for content organization had been developed, a more clear vision of the final product emerged. Existing content was distributed on categories, and wherever there was evident content scarcity, new targeted production sessions were organized to fill content gaps. When the detailed web design format was defined, production sessions were organized to create content of specific types, such as introductory videos for website categories and the main website introductory video.

The activities in this last stage were conducted in close cooperation with a group led by the local councillor for the Roma. Targeted production sessions were organized with its assistance for covering specific themes and content types. Introductory videos were produced by interviewing community leaders, each tackling one or more themes corresponding to website categories.

The oral history guide was used for these sessions, after its structure had been modelled on the main website categories. A special section was added for guiding the production of introductory videos, with more ample questions that covered general community features in relation to the website categories.

Figure 4.14. The religious alcove of a local house during a targeted production session for the theme 'Religion'. Source: author.

Figure 4.15. Visualisation of a testimonial by a local woman after it had been edited. Source: author.

4.4.3 Outcomes

Outcome #1: Content production tools

The list of content themes and the oral history guide have been revised and updated in this phase. The list numbered 35 themes (Table 4.3). While thematic groupings and relations were immediately obvious, the list was kept free of any divisions or hierarchies. This list was used as tool during the card sorting exercise in the first website design session, in which the taxonomy for category-based navigation was developed. It stood as well at the basis of tag-based navigation in the final website.

The oral history guide has been used throughout the content production phase as a roadmap to interviewing and story elicitation. In this process it has been enriched and adapted to the core themes gradually emerging as most relevant. In its final version, the content of the oral history guide was organized based on the main website categories as identified during the 'Website design and development' phase, running in parallel with the last stages of 'Content production'. This version was integrated in the training guide left with the community on project accomplishment, in the section that tackled content production.

Table 4.3. Final list of content themes resulting from content production. Source: author.

The village	Life conditions
Poverty and work	Poverty and aspirations
Roma children	Poverty and child education
The value of education	Access to education
Aspirations for Roma children	Discrimination at school
Romani identity	Romani continuity
Romani language	Community history
Origins of the Roma in Podoleni	Deportation to Transnistria
Life during Communism	Life in the 40s – 50s
Life histories	Cultural traditions
The value of cultural traditions	Traditions today
Ritual events	The wedding
The baptism	Christmas
Easter	The value of work
Discrimination at work	Christian faith
The church	Music
Tradition in a family of musicians	History of musical tradition in Podoleni
Music performances	

Outcome #2: Database of audio-visual content

The database included raw video footage, pictures, and edited content samples. Based on this content pool, content chunks were edited in final form and prepared for publishing during the 'Website design and development' phase.

4.5 Website Design And Development

4.5.1 Design

The website design has been done in three sessions with the participation of local people (Fig. 4.16):

1 Design of the information architecture
2 Detailed website design and initial content mapping
3 Final website design and content mapping

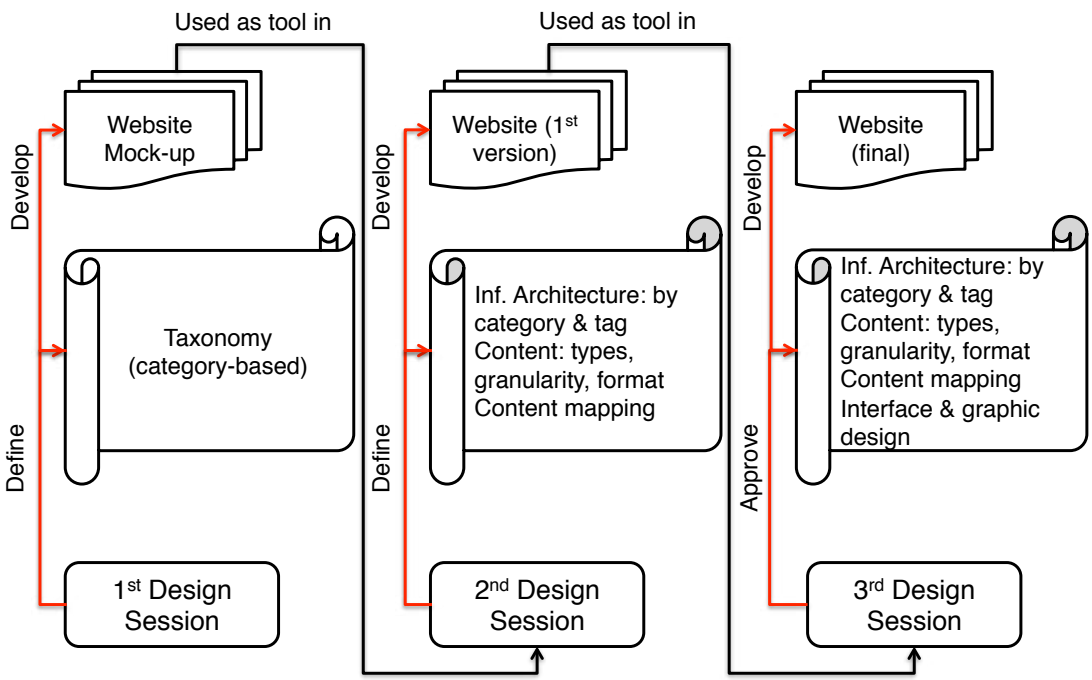

Figure 4.16. The role of each design session in designing the community website, with relations and outcomes. Source: author.

First design session

Session protocol

The main *purpose* of this session was to develop a taxonomy for the organization of content, declined in two alternative navigation paths:

- By category, grouping content chunks according to grand themes highly representative for the community; and
- By keyword, or tag, grouping a smaller number of content chunks around more specific themes with a more limited coverage.

The *method* employed was based on open card sorting methodology, used by information architects in user-centred web design for incorporating user insights into the design of website information architecture (Courage and Baxter, 2005; Paul, 2008). This method was adapted to fit the profile of the participants (especially considering the low little digital literacy) and aligned to the overall program format. One important adaptation was that the design used not only content samples, but also the content themes developed throughout the collaborative ethnography and content production phases.

The main *tools* used in the session were:

- Content samples presented on cards (n=17), each including a title, a visual screenshot, the names of the interviewees, storytellers or event, and the names of the content producers;
- Sample audio-visual content for being played on the computer (n=17, same content as in paper content samples);
- The main content themes resulting from the content production phase, written on separate small paper cards (n=35); and
- White cards.

Participants (n=4) have been selected taking into account the responsibility and authority weight had in the Romani community, as well as the level of media literacy. Participants included the local councillor for the Roma, a key figure in the community; two young men who were part of the content production group and had some experience with computer usage and Internet navigation; and one adult member of the main contact family, who had participated constantly in the initiative and was acquainted with the activities done and the goals of the project.

The session was *introduced* through an explanation of the purpose of the exercise, an overview of the tools we were using, and a definition of the tasks that had to be completed. The main tasks were to define two independent content taxonomies: by category, and by tag. Both were to be defined using the tools available (content samples, content themes) and

written on white cards; existing sample content was also to be grouped accordingly around the taxonomic terms identified. The blank cards could be used for writing new categories, but also for defining, if necessary, new themes and keywords. The difference between categories and tags/keywords was explained and length and examples for each were provided.

Process highlights

At the beginning of the design session, once the difference between categories and tags was clarified, participants indicated that at the moment it was better to focus on defining the main website categories and postpone the definition of the tags for a subsequent session.

Figure 4.17. Content sample used during the first website design session (MS Powerpoint screenshot). Source: author.

The local councillor named straight from the beginning two categories that he deemed crucial: 'reintegration' and 'dialogue'. We discussed their significance, and decided throughout a group discussion what type of content would be associated with each. The two categories were then written on blank cards, and the exercise continued while we took the 35 content themes one by one, discussed them over, and grouped them in the two categories already defined or in new ones that were written on cards as they emerged. Short descriptions for categories were added if considered necessary. Sample content written on cards and played on the computer was then discussed and associated to each category to

test the coverage of categories and to define the logic by which a content piece would be assigned to a certain category. In the process, new content themes and tags were defined as was considered fit for describing existing sample content, while some content themes were left out if considered unfit for the final website structure.

Apart from the definition of categories, the discussions carried in this design session with respect to each content theme, the links among themes, and between one theme and an overarching category were important as they allowed the definition of a logic, a thinking pattern to emerge and on which the entire website design needed to be based. To make this possible, my input during the exercise was limited to active questioning, guiding the discussion toward the fulfilment of the expected outcomes, and responding to participants' questions regarding details of the exercise and the final website.

The results of this session were used for preparing a mock-up of the website (Figures 4.19, 4.20), used during the second design session.

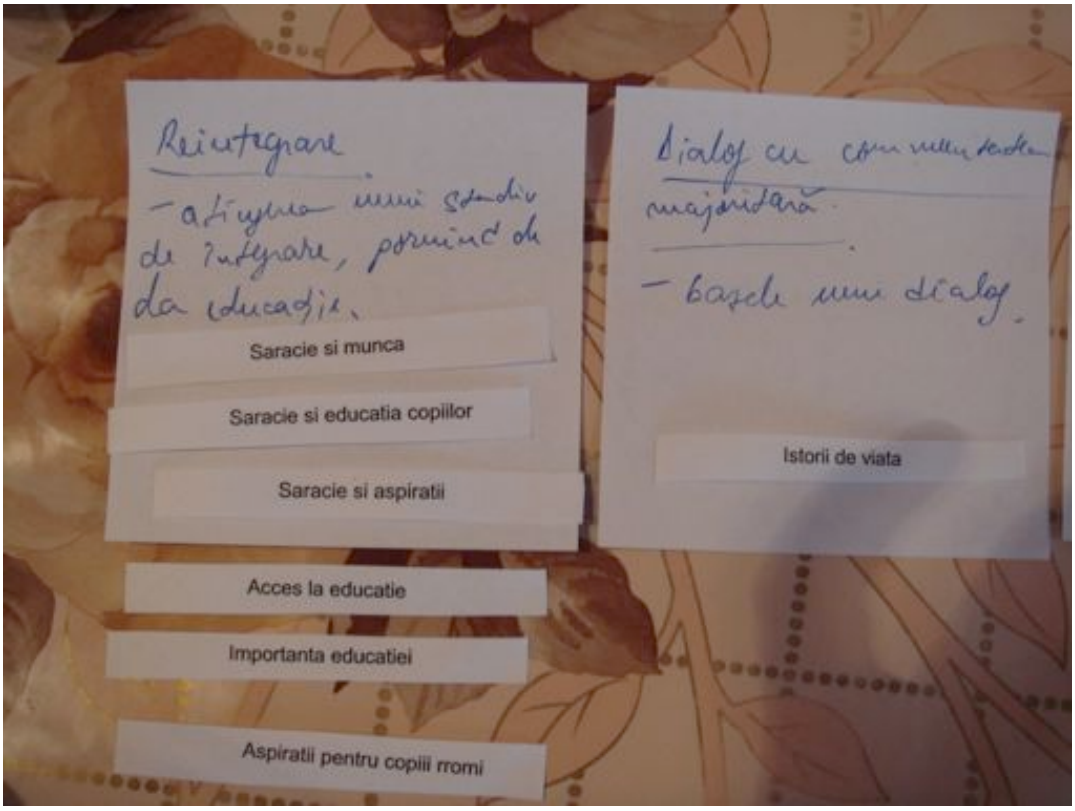

Figure 4.18. Content themes grouped by category in the first website design session. Source: author.

Second design session

Session protocol

The second design session fulfilled a set of *objectives* which covered key web design elements:

- Information architecture, including: validation of taxonomy for category-based navigation; definition of taxonomy for tag-based navigation;
- Content, including: validation of content types and granularity for each; definition of a format and multimedia for each content type; and
- Incipient content mapping on architecture.

The main *tools* used were:

- A mock-up of the website (on the computer and printed);
- Sample content playable on the computer (n=20); and
- A printed list of sample content (n=20) organized by category and by tag (printed).

Participants (n=4) included the local councillor for the Roma, his teenage daughter with high computer literacy; one of the members of the main contact family; and a teenage male who had participated in the project as content provider.

The *introduction* to the session included an explanation of the purpose, tasks and helping materials to be used. Participants were explained the purpose of a mock-up, the details that needed to be taken into account (relations, pages, links) and those that would be modified through graphic design (layout, colours, etc.). The task was to define the dimensions listed in the objectives, while browsing the mock-up and discussing one by one sample content items and their mapping on the website architecture.

Process highlights

The session started with the verification of the *category-based taxonomy* (defined in the previous session) and the definition of an incipient taxonomy for *tag-based navigation* while browsing the mock-up and using the printed list of content items with assigned categories and tags. We verified the adequacy of the category-based taxonomy defined in the previous session for content coverage and clarity. The tags assigned to sample content items were then discussed, until a logic of identifying tags for characterizing representative pieces of content was defined, and a list of tags for the existing sample content was drafted. In this process, existing content samples (n=20) were mapped on categories and tags, based on the proposal I had put forward.

Figures 4.19, 4.20. Website mock-up, example of content page and category page. Source: author.

Types, formats and multimedia for content chunks, were defined by discussing a series of possible content types based on purpose (an introductory content for the entire website; introductory content for categories; core content page) and media (photo, video, textual, audio or a combination of these). Sample audio-visual content was played on the computer. Some content chunks had been edited in different versions, so that one best format could be chosen. One important aspect regarded the choice between *a story-based format* and *an interview-based format*. Many videos had been based on interviews and my general editing strategy was to edit out the interviewer questions and focus on the story of the participant. For some videos, however, this was difficult to achieve, as the story was created partially by the interviewer's questions. Participants were solicited to opt for one of the two possible video formats, or suggest others. The *theme-based format* emerged as a third possible format from the discussion.

The most active participants in this process were the local councillor and his daughter. The latter was especially helpful and came up with good insights in defining and validating the website elements. The local councillor, on the other hand, had a precise vision with respect to content format and based on his inputs the types of content and associated formats were validated. Another observation was that lively discussions and proactivity on behalf of participants were triggered when they were given several options and versions to reflect upon, rather than merely being solicited an opinion and revisions on a single proposal. Such was the case, for instance, with content chunks edited in different versions for choosing the most adequate content format – story-based or interview-based.

The results of this session were used to develop a first version of the website.

Third design session

Session protocol

The third website design session had as *objective* the final validation of elements defined in the previous sessions, covering:

- Taxonomy (category- and tag-based);
- Content types, granularity and formats;
- Content mapping; *and*
- Approval of interface and graphic design.

Figure 4.21. Graphic design proposal. Source: project files.

The main *tools* used were:

- The customized Content Management System (at that stage only in English);
- Published video content on the Romani Voices YouTube channel (http://www.youtube.com/user/RomaniVoices);
- A list of content pieces (n=25) representative for the six main categories, grouped according to category and tag based on my proposal; and
- The interface and graphic design proposal.

Participants (n=7) included the local councillor for the Roma and his daughter, two youth that had taken active part in content production and also had a basis of media literacy (same participants as in the first design session), two members of the main contact family and an adult male who had participated in content production as music performer, and member of the Orchestra of Podoleni.

The session was *introduced* by explaining the tasks and the helping tools. Participants were shown and explained how the CMS worked and the structure of uploaded content. The provisional version of the website, though developed, was not viewable since the interface and graphic design still needed to be approved and implemented. The Romani Voices

channel on YouTube was showed, and participants were explained that the videos were published on YouTube for enhancing visibility and for technical reasons, and that they would be linked as well to the community website.

Process highlights

After the presentation of the session tools, the design session proceeded with a discussion on each content sample in the list (n=25) for which we checked:

- Content mapping: the correct affiliation to categories and tags;
- Content granularity and format. We discussed the adequacy of employing one of the three types of formats agreed - story-based, interview-based and theme-based, as well as the multimedia format for each.

Participants' vision of the final product was facilitated by using the interface and graphic design proposal, which showcased the homepage, introductory pages for category and tags, and content pages. The proposal was used for soliciting feedback on graphics and interface elements and layout, and as well for validating the page design for each content type.

With respect to members' participation, proactive roles have been played by the local councillor and his daughter, while the other participants had occasional interventions and answered when their opinion was asked on aspects where a group decision had to be taken.

4.5.2 Outcomes

The three website design sessions served to define the main design elements, listed below in relation to:

- The information architecture; and
- Content: types, granularity and formats.

Information architecture

A *taxonomy for category-based navigation* was defined in the first design session. It remained unchanged throughout the rest of the design process and was used as such in the final website. It included six categories:

1. Reintegration
2. Dialogue
3. Romani identity
4. Cultural traditions
5. History
6. Religion

The categories above covered extensively all the content samples presented in the first design session, and 31 out of the initial 35 content themes, plus a new content theme (32 overall). Further, the rationale for each category is detailed, following the argumentation provided by participants in the first design session; in addition, the content themes associated with each category are highlighted.

Reintegration. This was, in the opinion of the local councillor for the Roma, the most important category of the website, in correspondence with the crucial role it played in the life of the Romani community in Podoleni. 'Reintegration' was taken globally to encompass the efforts and achievements for ensuring a satisfying life standard for the members of the Romani community, inclusive of access to education and economic welfare. Education was considered the stepping stone in the process of reintegration. The biggest obstacle for achieving reintegration was the generalized state of poverty. Reintegration actions were therefore seen as closely connected with efforts and results for the eradication of poverty. The most important content themes associated with this category during the first design exercise were: 'poverty', 'work', 'aspirations' (inclusive of 'aspirations for Roma children'), 'education' (inclusive of 'access to education', 'the value of education', and 'poverty and education').

Dialogue. In its initial longer version, this category was named 'Dialogue with the majority population'. It was conceived as the beginning of a dialogue with members of the majority culture, based on the communication of life stories and testimonials of Romani people. Its purpose was to present a truthful and honest portrayal of the Roma as they were, people with values, aspirations, but also concerns and daily life problems. It was hoped that, in the long run, the truthful testimonials in this category would oppose discriminatory attitudes from the majority culture, created and perpetuated due to ignorance with respect to the life and conduct of the Roma. The content fit for this category could cover any of the content production themes, as long as it was a personal, consistent account based on the life and experience of a community member.

Romani identity. This category gathered content focused on the Romani legacy of the Roma in Podoleni, and their present-day values. In the participants' vision, the values were not necessarily linked to Romani culture; content speaking of 'work' as high-standing value of the Roma in Podoleni was for instance included in this category. The content themes associated with this category were: 'Romani identity', 'the value of work', and 'Romani continuity'. A new content theme (not emerged from content production) was added in relation to this category: 'Romani values'.

Cultural traditions. This category included content in which the living traditions of the community were showcased and discussed. The traditions included therein could cover from religious events (e.g. Easter traditions), to the village musical tradition (e.g. stories about

music and music performances). Associated themes were ‘ritual events’, ‘music performance’, ‘the musical tradition in Podoleni’.

History. This category included content that narrated historical events, or autobiographic events linked to important historical times, such as the deportation of the Roma in Transnistria during WW2, life during Communism, or the 1989 Revolution. Related content themes were: ‘origins of the Roma in Podoleni’, ‘deportation to Transnistria’, ‘life in the 40s – 50s’, and ‘life during communism’.

Religion. This category grouped content about faith, creeds and the religious life of the community. Example of associated themes were ‘Christian faith’, ‘the Baptism’, and ‘the church’.

The *taxonomy for tag-based navigation* was, as different from the category-based taxonomy, not rigid, but fluid. The three design sessions produced a provisional taxonomy of tags related to representative content samples (Table 4.4). These tags were sourced in the original content themes, but newly elicited as well in accordance with the significance of content pieces. Tags elicitation was therefore fluidly emerging based on the content that had to be categorized. The design sessions served to provide a taxonomy that reflected existing content. It also allowed participants to understand the purpose of tags and how they were elicited, thus enabling them to continue to produce tags at the time when they would be in charge of managing the website. At the same time, they allowed myself to understand what tags were fit and which were not acceptable, an insight necessary for the proposals I put forward with respect to content organization. For instance, the tag ‘death’, which I had proposed for two content samples, was dropped in unanimity and different tags were produced for those content items.

Table 4.4. Tag-based taxonomy emerged throughout the three design sessions. Source: author.

Children	Christian faith
Community problems	Customs
Education	Folk music tradition
Hardships	Hope for the future
Interethnic relations	Life conditions
Life in the past	Music
Poverty	Religious cults
Religious life	Romani values
Steps forward	The elderly
The village	Work

Content: types, granularity, and format

Two *types* of pieces of content (POC) were defined:

- Regular POC were centred on a singular story or event, part of a single-standing web page;
- Featured POC introduced a category or the website homepage. Their role was to provide a rationale and introduction for the content in that respective category, or a welcome to the community website.

Granularity of content pieces was defined taking as main criterion the centrality on a core subject: each POC was focused on a core theme or subject, which could involve one event, one person narrating, or more people, provided they all tackled the same theme. Three types of content *formats* were approved, applicable especially for video-based POC:

1. Story-based. The story of one storyteller was presented, with no interruptions. When resulting from an interview, the interviewer questions would be edited out. Most videos in the final website were based on this format.
2. Interview-based. Several videos would take an interview or reportage form, where the questions of the interviewer were audible and the interviewer himself may be visible in the frame. An example in the final website is the video 'In old age'.
3. Theme-based. Testimonials from several people were grouped on virtue of a common theme. An example is the video 'Our youth'.

With respect to *multimedia*, it was agreed that each piece of content (POC) was focused on a video file or, exceptionally, an audio file. Other media, such as text and pictures could be associated with a core POC, provided they offered more contextual information on the same subject.

4.5.3 Development[5]

The website implementation was based on a CMS solution, identified through an assessment of existing technological options against requirements generated in the *community needs assessment* and the *website design* phases. Requirements included:

Visibility: This requirement implied that website content had to be easily crawled by search engines and syndicated across other websites. For search engine optimization, content had to be semantically annotated, and the entire information architecture needed to be

[5] The assessment of the possible technological solutions detailed in this section is based on the technical expertise of Matteo Agosti, member of the research laboratory TEC-Lab, who managed the technical implementation of the project.

automatically translated into a dynamic sitemap suitable for search engines. The syndication could be done with the generation of an RSS feed. Integration with social media for facilitating content spreading was also taken into account.

User friendliness: The website management system had to be easy to use, and provided with a contextual help mechanism that would keep training costs low, considering that the website would continue to be managed by the local people.

Sustainability: The initial cost and the maintenance cost had to be kept low, especially for the time when the website management would be completely left to the community.

Content: As the content produced was strongly structured, the technological solution had to provide a content framework capable of defining different content types, organize them with taxonomies, and reuse them without duplication. In addition, as the bulk of the content massively relied on multimedia assets, their management needed be handled without problems both in terms of storage and streaming.

Multilingualism: The technological solution needed to provide content-level translation and interface translation for both end users and content editors.

Based on these requirements, the technological solution was searched among platforms that support quick content publishing requiring little technical experience, such as CMSs. To keep costs low, the CMS list has been further narrowed to free platforms. After evaluation of an initial shortlist of three free CMSs (Joomla, Wordpress, and Drupal), Drupal (https://drupal.org/) was selected for implementing the website. Despite the fact that it requires additional effort and development resources in the initial phase of implementation, Drupal is a reliable content management framework. In comparison with WordPress and Joomla, it is more focused on content, and offers a series of modules to deal with content complexity.

4.6 Delivery and Maintenance

4.6.1 Activities

In this phase the website has been presented to the community, an agreement for its maintenance has been discussed, and the customized CMS has been delivered. To enable the community to take charge of managing the website and the workflow of content production, a practical guide was prepared and delivered.

The website was presented during a community event occasioned by the International Romani Day feasted on April 8th. A diploma has been handed over during the event as a

recognition of the contribution brought by the project to the Romani community.

The website management was entrusted to the Romani councillor who was aided by a small group of people, able to handle content production, editing and publishing. The councillor has been handed in the URLs and the account credentials for the CMS and the Romani Voices channel on YouTube. Training was delivered to a young woman with a good digital literacy level, in charge with the content publishing on the community website. The training included an overview of the production workflow, a detailed presentation of the CMS elements, and the workflows for uploading and updating website content.

Figure 4.22. Community members attending a cultural program for the International Romani Day, April 8th, 2012. In this occasion, the website was shown for the first time.

The website domain www.romanivoices.com has been bought for three years. Socio-technical support for one year after the project end has been offered by myself and my research laboratory.

4.6.2 Outcomes

The main outcome resulting from this phase was a technical kit that included the customized version of the CMS optimized for community usage and a practical guide for the entire content production and publishing process.

The CMS was prepared for community usage by including contextual help for all content upload and editing actions, adding Romanian translation for the interface, and creating a

dedicated community user profile. Aiming for simplicity, the range of system functions for the community user profile was limited to those having strictly to do with content upload and taxonomy update. Administrative rights were maintained by the research laboratory, who also remained in charge of technical maintenance for one year beyond project completion. The 'Romani Voices in Podoleni' YouTube channel was delivered as such, with full administration rights over its content and an associated email address.

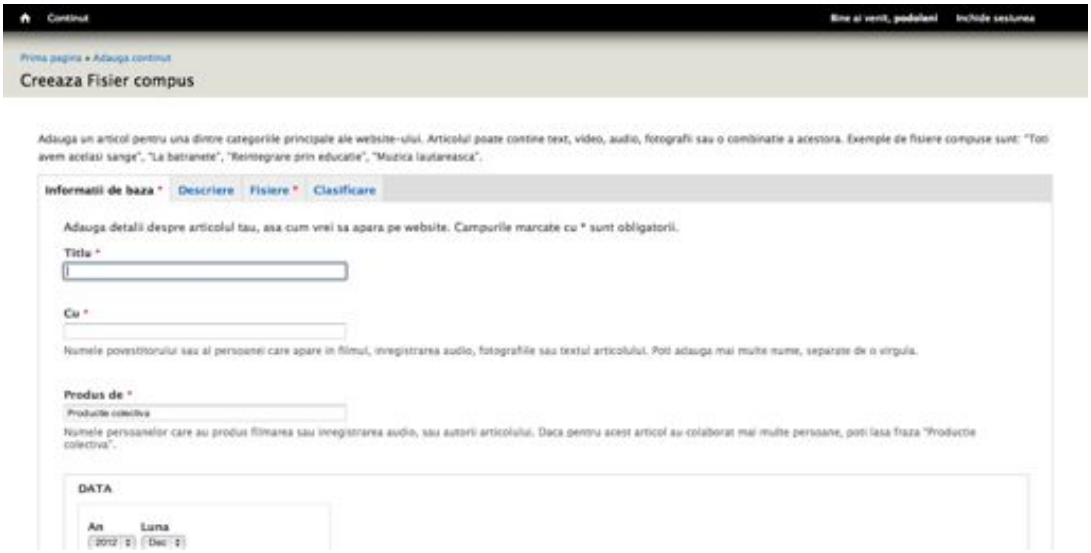

Figure 4.23. Screenshots of the Drupal CMS with interface translation in Romanian (detail of content upload page and editing menu for a compound document). Source: author.

The practical guide covered the entire content production and publishing workflow and contained detailed guidelines on:

- Content production, including technical advice for video production, interviewing techniques, and a list of questions for interviews structured according to the main website categories (this latter integrated from the latest version of the oral history guide);
- Content editing, including a tutorial in video-editing using a simple video-editing program (MS MovieMaker);
- Content publishing on YouTube; and
- Content upload and update with Drupal.

4.7 Conclusion

This chapter provided an account of the activities conducted with the first community involved, the Roma in the village of Podoleni, Romania. This field study functioned as a testing bed and the primary data source for the three outcomes of this research. To pinpoint the role of this study in the development of the research outcomes, it is useful to single out two significant aspects:

1. First, the *fils rouges* followed to navigate the progression of the intervention and the data garnered around its study in order to produce the research contributions.
2. Second, the measures taken in order to ensure that community views were adequately reflected in the communication solution.

With respect to the first, analysis covered the causal relationships established among features of the local context, elements of the intervention, and the social processes triggered or happening within the frame of the intervention. In this process, observation has been facilitated by the sequential approach adopted for the intervention design, what can be seen as a first *fil rouge* following the initiative flow: The intervention grew out of the vision and guidelines defined in the first phase. Further, the initiative phases have been sequenced and connected through outcomes, so that each phase grew organically out of the results of the preceding phases. This enabled close observation and data generation around each design choice. A second *fil rouge* is made of the gradual introduction of new technology and its versatile employment to new purposes throughout the initiative course. Recording devices were introduced during the explorative phase for gathering cultural probes, continued to be used throughout content production, and then left with the community on project end. The close analysis of usage combined with an analysis of other social processes taking place concomitantly in the frame of the project was pursued in parallel with an analysis of

intervention-bound activities. This enabled in the long run the development of a draft version of the core components of the CoRA methodological framework and the conceptual contributions outlined in chapter 8 of the monograph.

With respect to the second point, steps were taken to ensure that the communication solution reflected adequately community views. These views were elicited during the first project phase and condensed in a vision of the final communication product. To ensure compliance to this vision, continuity from the first to the last intervention phase was marked by two tools:

1. A list of local content themes was first conceived during the *Community needs assessment* phase, guided content production, and was finally used for defining the main website categories during the design sessions.
2. An oral history guide was conceived during the first project phase, used to guide story elicitation during content production, and finally integrated in the training guide left with the community on project end. These tools have proved useful for facilitating transition between lived experience, oral storytelling, and digital media, enabling local people to draw connections between digital media representations and their own views, experiences, and priorities.

The next chapter describes how the communication intervention in the Munteni site has been designed and run using the insights derived from the first phases of the fieldwork in Podoleni, commenced 10 months beforehand.

5 Second Field Study[6]

"We want people to understand how we live, why we go for months travelling, living in tents. Because our metal products are our only source for making a living."

- Local expert for the Roma, Munteni village, Galati county, Romania

5.1 Synopsis

This chapter presents the fieldwork activities carried out with the Romani people in the commune Munteni, Galati county, focused on the development of an ICT-based communication solution that could fulfil community needs. The role of this second field study in advancing the research was to probe the conceptual, methodological and design contributions emerging from the Podoleni study. The design of the technology intervention was shaped by the results of the assessment in the Podoleni study, which was already in its advanced stages. The chapter presents the fieldwork activities in chronological order, listing the methods employed and the results for each.

1. *Exploration* aimed to enhance reciprocal knowledge acquisition on technological options, the local reality and applied communication solutions. It involved systematic data generation (using interviews, focus groups, cultural probes, and observation), the organization of informative sessions, and content production demos. Its main outcome was a situation assessment report.
2. During *Activity design* the intervention was designed and planned with the participation of local people. It gathered data through focus groups and used reporting and decision-making sessions for designing the activities. Its outcomes were the project vision and a plan for content production and project evaluation.
3. *Content production* was dedicated to the participatory production of local content, resulting in a content database and a list of representative themes.
4. During the *Website design* phase the digital content created was selected and organized for publishing and the website has been designed with local participation.
5. *Evaluation* was done for the previous two phases, based on the CoRA evaluation model. Its purpose was to ensure the constant alignment of the implementation process to the vision formulated in the first project phase.

[6] Early versions of fragments in this chapter have been published in Sabiescu (2011a,b).

5.2 Workflow

The study in Munteni lasted for 23 months, from October 2010 to August 2012. This process was divided in five macro-phases:

1 Exploration
2 Activity design
3 Content production
4 Website design
5 Evaluation (running in parallel with phases 3 and 4)

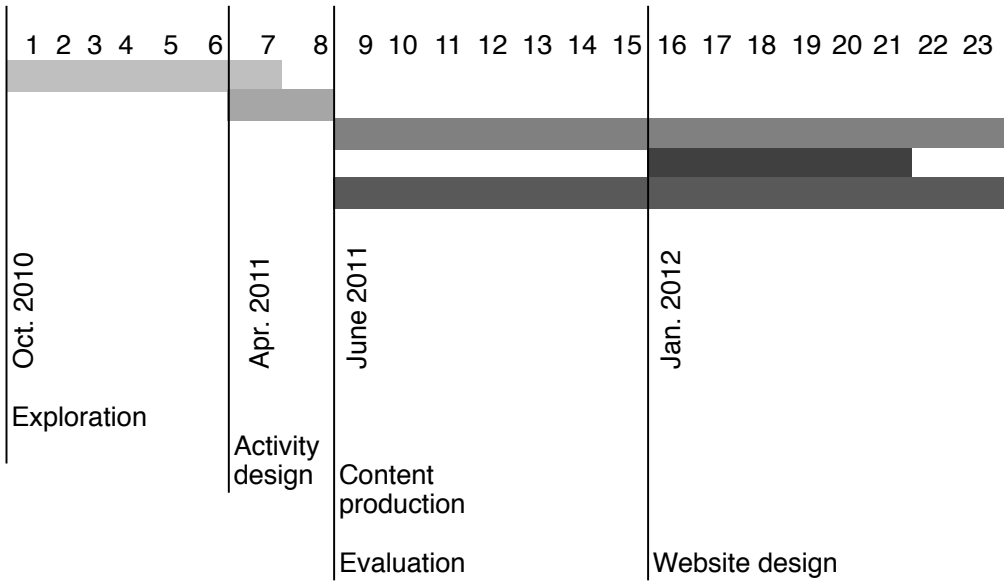

Figure 5.1. Workflow timeline in the Munteni site. Start month: October 2010. End month: August 2012. Source: author.

Each phase served a precise *purpose* in the frame of the intervention, achieved through the employ of specific *methods and techniques* (Table 5.1).

Table 5.1. Workflow with methods and outcomes by phase in the Munteni case. Source: author.

Phase	Methods	Outcomes
1. Exploration	*Data generation:* emergent group interviews, semi-structured interviews, focus groups, observation *Intervention-bound:* informative sessions, content production demos, cultural probes	Intangible: knowledge, awareness, understanding Tangible: situation assessment report
2. Activity design	Data generation: focus groups *Intervention-bound:* reporting and decision-making sessions	Project vision Planning Formative evaluation plan
3. Content production	*Data generation:* observation, Inquiry cycle steps (Inquiry, Discussion) *Intervention-bound:* Inquiry cycle (adapted)	Database of audio-visual content Content themes
4. Website design	*Data generation:* observation, group discussions *Intervention-bound:* card sorting	Website design elements Community website
5. Evaluation	*Method*: CoRA evaluation model *Data generation*: aligned to content production and organization activities	Intermediary: revision proposals Final: synopsis of revisions

1. Exploration had as main objective to create a knowledge pool on three knowledge dimensions: 1) the local reality, 2) available communication technology options, and 3) possible communication solutions matching the two. It was focused on enhancing learning for myself as well as for local people. Separate methods were used for the three foci of this information-gathering and dissemination process:

- The local context was explored through data generation based on ethnographic techniques. Instruments included emergent group interviews, semi-structured interviews, observation (field notes), and focus groups.
- Available technological options have been presented to local people through informative sessions.
- Communication solutions applied to the local context have been explored through content production demos and the gathering and examination of cultural probes.

The main *outcomes* resulting from this phase included tangible outcomes (a situation assessment report) and intangible outcomes (knowledge developed by myself and the local people involved as well as awareness and understanding on the three dimensions listed above).

2. Activity design was concerned with defining the design of the initiative, inclusive of objectives, a vision, and a planned course of action. Methods included focus groups (for data elicitation on design dimensions) and reporting and decision-making sessions (for reaching agreement on the vision and planning). The main outcomes produced were a project vision, a plan for content production and organization, and an evaluation plan including indicators, instruments, and protocols.

3. Content production engaged local people in the participatory production of audio-visual content on representative local themes. Production was based on a modified version of the Inquiry Cycle (Bruce, 2002; Bruce and Bishop, 2008). The main outcomes were a database of audio-visual content, and a list of representative content themes.

4. *Website design* oversaw the organization of digital content and its preparation for publishing, and the technical implementation of the community website. The main technique used during design sessions was card sorting. The principal project outcome – the community website – has been finalized in this phase.

5. *Evaluation* ran in parallel with the two previous phases, and was aimed to constantly assess and adapt the process to the defined vision of success. It was based on the CoRA evaluation model, and included separate tools for data generation, validation and integration of change, all aligned to the activities regularly run throughout content production and website design. The intermediary outcomes produced were proposals for revision, while the final outcome was an evaluation report.

As different from the Podoleni case, in this site a sustainable communication solution could not be ensured. The project ended with the website development and the agreement to keep the website online for three years, as the community manifested no interest in its maintenance, also due to low literacy and digital literacy.

5.3 Exploration

5.3.1 Methods

The methods employed during the *Exploration* phase were modelled according to the knowledge elicited on three knowledge dimensions – local context, technological options, and applied communication solutions – by the learning agent involved – myself and local people (Table 5.2).

Table 5.2. Methods employed in the Exploration phase, by learning agent and knowledge dimension. Source: author.

		TOOLS BY KNOWLEDGE DIMENSION		
		Local context	**Technological options**	**Applied communication solutions**
LEARNING AGENTS	**Researcher**	Data generation (emergent interviews, participant observation, semi-structured interviews, focus groups)	-	Content production demos Cultural probes
	Local people	-	Informative sessions	

Data generation

Data have been retrieved using four instruments: emergent group interviews, participant observation (tracked through field notes), semi-structured interviews, and focus groups.

Emergent group interviews

Data generation began with three emergent group interviews. The first was held in the house of the community leader and involved 10 local participants (2-F-young, 1-M-young, 2-F-adult, 2-M-adult, 2-F-elderly, 1-M-elderly). The questioning route was declined from the framing question for emergent interviews (see section 3.5.2), following conversational leads. Subjects covered cauldron-making, community history, literacy and education, Romani tradition, Romani language, nomadism, and religion. Discussions have been in great part led by the community leader for aspects related to cauldron-making, nomadism, and literacy and education. The elderly, and especially the old community leader (*bulibașa*) and his wife intervened most on subjects related to tradition and community history. The young people, both women and men, have had only light interventions.

The second group interview was held in the Pentecostal church, still under construction. The participants (n=7, 4-M-young, 3-M-adult) had all recently embraced the Pentecostal faith, including the community leader. The place was chosen by the community leader, who wanted to speak about the efforts they were making for building the church. The discussion was held before the daily Church meeting, and the small group was gradually surrounded by many spectators, men and women. Subjects covered religion, Romani identity and community change. The *bulibașa* was most active in discussions, especially with respect to

community change, about which he was speaking from his own experience as a leader. Discussions on religion had a more balanced participation, including the young.

The third group interview was held with women (n=5, 2-F-young, 2-F-adult, 1-F-elderly), in the house of the community leader. The leader was absent, and the discussion was hosted by his middle-aged wife. The discussion covered daily life, family roles and duties, local customs (especially marriage customs), nomadism and child education. All women participants had a balanced involvement in the discussion and shared their own experiences.

The first two interviews were not audio-recorded, and notes were taken during and immediately after their course. The third interview was audio-recorded, and notes were taken as well while it was conducted.

Participant observation

Overall, the project spread over 25 field visits, eight of which were conducted during the *Exploration* phase. Detailed field notes were taken for each of these visits (observing the template in Annex 1). Observation produced data on local patterns of interaction, social relations, participation in cultural practices, cultural protocols (especially cultural models based on gender, age, and status), and settled and nomadic lifestyle.

The visits during the *Exploration* phase were particularly intensive, and included activities with several groups of people. A typical field visit included, for instance, one or two interviews, one group-based data generation session (e.g. focus group) and an activity (e.g. training, a production demo, visualisation of cultural probes). Sessions were in the community leader's house, in separate houses with different groups, in village streets, and places of worship (i.e. the Pentecostal church). Most activities were facilitated at the beginning by the community leader and the cultural mediator who had introduced me to the community. Gradually, direct contact with people with no mediation was accommodated.

Semi-structured interviews

Interviews (n=5) have been conducted with local authorities and opinion leaders, and with the Romani mediator that facilitated entry and cooperation with the community.

The community leader and representative was interviewed in two sittings, both conducted in his home. The protocols followed the template in Annex 2, to which a lengthy discussion on nomadism was added.

Two interviews were conducted with the elderly *bulibașa*. The first covered the community life in the past, starting with the forced settlement of the then nomadic people at the end of the 1950s. The second interview focused on religion and the increasing penetration of the Pentecostal faith in the community.

One interview was taken with the officials of the local commune city hall, in the City Hall headquarters. The protocol followed the template available in Annex 3.

In addition, I have conducted two interviews with the mediator that facilitated my entry in the community, who held the position of local expert for the Roma in a nearby rural commune. The interview drew on his experience of working with the Roma in Munteni for several years and covered lifestyle, civic participation, customs and traditions, interethnic relations, economic profile, and regional development programs from which the community had benefitted.

Focus groups

Three focus groups have been conducted. The protocols were based on the template available in Annex 5, adapted to the age/gender composition of each focus group and to what has been observed from emergent interviews to be the adequate wording and style for getting genuine responses. An open agenda was followed in both cases, therefore detours in conversation were accommodated before prompting a return to the topic guide by a new question.

One focus group was held in the courtyard of a traditional cauldron-maker, with five male participants (2-M-young, 2-M-adult, 1-M-middle-aged). The main topics were nomadism, cauldron-making, lifestyle, social relations, and religion.

The second focus group was held in the house of the elderly *bulibașa*, with six participants (2-F-adult, 2-M-adult, 1-F-elderly, 1-M-elderly). The topics covered were poverty, work, nomadism, education, discrimination, and media usage.

The third focus group was held with children (n=5; 3-M, 2-F). The topic guide was concentrated on education. Nomadism, poverty and discrimination emerged from participants' responses as connected subjects. An open agenda was maintained, encouraging children to tell their stories on their school experience and the way they coped with poverty, discrimination and the frequent travels during the warm seasons.

Informative sessions

Informative sessions were delivered on a Q&A format, including a short presentation on a particular subject followed by discussion animated by participants' questions. The subjects covered the Internet and Internet publishing, including information about access, publishing process and Internet products and services (websites, blogs, single media on social media sites, etc.).

One session was devised to present all aspects related to the Internet in their togetherness. The presentation was supported by a slideshow played on the computer and included basic

aspects about Internet, explained in a simple terminology: what is Internet, how it can be accessed, how to search for information and how to publish on the Internet, what are websites, blogs, and social media, what are emails and instant messaging systems.

Figure 5.2. Screenshot from the slideshow 'About Internet'. Source: author.

Content production demos

These demos have been employed for showing people the entire process by which a video could be published online, starting from footage production and continuing with editing, preparation for publishing, and publishing. The demos included four main sessions:

1 Subjects choice. The purpose of the demo sessions was explained, and people were solicited to choose subjects of interest that could be documented.
2 Production. The subjects were recorded using video, photography and audio.
3 Publishing. The videos were published on a temporary community blog.
4 Sharing and discussion. The results were shared and discussed upon.

A group led by the *bulibașa* chose two core subjects to be used for the demos: cauldron-making and religion (Pentecostal faith). Three videos were produced on these subjects, based on interviews with a cauldron-maker, the community leader, and the elderly bulibașa.

Cultural probes

A kit containing two photo cameras, a video camera with a tripod, and an audio recorder was entrusted with the community leader. The kit was used for exploring the range of community subjects that could potentially be documented as part of the project. Subjects and choice of media were not guided. The probes were used in group discussions for overviewing the range of communication possibilities opened by the use of recording devices. These discussions (n=2) were held in the house of the community leader and included participants from his extended family, as well as other villagers.

5.3.2 Outcomes

Data from the Exploration phase have been analysed and included in a situation assessment report in 14 parts:

1 Identity
2 Socio-cultural profile
3 Semi-nomadism
4 Participation in social and cultural practices
5 Culture: value, knowledge and enactment
6 Economic profile
7 Citizenship and civic participation
8 Education, literacy and digital literacy
9 Access to information and media usage
10 The role of media in daily life
11 The broader socio-economic context
12 Community needs, goals, problems and values
13 Directions for growth and development
14 Communication solution: scope and feasibility

1 Identity

The identity of the Roma in Munteni resided on proud identification with the Romani sub-group to which they belonged: Nomadic Coppersmith (Kalderash) Gypsies, and a denial of the global generic 'Roma' label. The self-affirmed identity of the community can be assessed at two levels:

Not being Roma. In repeated instances, opinion leaders and especially the bulibașa refused the 'Roma' label as an externally imposed, new identification mark which did not reflect the

peculiarity of the community. There were various reasons for refusing the global ethnic denomination. First, in the opinion of the community leader, it was imposed externally, and therefore artificial, as it did not reflect the history and the tradition of the Roma. Second, it implied that all Roma are the same, a fact that was completely refuted by people in Munteni.

> "If you say to somebody I am Stanescu, they would know, you are a Kalderash Gypsy. But when you say 'I am a Roma', oh well, Roma... Roma are many!"
>
> - Community leader, semi-structured interview

By refusing the label 'Roma', people did not deny their Gypsy origins. What they refused was a label imposed on them that they never had the occasion to understand, accept or refute. Still, the refusal of the term for the globalism it entailed indicates that the Roma in Munteni wanted to affirm their identity through affiliation to a specific type of Romani sub-group (Kalderash), over that of the global ethnic group.

Being nomadic Kalderash Gypsy. The identification with the traditional Romani sub-group is charged with rich significance, encompassing lifestyle features that can be traced back in the past across centuries. First, *being nomadic* was a feature which distinguished the Kalderash Roma from other Romani sub-groups in Romania, which had been settled much earlier. The Roma in Munteni had been nomadic until the second half of the 20th century, when they were settled by order of the communist regime. Even if meanwhile they had built homes and settled in a village, most Roma in Munteni continued to travel from spring to fall, and stayed in tents while selling their traditional products. They took great pride in their traditional nomadism, which they continued to perpetuate, if only throughout half of the year. Second, *being Kalderash*, or Coppersmiths, was a traditional denomination, but also an indication of a profession. Virtually all families in Munteni had a coppersmith at least among their members. It was a profession inherited and transmitted for centuries, still alive despite the professional restructuration caused by modernization. By insisting on their being nomadic Kalderash Gypsies, the Roma in Munteni stated an unbroken tie with tradition manifested through two crucial lifestyle and economic profile features: being nomadic (at present, only from spring to fall), and being professional coppersmiths.

A strong identity mark was Romani language, more precisely the Kalderash dialect spoken. The community leader underlined in some occasions that the dialect spoken was different from that of other Romani sub-groups, so that when interacting with other Roma there were difficulties with conveying the intended meanings with clarity. All members spoke exclusively Romani among themselves. Little children started by speaking Romani and gradually integrating Romanian words from a very small age.

2 Socio-cultural profile

To arrive at a consistent portrayal of a socio-cultural profile, it is useful to recall once more

Tönnies' concept of *Gemeinschaft/Community* (Tönnies, 2002). The Romani community in Munteni can be seen as a pure type of Gemeinschaft. The core quality of the group was that community interest and greater good had precedent over that of the individual. Choices in an individual's life were done to serve one's family and one's community. The Romani child would be raised in respect of the tradition, and compelled to stand by it from a very early age. Important life choices in an individual's life, for instance their role and profession and their bride or groom were decided by the family.

The profession was passed down as well from generation to generation. Little male children would attend on their fathers in the metal work tasks, and learn the skills by watching and helping. Most children grew up to be coppersmiths, or, alternatively, take up scrap metal deals or other jobs which could allow them to remain in the community. Little girls were all raised to be wives and mothers. As a job, they would help on their brothers and husbands, or would learn to make soap or other easier manual tasks.

The customs by which all members abided have been transmitted and enacted for centuries, and were as strong at present as they had once been. Minute details of conduct and lifestyle, such as the manner of hair braiding for little girls and for married women, had been passed down and observed with religiosity. Customs also regulated conduct and appearance according to age and social status. For little girls, the transition to puberty was marked by the fact that they braided their hair and wore exclusively long skirts. Upon being married, their braiding style changed and they wore a scarf on their head. The community elderly were held in high respect and their advice was sought when ritualized events were planned. The same respect was held for community leaders. The old and the current *bulibașa* enjoyed unquestioned authority.

Figures 5.3., 5.4. Man making a cauldron attended by young boy. Cauldron makers. Source: photos by local woman.

3 Semi-nomadism

One particular feature of the communal lifestyle deserves attention as it had a profound impact on the cultural, economic, and educational profile of its members: *semi-nomadism*. The Roma in Munteni conducted a regular countryside sedentary life from the colder autumn months to the first weeks of the spring. Once warmth set in, families started travelling and setting up their tents in search for customers for their metal products. Travels could be as near as 100 kilometres, or as far as 600 kilometres in the West of the country, depending on how customers were found. More families would typically set off together in cars, including all their children. Family tents were set up in clearings near villages, after agreements with the local authorities had been obtained. Families could settle in one place from one week to several weeks, depending on the request they found for selling metal products. When there was no more demand for products, the tents were brought down and the travel resumed for another place to settle. These travels lasted until the first colder days of the fall season, with brief breaks when families returned home to the village for a few days.

Figure 5.5. Electric bulb in a tent. Source: author.

Figure 5.6. Grandmother and young girl in a tent on a rainy day. Source: author.

There are a series of important aspects around semi-nomadism, which are tackled below.

First, what were the reasons for travelling? Tradition did have a bearing, yet the most surprising aspect of the research was the finding that people felt compelled to travel not in order to keep up with tradition, but driven by strong economic imperatives.

> "We travel because we have to, not because we want to. How else can we live?"
>
> - Focus group participant, F, elderly

People travelled to sell their products, as this was the only revenue source for the grand majority of the community members. When questioned if they would still travel if they had a choice, most members answered that they wouldn't. Life in the tent was difficult, for adults as well as children. An entire family sometimes numbering many children needed to squeeze in a single tent. Rainy days or colder spring and autumn days were as well difficult to manage.

Second, it is important to understand well the relation between keeping up with tradition and maintaining a semi-nomadic lifestyle. The two most characteristic community features passed down from ancestors were the profession of metal working and the nomadic lifestyle. The two were intimately related, as travel was a means for finding a market for metal

products. The only communal source of revenue was therefore conditioned and entangled with the lifestyle for sustaining the economic practice. People would have gladly given up semi-nomadism, yet keep to the ancestral way of revenue-making, metal work, if conditions were met for being able to sell their products from the village premises.

Third, looking at the effects of semi-nomadism, it can be noticed how it conditioned communal lifestyle, becoming a fixed landmark around which yearly cycles unrolled.

> "We go, we sell our products, we make some money, and in autumn we come back. We prepare for winter, buy wood, buy food, and so winter passes. We earn enough to let us pass through the winter. And if we don't earn during summers, we have nothing to feed our families during winters."
>
> - Focus group participant, M, adult

One of the most significant effects of semi-nomadism was on child education. All the children of travelling families would accompany their parents from early spring in their travels. Normally, arrangements were made with schools in the territory for allowing children to recover lectures. Yet this practice was difficult to maintain, so that children experienced gaps in their curricular education and only with difficulty could complete even the elementary cycle.

4 Participation in social and cultural practices

The social life of the Roma was concentrated in the community and favoured Roma to Roma interaction. Patterns of variation can be identified with respect to age, gender and the people's whereabouts according to season. When the people were not travelling to sell their products, most social interaction occurred in the community premises, in the village area inhabited exclusively by the Roma. The occasions for interacting with *Gadje*, or non-Roma, were mostly related to work. People would visit a Romanian house, for instance, to make arrangements for the production of metal objects. Cauldrons were made on the spot, in the courtyard of the buyer, and in these cases a Roma could spend one or more days in a Romanian's estate, solely for the purpose of working. The cauldron-maker could be accompanied by his wife or male sons, who helped him while crafting the cauldron. Occasions for interacting with *Gadje* were more frequent for men then for women, since they were the ones who were running businesses for selling metal products and other scrap metal deals. Men would therefore be more frequently out of the community premises, in the nearby cities or in other villages, in most cases solely for work purposes. Women, if not accompanying men, would spend most time of their regular days in the commune, taking care of the household and kids or doing their own work, for instance making soap. Children were involved in social and work activities from a small age. Women would take their children with them when visiting relatives or other community members, and would also involve them in household tasks. Little girls would typically be involved in small household

tasks such as cleaning or sweeping, while little boys would attend on their fathers while crafting metal products.

The usual spots of social interaction were the homes, courtyards and village streets. People visited each other frequently during the day, especially women accompanied by their small children.

When travelling, the social milieu of the village was re-enacted in the spots of temporary settlement. Families travelled together, including their children, usually in groups from five to ten families. In this temporary location, the social life would resume based on the same rules: women attending to their household duties, visiting other families accompanied by their children; men looking for jobs in the villages, and once a job was found crafting the cauldrons, often assisted by their wives and male children.

Cultural practices, taken to encompass all ritualized events and conduct, were guided by ancestral customs that regulated behaviour according to age and gender. A person's life path was punctuated by a series of ritualized events, going through baptism, betrothal, marriage, and funeral rites. Detailed customs were observed for each of these events. The rituals observed mingled religious elements of Christian Orthodox origin, with Romanian elements, and specific Roma features. For baptism for instance, a detailed ritual was observed which involved the small child, the parents and the godmother and godfather. Some of the elements were regulated by Christian orthodox tradition, such as the Church ritual, and some were common with Romanian tradition, for instance the handing over of the son or daughter over the threshold by the godfather and godmother to the parents. To these, elements that were typical of the Roma were added, for instance the offering of a boiled chicken by the child's parents to the godmother and godfather. For weddings as well, Christian, Romanian and Romani elements were mingled. A tradition that was typically Romani was the fact that the girl was bought by the boy's family; upon betrothal, an earnest was brought, sometimes under the form of refreshments for a party which sanctified the betrothal arrangement. When reaching the proper age for marriage, the girl was bought with golden coins (Ro. *cocoșei*) given by the boy's family.

Apart from the ritual role they played, all cultural practices were occasions for entertainment and social interaction, with music and dance. Events had a very large community attendance, also because people were tied by kinship through blood or marriage.

5 Culture: value, knowledge and enactment

The strength of tradition in the life of the community in Munteni was ensured through steady enactment of the cultural practices, faithfully replicated as they had been transmitted. The value of culture and tradition was not recognized from a critical distance, but integrated in an unquestioning manner in the lifestyle of all the members. When asked about the reasons for

performing certain events in a regulated way, respondents would invariably answer “This is how it is done in here.”

Knowledge about customs and the community history was sourced from community elders. With respect to history, it encompassed what the older living generations have witnessed themselves or heard in first person from the ancestors. Known history was punctuated by a series of large-scale events which had an impact for the community as a whole. The most significant events were the deportation to Transnistria in the 1940s, and the forced settlement at the end of the 1950s. This latter marked a strict division between a nomadic lifestyle and life as a settled community. The elderly had witnessed the forced settlement and could still recall in detail the events as they happened, the way of dressing of the men and women back then, and the changes incurred by the new way of life.

Historical knowledge of culture was therefore found to lie in the span of the recent generations, and relying exclusively on oral sources. This knowledge had an impressive level of detail, and could be recounted by the elderly in vivid storytelling sessions. Members were, on the other hand, ignorant of the history and culture of the other Romani groups in Romania and elsewhere; they were as well unaware of the origins and whereabouts of their ancestors before the period of the settlement.

6 Economic profile

Economic subsistence in the community relied on metal work, the most wide-spread profession. The skills were transmitted from father to son in each family, and the range of objects produced varied from spirits brewing cauldrons (most looked for products) to kitchen utensils, wash basins, dustpans, to drinking cups. Despite the fact that they could produce very precise objects neatly fitting together, metal workers were not schooled.

> “Our masters don’t use numbers or any measuring tools. They measure with their hand.”
>
> - Community leader, semi-structured interview

Among the development programs from which the community had benefitted, one targeted specifically metal workers for recognizing their professional qualifications. Therefore some of the masters had officially recognized diplomas for their metal work profession.

Other sources of revenue apart from metal work were scrap metal deals, roof painting services, soap making, and other small businesses. Most revenue-making activities were carried on by men. Women could undertake a smaller range of work activities, for instance soap making.

Figure 5.7. Metal worker crafting a dustpan inside a tent. Source: author.

The uncertain and fluctuating revenue-making activities reinforced an economic pattern based on immediate satisfaction of basic needs. Most people found it impossible to invest in activities or infrastructure beyond the strictly necessary. Families usually lived in small houses where shared few small rooms were inhabited in large numbers. The expansion of the houses, when required by addition of new members, was done according to need with no architectural plan: a new room was just added adding new walls to one of the existing walls of the house. Many built houses were inhabited unpainted, as the money would not suffice to also cover painting costs.

Most families in the commune needed to round up their revenues to reach subsistence level with social assistance and the monthly allocation for the small children that they had under care. For many families social assistance and child allocation were the only steady sources of revenue.

7 Citizenship and civic participation

The Roma in Munteni enjoyed full citizenship status as commune members, bearing no difference from the Romanian villagers. Yet in order to understand full-scale their civic status and the exercise being made of it, it is necessary to consider the place of the individual in the Romani community, in addition to their place in the territorial administration governed by the laws of the Romanian state.

Figures 5.8., 5.9. Poor life conditions in the village and on the roads. Source: photos by local participant.

At the level of the Romani community, the Roma in Munteni abided by traditional, unspoken laws that governed the conduct, behaviour and appearance of all members. These laws were only applicable to the Roma. Though traditionally Kalderash Roma communities used to have as well their own organs for legal enforcement and regulation, this was no longer practiced at present. Rather, individuals felt compelled to abide to traditional laws for being able to continue to function as members of the community.

Keeping up with tradition, the Roma had a leader, called traditionally *bulibașa*. The current *bulibașa* was the son of the elderly *bulibașa*. He was recognized by all members as a leader. His power was less significant than in past times. His authority was rather a matter of consensus among members, yet there were also aspects of the community life where he had a say. For instance, he regulated the activities of the cauldron-makers and mediated requests for products on behalf of other masters. In more recent years, when the figure of the local expert for the Roma problem was introduced in the local administration, the *bulibașa* came to fill out this role as well. Therefore his traditional authority as a leader was complemented by the recognition of his role not as leader but as Romani representative and mediator with the local administration. In this role the *bulibașa*-mediator represented the Roma interests in the City Hall, interceded communication with the Roma, and took action when there were aspects to be settled that involved Romani people.

Romani people entrusted their interests to their leader and representative in all matters that regarded contact with the local legal and administrative authorities. Their non-mediated contact with the local administration would normally be limited to requests for social assistance and child allocation. Also, they could take part as voters in public election campaigns. Apart from these activities, local Roma had scarce contacts with administrative authorities and regulated their lives inside the community.

One significant aspect in relation to citizenship is the fact that until recently, many Roma lacked legal identification documents, including birth certificates. Around the year 2000, through a series of programs, hundreds of Roma in Galati county were legally registered. Before being legally registered, the Roma with no identification papers were practically deprived of any rights as Romanian citizens. In the eyes of the law, they did not exist.

8 Education, literacy and digital literacy

Access to compulsory education was ensured in the commune. Though most children started school attendance, there were multiple problems that hindered scholarly progress or termination of the compulsory eight grades.

One significant problem with school attendance was the financial difficulty with keeping children in school. Families did not afford the cost of scholarly materials, daily subsistence during school hours, and clothes.

> "The other kids say I'm dirty. At the beginning I was mad with them, but now I don't respond anymore, I just let them say what they will. I have a hole in my shoes and I just walk like that. Sometimes I hit on stones. Like a horse… (laughs)."
>
> - Focus group participant, M, secondary school pupil

A second issue with education completion was related to the seasonal family travels. While travelling, children were temporarily registered in schools and received grades certificates upon leaving. However this discontinuity marked their educational advancement, so that many were left behind and had to repeat classes, or dropped school immediately after the elementary cycle was completed.

Third, the young age at which youth formed a family needs to be considered as a serious impediment to school attendance. Couples married in their teens, when still in secondary cycle attendance, especially if classes had been repeated due to prolonged absences. When taking on household duties, school was in many cases abandoned. This aspect was particularly valid for young girls. If for boys completion of secondary cycle was considered important in order to be able to apply for a driver's licence, for girls knowing how to read and write would often be considered enough.

Fourth, the level of priority that child education had for their families needed to be considered. All parents that participated in focus groups deemed education important.

> "We don't know how to read. We are happy they go to school, they can read to us when watching TV."
>
> - Focus group participant, F, adult

(Note: In Romanian television foreign language programs are subtitled rather than dubbed).

Yet, in most families education was not a priority. When facing financial difficulties, priority was given to covering basic subsistence needs.

Fifth, the role that education could play in the life of a Romani individual should be considered. After school Roma teenagers would marry and resume the life that their parents had. A job would be chosen stepping on the parents' steps, or other jobs that could allow them to remain in the community. In this life path, education was only important for literacy; for men it could also be important when applying for a driver's license. Solid education, or pursuit of high-school education had no benefit whatsoever for a youth that filled out the role models he had been raised with.

Aside from the generations still in school and the recently graduated ones, literacy levels were very low in Munteni. Precise statistics could not be made available, therefore the approximation of literacy in these pages is based on the results of focus groups and interaction with the members of the Romani community.

Literacy rates were found to be most scarce for women. Most middle-aged and elderly

women contacted did not know how to read and write; illiteracy was also wide-spread among young women in their twenties. Literacy levels had started to rise only for the latest generations, the current teens or those still attending school.

For men, literacy rates were slightly higher than for women, yet at a very basic level. Many men were semi-literate; they knew the alphabet letters yet took time to read long portions of text.

Many people had begun only recently to manifest interest in completing basic education. One wide-spread phenomenon was the attendance of literacy programs for adults. The program 'The second chance', which offered primary and secondary level recovery classes for adults, had a wide attendance in Munteni. Many people enrolled in the program for being eligible to apply for a driving license.

Digital literacy was null for the grand majority of people. Children still in school had ascending levels of digital literacy due to Informatics and Technology classes introduced in school curricula. Despite the fact that some houses had computers at home, acquired though school programs at special rates, parents had no computer literacy, so that only children and teens could make use of them.

9 Access to information and media usage

Television was the most popular information medium, with a television set in virtually every house. People watched it daily, and in many houses it was always on when somebody was home performing their household duties. People were specially interested in news programs, music and movies.

Radio was popular only for driving, and used for music streaming. Written media (newspapers, magazines) were virtually not used. Even for people who knew how to read and write, reading articles in newspapers and magazines was found to be a much too time-consuming activity. Access to Internet was only available at the City Hall and at the public bar.

The communication devices used mostly were mobile phones. Many families owned a mobile phone, useful for social interaction, but also for work purposes. Mobile phones were also preferred over fixed phone lines, since people were practically on the roads for an entire half of every year.

10 The role of media in daily life

Just as in the Podoleni case, the most important media used daily were television for information access, and orality (in face to face interaction and by mobile phone), for communication.

Television was the informative device by excellence, a window onto what happened elsewhere in Romania and the world. It was found that television was not only a source of information, but also a producer of role models. The influence of television was felt especially during the demo production sessions, in which the style approached by people interviewed was a replication of the style of presenters and guests in political talk-shows. Being on TV was the icon of popularity and visibility. In the initiative, television was used as the conceptual stepping stone for introducing issues of technology and communication in relation to project goals. It made for the closest example that could be given to people, especially the elderly, for the type of publicity that Internet entailed. Since reporters had come before in the community and some did video reportages, people had some exposure to the process of content production and transmission.

Orality was the prevalent communication means, in face to face interaction and by mobile phone. Face to face communication was used in all aspects of daily life, from leisurely social interaction, to transmission of news, and for work purposes. People would take spontaneous visits in the houses of neighbours and relatives for a specific purpose or just checking in. The mobile phone was especially used for settling work deals and for communicating with community members while travelling.

11 The broader socio-economic context

The features of the wider context which had an impact on the Roma can be mapped in five dimensions:

1. The Romani minority status
2. The Roma reintegration movement
3. The political role of the Roma
4. Rurality
5. Economic crisis and the poverty spectrum

While the factors of impact identified are the same as those singled out in the Podoleni case, the impact on the community in Munteni reflects patterns of similarity but also patterns of difference with respect to the effects produced in Podoleni.

The Romani minority status

For the majority population, the Roma in Munteni are part of the Romani minority, usually with no further distinction operated. One aspect of this global characterization was related to discrimination: the negative image of the Roma, alimented through press and television, was reflected indistinctively on all Roma. In the village relations were cordial with the Romanians, as reported both by people and by city authorities.

Figure 5.10. Romanian customer helps out a Roma cauldron maker. Source: photo by local woman.

Yet when travelling the Roma could face discriminatory behaviour. The image local authorities had of Roma could determine whether they were allowed to set up their tents and sell their products.

> "Sometimes they send us away. Once they said we are stealers and they drove us away. But it was not us who stole, it was another group. People who meet us would know we don't steal, we are honest."
>
> - Focus group participant, F, adult

A second aspect was related to the impossibility to affirm the group's identity of nomadic Kalderash Gypsies beyond the global 'Roma' label. This aspect was deemed important by opinion leaders and less by regular community members. It emerged especially through discussions and interviews carried with the community current leader.

> "We are not Roma. We are nomadic Kalderash Gypsies. Did they ever ask us? If they had asked us, I would have said: no, we don't want to be called 'Roma'. I am Gypsy, born Gypsy, and am not ashamed to say this openly and freely."
>
> - Community leader, interview

The Roma reintegration movement

The existence of projects and programs targeting the Roma was well-known in Munteni. Yet very few of these programs had benefitted the community. One such programs was related to the release of legal identification documents, and one for the professional recognition of cauldron-makers. Local people felt that much more could be done from the outside to help their community get out of poverty.

> "We are the poorest of the Gypsies. In other villages around, Gypsies have nice houses, they are well-off and do not have to travel to sell cauldrons. We are the only ones that are still on the road. We are the most wretched ones."
>
> - Focus group participant, F, adult

Help was expected from the outside; from inside the community there were hardly any people apart from the leader, who could propose or sustain development actions.

The political role of the Roma

Given their significant percentage at the level of the commune, the Roma represented an important target for electoral campaigns. People were aware that they represented a source of votes for local politicians; at the same time the cycle of un-kept promises repeated around electoral periods had made people diffident and circumspect with respect to the actual goals of politicians. This atmosphere of mistrust was expanded with respect to politics and national and local administration in general.

Rurality

The low state of development of the Romanian rurality is to be regarded as a simultaneous source of advantage and disadvantage for the Roma. On the one hand, the lack of industrialization of the Romanian countryside resulted in an open market for the traditional metal products, and therefore an advantage. These products had little demand in cities where modern, finer, and even cheaper products could easily replace them. In rural areas, and especially in remote hill and mountain regions traditional products had less competition. For cauldrons, for instance, used especially for spirits brewing by Romanian peasants, there was still a market; on the other hand for metal objects such as spoons, dustpans, coffee pots and wash basins, there was less and less request, as people could easily and affordably buy them from regular stores.

At the same time, low development of the Romanian countryside was also the context in which poverty for the Roma in Munteni was perpetuated. Due to poor development, there were practically no alternative revenue-making activities for the Roma apart from traditional metal work. The lack of alternatives compelled them to continue to replicate metal work as

the core money-making activity, and seasonal travelling as the only way to market the products.

Economic crisis and the poverty spectrum

Similarly to the Roma in Podoleni, poverty needs to be understood not as an isolated phenomenon specific only of the Romani community, but as a wide-spread one, affecting Romanian urban as well as rural areas. For the Roma in Munteni wide-spread poverty had an impact in economic terms (less buying power for customers resulted in reduced revenues) and as well in terms of aspirations and attitude toward the future. Poverty in hard economic terms was accompanied by low spirits and little hope for betterment expected from the future.

12 Community needs, goals, problems and values

The needs, problems, and goals of the community circled one core issue: getting out of poverty and achieving welfare. Reaching a state of welfare was perceived as the number one condition that could enable people to make significant changes in their lives. For instance, many of them would have reduced or completely given up the seasonal travels for selling metal products, if a reasonable life standard could have been secured.

One related significant community need was the creation of work places in the commune, or of market opportunities so that they could sell metal products without having to travel.

> "We want to work. I don't want to go and steal, it does not become me, and I don't want to get into trouble. But there is no work to be done. Nothing, not even sweeping the streets."
>
> - Focus group participant, M, adult

The principal goal of reaching a state of welfare needs to be read in conjunction with one of the strongest community *values*: cultural preservation. By 'cultural preservation' is implied the replication of the socio-cultural patterns that have been transmitted from the ancestral past, including the integrity of the community as a collective whole. All possible solutions for escaping poverty needed to be aligned to this value. For example, it was inconceivable for an individual to pursue his own or his family's welfare outside the community, or finding a job elsewhere. There were of course cases where individuals or couples had left the community and moved away; some of them went away for achieving a satisfactory life standard, therefore privileging their own good over the community greater good. Yet these people were not role models, or at least not publicly accepted role models. Appropriate development needed to happen in respect of tradition. Alternative forms were not discarded, they were rather inconceivable: development that entailed dispersion of community members, or their

departure from the group, was a sheer improbability. This aspect can also shed some light on the desirable levels of education that a youth should have achieved. Learning how to read and write and completing eight grades to be eligible for having a driving license was the desirable education level for a community member. There was no need for high school or university studies, since jobs for very learnt people were hardly obtainable on the village premises.

13 Directions for growth and development

A prognosis on the direction that community development could take needs to be done in full consideration of the most pronounced community feature: its unbending resistance to change. The Roma in Munteni, just as other Kalderash communities, maintained a remarkable continuity in lifestyle and customs across centuries. Change was resisted even when coping with very strong impediments, such as for instance the forced settlement at the end of the 1950s. After being compelled to give up nomadism, the Roma found their own formula of continuity by mingling settled life with travel in seasonal cycles.

Fieldwork identified a series of dimensions that began to manifest change with respect to the past; and factors that could in the long run be responsible for bringing change, innovation and development.

Local initiative. The general level of local initiative has been found to be very low. People were characterized rather by a sense of helplessness and a hope that positive change and development would come from the outside. Yet, some aspects began to change, especially since the local bulibașa was also invested with the role of local expert for the Roma in the City Hall. His double role favoured an increased sense of awareness of the state and local administration, and possible economic and social initiative hubs, which had been before largely obscured. Around the time fieldwork started, the first non-profit association was created in the commune, which had as goal to promote economic development in conjunction with cultural preservation. Local initiative is bound to grow in the commune and involve more people if this incipient step will have positive effect.

Education. The importance of education had started to become more widely acknowledged. Adults were recovering primary education in high numbers, and most of them also admitted to the importance of education for their children. This openness needs to be understood in the right light: education was important only insofar as it allowed members to function more efficiently while filling the same roles in the community. Knowing how to read and write was considered useful, and so was the completion of the compulsory secondary education, so that one could apply for a driver's licence. Pursuit of high-school or university education, on the other hand, would have impacted negatively on the community ecosystem, and was therefore discarded as option. Yet even completion of the compulsory secondary school for

current and future community children is prone to change mentalities and introduce slow change in the community, starting with the development of different perspectives, aspirations and values.

The status of the woman. The role of the woman in the community followed the traditional patriarchal model in terms of submissiveness and role in household care. The acceptance of this role has been found very levelled and unquestioned. Yet it has been noticed that women tended to create their own role models out of other women that embraced modern attitudes and behaviour, such as for instance car driving.

> "You must be very proud of your mother, for her being able to drive a car."
>
> - Emergent interview, F, young

When starting the fieldwork no woman in the commune had a driving license, though many men had. During the fieldwork, one of the community leader's daughters and one of the daughters in law had started to take driving courses. It is expected that very slowly, starting from the appropriation of role models from television and personal life, women will begin to think differently of themselves and their roles. Change in their status could occur by adaptation or re-interpretation of traditional models, without denying or bluntly refusing them.

14 Communication solution: scope and feasibility

Internet had been selected as the communication medium best matching the project possibilities and the community goals during the first fieldwork sessions. The youth present during the first sessions indicated Internet as a possible channel for spreading the results of the project. Upon seeing the video-camera, they also indicated the possibility of using videos as the main communication products. For the elderly, who could not imagine what Internet was, the closest medium in terms of publicity potential and multimedia options was television. Television was used as an example of the potential of Internet communication in the informative sessions. Based on these examples, Internet features were more largely understood, and the Internet became the central medium for the range of communication solutions that could be envisaged.

With respect to feasibility, the results of the 'Exploration' phase have been interpreted in terms of opportunities and constraints for the continuation of the project, taken into account in the subsequent 'Activity design' phase.

Challenges included:

- *Barriers to long-term partnership.* Outsiders could enter the community only through mediation, and their presence aroused high curiosity and questioning. Long-term intervention in the community was also subjected to members' questioning. Building genuine relationships required time and sensitivity.

- *Low literacy and digital literacy levels.* Literacy levels were extremely low, while for digital literacy it was found to be close to zero for practically all members directly involved in the project.
- *Strong patriarchal models.* Communication flows were amply determined by traditional patriarchal models, in which hierarchy and gender were two determinant factors. Women, for instance, were unlikely to contradict a man or intervene over a man during discussions. Patriarchal models were observed as well with respect to community interests. Male interests and values were likely to take precedent over women's.
- *The existence of interest groups.* Despite the high collective orientation, a series of interest groups were identified in the commune, characterized by competition for external support.
- *Participation for expected individual benefit and status-raising.* It was found that for many people participation was enticed by the hope of getting material rewards, or simply for raising their status by owning a camera.

The initiative could build, on the other hand, on a series of *opportunities*:

- *Meeting local needs.* There was a genuine meeting between community needs and the range of solutions the project could afford. People needed a channel for expression, a reality indicated by themselves, with no prompting, during the first fieldwork visits. Very high interest was manifested in speaking out and addressing a broad audience. People were naturally driven to speak and did not feel shy in front of the camera.
- *Storytellers.* People were extraordinarily gifted as storytellers, especially the elderly.
- *Interest in technology.* High interest in trying out and using technology was manifested by young and elderly alike.

5.4 Activity Design

5.4.1 Methods

The methods used during *Activity design* were focus groups (for eliciting data on design dimensions) and reporting and decision-making sessions (which made use of the results from the focus groups to take design decisions).

Focus groups

The strategy employed for the organization of focus groups (n=5) was to rely on small compact groups with similar interests, background and expertise. After initial discussions in which it had been decided to produce a community website, focus groups in Munteni were designed to in the scope of a specific area, in relation to participants' interests and knowledge. The number of participants for each ranged from four to seven people. The topic guide used in each focus group was adapted from a unique model common with the Podoleni study, according to the expertise and interests of the participants involved (Annex 6 presents the final aggregated questions, as used across several focus groups). In each focus group, generic formulations were avoided, and discussions always focused on specific subjects and examples. For instance, participants were solicited to think of subjects to document for the community website in relation with a particular subject, from religion, to tradition, to cauldron-making. These clusters of answers were then merged and harmonized, and used as basis for the reporting and decision-making sessions.

A similar introductory protocol was observed for all focus groups, where members were presented the goal of the project, the role of the session they were participating in and how their feedback would be used.

The first focus group was held in the Pentecostal church, with five participants, all male (2-M-adults; 3-M-young). The topic guide focused on subjects to document, people that could potentially be involved, and selected audience. These dimensions were all tackled in relation to religion and faith as potential communication subjects.

The second focus group was held in the house of the community leader and involved six people (1-M-young, 2-F-adults, 3-M-adults). This focus group had a more generic agenda than the others. The topic guide was focused on priority subjects, audience, people that could be involved (both as producers and as storytellers), ethical issues and expected community benefits. The presence of the community leader enabled a discussion on ethics and expected return for the community in more general terms, covering all possible subject areas.

The third focus group was held in the house of the community leader, with four participants (3-F-adults, 1-M-adults). It focused on community traditions as subject area, and in relation to it, the targeted audience and potential storytellers that could be involved.

The fourth focus group was held in the courtyard of one cauldron-maker, with four participants, all male (1-M-young, 2-M-adult, 1-M-elderly). Cauldron-making as subject area was the core of the discussion; the topic guide covered detailed subject range around cauldron-making, the selected audience, expected benefit, and people that could be potentially involved as storytellers.

The final focus group was held in the house of the old *bulibașa*, with five participants (1-M-young, 2-M-adult, 1-F-elderly, 1-M-edlerly). It focused on religion and community history as general subjects and in relation to these detailed content themes and potential storytellers were tackled.

Reporting and decision-making sessions

Two group discussions were organised for negotiating a vision for the outcome and the course of action to be taken. Both sessions included the community leader among the participants.

The first session involved 10 participants (3-F-young, 1-M-young, 2-F- adult, 4-M-adult). The protocol for the discussion included an initial reporting, followed by discussion and decision-making. The reporting was based on salient data retrieved during the *Exploration* phase and the focus groups on communication solutions, organized in five dimensions:

1 Communication solution: objectives, audience and expected return
2 Content: themes and media
3 Roles
4 Workflow
5 Ethical issues.

The reporting was punctuated with examples of video recorded during the *Exploration* phase, played on the computer.

The second session involved eight participants (2-M-young, 1-M-young, 2-F-adult, 3-M-adult) and was held as well in the house of the *bulibașa*. Two documents were brought and used as basis for discussion: a plan of action for the project, based on the decisions taken in the previous session; and a community agreement, drafted based on the model presented in Annex 8, and accompanied by a draft of the individual release form (Annex 9). The protocol included an initial part of presentation, in which the proposed communication solution was described. The presentation insisted on ethical issues and expounded the main parts of the community agreement and the release forms. Based on these starters, a round of discussion was held, lead by the *bulibașa*.

Based on the results of these sessions a project vision and a plan of action were drafted.

5.4.2 Outcomes

Vision

The vision for the communication solution was formulated in a nutshell as:

> "Create a community website that will mirror people's traditional lifestyle, difficult life conditions, and showcase their traditional metal work professions, through authentic testimonials of its members. The website should provide visibility for the community, build positive image, and generate awareness of: the poor living standards; the traditional products marketed; and the growing Pentecostal Christian community."
>
> - (Sabiescu, 2011a)

The *benefits* for the community encompassed:

- Foster visibility of the community and the traditional lifestyle for a broad audience;
- Generate awareness of difficult life conditions and poverty; and
- Foster visibility for the traditional profession, including the masters and products.

The content areas captured in the vision (traditional lifestyle, life conditions, traditional profession) was operationalized in a list of content themes further used to guide the content production sessions.

Planning

The content production and organization activities were planned with respect to:

1 Roles
2 Resource allocation
3 Activity types
4 Ethical measures

1 Roles

People could be involved in the project as content producers, storytellers, and participants in the website design sessions. The distribution of people for each of these sets of roles was done on the basis of interests, skills and status in the community.

Content production was entrusted initially to six families, selected through the mediation of the community leader. The families included those of the community leader, four cauldron-maker families and the family of a scrap metal dealer. The decision to work at family level has been taken based on the results of the *Exploration* phase. It was found out people do not use to lend things among each other, such as cameras. The cameras used for collecting cultural probes were only given out among members of the extended family, and never out of

it. Wherefrom the decision of involving families as the main hubs in content production. One person from each family was provided training, and would then provide training to the other members.

The storytellers were selected on the basis of their capacity to cover one or more of the main subject areas defined in the communication vision. Professional cauldron-makers would be involved for instance in talking about their profession and their products, while the elderly could talk about the community history.

The design of the community website marked the completion of the project vision; to make certain the solution would be appropriate, one of the requirements was the presence of the community leader in all design sessions. No particular requirements for the participation of other members in the website design phase were formulated.

2 Resource allocation

Recording equipment included the initial kit used for gathering cultural probes (two photo cameras, one video camera and one audio recorder), and apart from it one video-camera and four other photo cameras with video recording modes. This equipment was entrusted to the six families directly involved in the production process, so that each family had the possibility to record video and take pictures at an acceptable quality. While all were encouraged to share the camera and lend it also to people outside the family circle for producing more content, the members in each participating family remained the direct contact points all throughout the content production process.

3 Activity types

A series of landmark activities for content production were defined for ensuring that the process would result in the communication artefact faithful to the vision developed, and in particular that it would be representative for the community as a whole. There was a need for a thoughtful array of activities which could give convergence to the process as divided across groups and to the subjects they were covering each.

The following moments were deemed important:

Collective sessions. One of the aspects noticed during the *Exploration* phase (verified as well in the first field study) was that learning to do quality shooting was not achievable in one or even more training sessions. It was something that happened by trying out, seeing the results of one's actions and imitating the good examples seen. This confirmed the need for mixing collective shooting sessions with recording sessions lead by community members, following the model used in the first field study.

Organization. There was a need to organize and plan the activities in a way that kept the

process on track while leaving enough space for members' creativity and their ability to capture moments to record in their immediacy.

Sharing. In order to ensure consistency, people needed to see each other's creations. This exposed them to what the others were doing, and were also occasions for gradually getting an overview of the content produced collectively and understanding the progress being done.

*Feedback and discussion. F*eedback coming from myself and from other people was needed for improving quality of productions, making people more aware of the results of their actions, and clarifying how recordings were linked to subject areas.

4 Ethical measures

According to the ethics approach embraced in this study, as described in the 'Research Design' chapter, the collective interests of the community were considered alongside the rights of every individual participant. The perspectives on site were different. According to the community leader, once a collective agreement had been set, this covered all the community members and there was no need for separate individual agreements. Despite this position, to be aligned to research ethics standards, the project considered collective interests and individual rights and interests separately.

The collective community interests were discussed and negotiated with the leader, and drafted in a community agreement. This agreement has been proposed, discussed with the leader, left over for revisions, and finally signed in two languages, Romanian and English. (Based on the same model used in the first field study, available in Annex 8)

The rights of individual participants, on the other hand, had to take into account each person's level of knowledge on research, academic and website publishing matters. The individual release forms contained detailed descriptions of these matters and could be used as basis for discussions (English translation of originals is available in Annex 9). People who knew how to read and write could be asked agreement confirmation through signature. The grand majority of people involved were, however, illiterate or semi-literate. For these people, it was agreed that agreement could be given orally, while being audio-recorded and/or video-taped.

5.5 Content Production

5.5.1 Production model

Content production was based on the Inquiry Cycle (Bruce, 2002; Bruce and Bishop, 2008), further revised in accordance with the insights of the *Activity design* phase. The final version of the model included seven iterative steps: *Inquiry, Planning, Creation, Observation, Discussion, Reflection* and *Progress overview* (Fig. 5.11). These steps were iterated in forms which blended activities at the level of the single family, with activities involving more families.

Time-wise, the seven-stepped cycle was set in motion in two broad formats in separate time periods, alternated:

- Collective sessions facilitated by myself, each spanning 2 to 3 weeks, and alternated every 6-8 weeks. In these sessions the entire cycle was enacted.
- Community-led sessions, spanning 6-8 weeks, where each family conducted its own content production sessions, usually limited to the steps 'Inquiry', 'Planning', and 'Creation'.

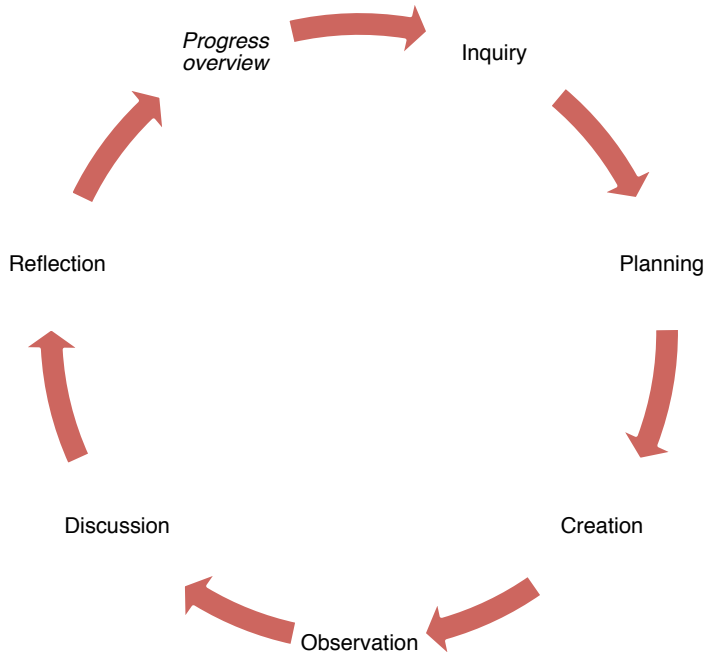

Figure 5.11. The localized, seven-stepped content production model used in the Munteni study. Source: author.

Inquiry, Planning and *Creation* could be run at the level of a single family owning a recording device in my absence or with my facilitation. *Inquiry* was the starting activity which triggered ideas for the forthcoming production session. It could be motivated by a particular event (e.g. a cultural event), or guided by the list of content themes drafted based on the vision developed during the *Activity design* phase. *Planning* included an account of the subjects to document, people involved, story triggers (e.g. questions for an interview), and timing. Planning could be very light in the sessions moderated by people in my absence, or altogether skipped, when an event simply triggered a recording session. For the sessions I facilitated, a more accurate plan was drafted, either for a single creation session or for a series of forthcoming sessions in the period when I was on the field. *Creation* sessions could be managed by members of each family involved, or run under my facilitation. They could be focused on an event or on a theme illustrated by particular stories and testimonials.

Observation, Discussion and *Reflection* were collective sessions with the participation of several families owning devices, as well as other community members. In *Observation* sessions the content retrieved from more families or partially edited was screened for an audience including family members and other local people. *Discussion* was usually accommodated in association with *Observation* sessions. Members were encouraged to comment on the pieces screened, give feedback or come up with suggestions for new content that could be properly related or complement the content produced and seen. For edited pieces, members were encouraged to give feedback on the appropriateness of the editing done, the selection of materials and their relating. *Reflection* was a by-product of the screening and discussion sessions, encouraged by the drive to re-iterate the cycle for the production and reviewing of new content.

Progress overview was carried out after the cycle was iterated a few times, and significant new content was produced. It was meant to give participants a sense of achievement and mark the progress done and how much more had to be covered. In these sessions a sample of representative content produced, in raw or edited form, was prepared, together with an overview of content covered based on the list of content themes. In most of these sessions the community leader was present, and a large community participation was encouraged. However, when it was not possible to bring together all needed people, sessions were at times replicated in several production hubs, in the houses of people directly involved as producers.

5.5.2 Production workflow

Three stages can be distinguished along the content production timeline:

1 Discovery
2 Focus on key themes
3 Targeted production

1 Discovery

This initial phase was characterized by a sense of exploration and discovery, in which the people revealed the potential of the recording devices and of the community features that could be captured. Despite the direction given by *Inquiry* and *Planning* sessions in accordance with the vision defined in the *Activity design* phase, content covered many other subjects, usually triggered by community events. In community-led sessions, people were more interested to capture internal events and happenings not destined for public viewing.

A new appeal for materials recorded prefigured in this stage: internal community usage. People were greatly interested to have prints of photographs and video DVDs for their family archives. Usually during the *Observation* sessions I would bring prints of photographs taken, and give out DVDs with events that had been recorded, such as weddings and anniversaries. A great part of the material recorded by community members in this stage was fit only for internal usage and was not used for the community website.

Collective production sessions covered thematically 'religion', 'community history', 'traditions', 'cauldron-making', 'poverty' and 'life on the road'. Creation sessions included stories, testimonials and interviews done in people's homes or hosted in the house of the community leader.

2 Focus on key themes

Gradually, three themes emerged as the most important: 'poverty', 'life on the road', and 'cauldron-making'. Both community-led and collective sessions facilitated by myself started to be intensively focused on these three themes. People felt compelled to speak about how *poverty* affected them, what they lacked, and how they hoped to evade poverty and have a decent life. Stories about *life on the road* were approached as a subject about which people knew to be interesting for a wide audience, but also with a focus on the difficulties that this lifestyle carried with it. On the one hand, people's contact with television and newspaper reporters made them realize that this particular lifestyle feature was unique, and could attract the attention of a large public. On the other hand, stories were focused on the hardships entailed by living on the road for many months, travelling around with children, and the

effects this had on people's lives and on the life perspectives and education of their children.

Cauldron-making was the subject that caused the greatest enthusiasm in the master cauldron-makers. Stories were told about cauldron-making as tradition and as profession, and highlighted the masters' skills and the quality of the products made. People also hoped that by speaking about their products they could spread more awareness of the existence and quality of their products and in the long run boost sales.

At the end of this stage the list of content themes was drafted for being used during the first design session (Table 5.3, below).

Figure 5.12. People gathered during a visualisation session. Source: author.

3 Targeted production

The start of this stage was triggered by the first two design sessions, in which 'cauldron-making' was selected as the core subject of the community website. Production sessions were focused on interviews with cauldron-makers and their stories, covering the art of metal work, master profiles, and the range of products offered in alignment to the website categories. The themes 'life on the road' and 'poverty' continued to be documented only insofar as they related with 'metal work' as core theme. 'Life on the road' content gave context to the nomadic life people were leading while marketing their products. 'Poverty' was as well related to this traditional profession, as it was their only revenue-making activity; the decrease in the demand for such products was therefore one principal cause for the generalized state of poverty. Special types of content were also produced in this stage, such

as the introductory videos for the main website categories and the main introductory video for the website.

5.5.3 Outcomes

The main outcomes resulting from content production were a database of audio-visual content and a list of content themes. Apart from original footage, the database contained edited content that had been used during content production screenings and for the website design sessions. With respect to thematic coverage, content covered the themes listed in Table 5.3, with a focus on the themes ‘cauldron-making’, ‘poverty’ and ‘life on the road’. Great part of the content was fit for community internal usage rather than publishing, and had been also lightly edited and given to people on DVDs to keep in their family archives.

The list of content themes as presented in Table 5.3 has resulted from the first two phases of content production and was used during the first website design session. As it will be detailed further in the chapter, the final thematic coverage in the community website was further focused following the website design results, and the majority of the themes listed were not included. From the raw content database, only a small percentage was edited and used in the community website, focusing on the tree core themes: ‘cauldron-making’, ‘poverty’ and ‘life on the road’.

Table 5.3. List of content themes resulting from the first two phases of content production. Source: author.

Community history	The wedding
Deportation to Bug	The baptism
The forced settlement in the 1950s	Poverty
Religion	Lack of work places
The church	Lack of housing sites
Christian faith	Traditional professions
Christian conversion	Child education
Miracles of faith	Life on the road
Romani identity	Discrimination
Romani traditions	Child discrimination in school
Cultural events	

5.6 Website Design and Development

5.6.1 Design

The design of the community website was done in three design sessions, aiming respectively to:

1 Define the website information architecture;
2 Revise/validate the information architecture;
3 Validate content types, formats, and map content on architecture.

The first design session

Session protocol

The *purpose* of this session has been to define a taxonomy for the website information architecture. The technique employed was based on card-sorting methodology (Courage and Baxter, 2005; Hudson, 2012). The main tools used were:

- 13 content samples, all corresponding to video files;
- The 13 content samples in audio-visual format, playable on a laptop computer;
- The list of content themes resulting from content production;
- White cards.

The printed content samples were presented on A5 paper cards, each including: the title, the main narrator, the time when the content was produced, and a screenshot of the video.

Figure 5.13. Content samples available during the exercise. Source: author.

Participants (n=5, 1-F-young, 1-M-young, 2-M-adult, 1-F-adult) included the community leader and people involved in content production as producers or storytellers. Apart from the

five direct participants, other people were present at the session, without however intervening.

The *introductory protocol* included an explanation of the purpose of the exercise, the tools available, the meaning of the elements that needed to be defined (website structure in relation to content pieces) and a detailed description of the task.

Process highlights

The objective of the exercise and the task were not immediately obvious to participants. The meaning of 'structure' in a website was more readily understood when explained in relation to content clustering, by making concrete examples using the content pieces and blank cards available. After two sets of content pieces were grouped together under category subjects by way of example, participants understood the logic of content clustering and went on to group content items according to their own thinking. Once all content items were grouped under categories written on blank cards, they were taken one by one and discussed.

The content themes, though available as tools, were not used during the exercise to avoid further confusion between content pieces, themes, and the new emerging categories.

Figure 5.14. Content items grouped by participants under the category 'Poverty'. Source: author.

The second design session

Session protocol

The second design session had as purpose to revise the website architecture, following leads after the first design session, in which the main website goal had been reconsidered. The *tools* used were the grouped content items and category lists defined in the first session.

Participants (n=4, 1-M-young, 2-M-adult, 1-M-middle-aged) included the community leader, the mediator who had facilitated contact with the community, one cauldron-maker and one young scrap metal dealer.

The session was *introduced* through a sum-up of the considerations that made us re-think the website goal and consequently its design. The task of the exercise – defining an architecture to match the new goal of the website – was explained.

Process highlights

Based on the indications in the introductory protocol, the community leader stated the main community goal that could be served by the website. The core thematic of the website was consequently defined, and upon agreement reached participants were solicited to describe the more specific details of the core thematic that they would like to transmit through the website. These themes were collected and used as basis for a revised version of the information architecture, focused univocally on the new thematic core agreed upon. Based on the insights of this session a mock-up of the website was drafted.

The third design session

Session protocol

This session had as *objective* to validate the information architecture (for category- and tag-based navigation), content types, content mapping on architecture, and interface and graphic design. The main *tools* used were:

- A mock-up of the community website (in print and viewable on a laptop computer);
- Content samples playable on the computer;
- The implemented website of the Romani community in the first field study.

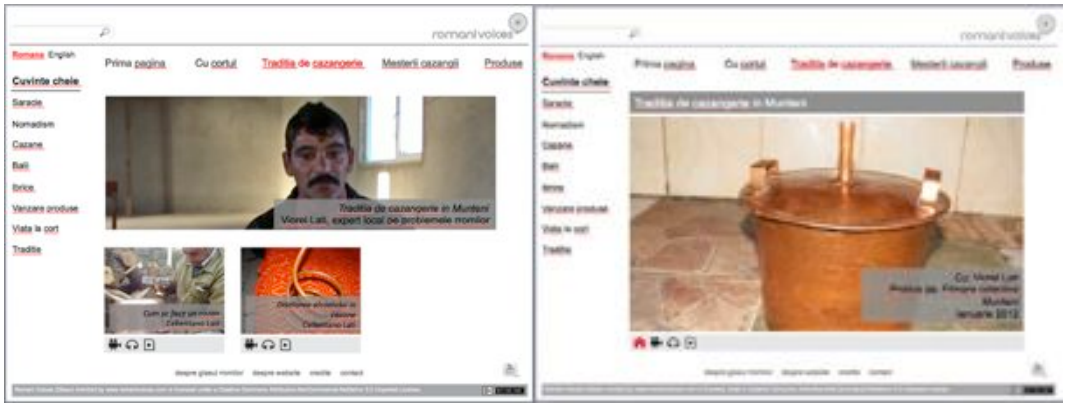

Figure 5.15. Screenshots of the community website mock-up (category page and content page). Source: author.

Participants (n=4, 1-F-adult, 1-M-adult, 1-M-middle-aged, 1-F-elderly) included the community leader, the mediator that had introduced me to the community, a woman participant in content production, and an elderly woman, the wife of the elderly *bulibașa*.

The *introductory protocol* covered the goal of the exercise, a presentation of the tools available, and a description of the task to be accomplished.

Process highlights

After the introductory statements, the exercise continued with a screening of the website of the Romani community in Podoleni, which had previously been downloaded for offline browsing. The purpose was to show participants how their website would look when ready, and to ask feedback regarding interface and graphic design. Further, the mock-up was shown and participants were explained that it was an example that illustrated the main elements of their future website, and that in the final form their website would look similar to the website of the Roma in Podoleni. The main elements that needed to be defined or validated – information architecture (category- and tag-based), content mapping (on existing content samples), content types, interface and graphical design – were taken and discussed one by one, while looking at the website mock-up, and playing content samples on the computer.

5.6.2 Outcomes

Results after the first design session

The temporary website information structure defined in the first session had five categories:

1 Poverty
2 Cauldron-making
3 Traditions
4 Religion
5 History

Poverty indicated a strong community problem, and gathered content that illustrated the causes, the dimensions and the effects of poverty. The content samples grouped under this category during the exercise included 'Travelling with the tents', 'I want to go to school!', 'Lack of work places', 'Child education', 'Poverty and everyday life', and 'Life in the tent'. The logic according to which al these samples were associated with the theme 'Poverty' was defined by the community leader:

> *"It is because of poverty that we need to travel by tent during summers to sell our products. And it's because of the travels that we cannot keep our children in school, they need to come with us wherever we go."*

Cauldron-making grouped all content that illustrated the metal work tradition, the masters, and the products.

Traditions was a large category in which all cultural traditions recorded as events or narrated were gathered.

Religion gathered stories and testimonials about faith, from Orthodox and Pentecostal believers alike.

History encompassed community history dwelling on important events such as the forced settlement and the deportation to Transnistria.

This exercise was particularly useful for highlighting an indigenous logic of clustering content in an information taxonomy. Moreover, in the discussions that followed the design session, the role of the website for sustaining a community goal was clarified. The long-term communal goal, made evident throughout the previous fieldwork sessions, was reinforced: people wanted to escape poverty. The fine-grain aspects of this aspiration also gained in clarity through the design session: people did not want to travel half a year to sell their products. They wanted to sell their products from where they were or have other working places in the commune. While the website could not directly serve any of these goals, it

could contribute by communicating their need to escape poverty and the value of their traditional products.

In the discussion that followed the design exercise, the importance of the categories that were not directly related to poverty and to traditional products became obsolete. A new design session was therefore required, that would take into account precisely the centrality of the two themes – cauldron-making and poverty.

Final design results

The website information architecture was revised to capture the long-term community goal, as formulated by the community leader during the second design exercise:

> *"We want people to understand how we live, why we go for months travelling, living in tents. Because our metal products are our only source for making a living. We want to sell our products from here, or have work places here, in the village."*

It was agreed that cauldron-making would become the central theme of the website; poverty and seasonal travelling were treated as secondary themes in relation to cauldron-making.

Starting from this agreement, the website main goals were revised into:

1. Give visibility to the community's longstanding cauldron-making and metal work tradition.
2. Give visibility to the community's state of poverty and its causes.
3. Clarify the reasons for seasonal travelling and the effects this had on community well-being and child education.

The goals were derived in a *primary taxonomy* made of three terms:

1. Life on the road
2. Traditional metal work
3. The masters

Life on the road emphasized the wide-spread poverty of the members and its causes, around the distinguishing feature of the community: life on the road, seasonal travels by tent. The key messages transmitted through content under this category were:

> *We go by tent because we have to, not because we want to.*
>
> *Going by tent affects our life: we are poor, we cannot care for our children well when we leave, we cannot keep them properly in school.*

Traditional metal work covered metal working in its traditional and professional aspects: how the tradition had been transmitted in the community until the present day and the process of making metal products. It presented as well the array of products that could be produced by the masters in Munteni, together with their qualities and features. The key messages transmitted were:

> *Our tradition goes far in the past.*
>
> *We have clear standards for quality work.*
>
> *You can trust the value and quality of our work.*
>
> *We can produce a large array of products.*
>
> *We produce useful products even for nowadays needs.*
>
> *Our products are of a high quality and durable.*

The masters presented a profile of each traditional master, including data about how he learnt the skills, and the range of products he was able to craft. Key messages were:

> *We have skilled workers who have inherited their professions from parents and ancestors.*
>
> *We are hard-working.*

The *secondary taxonomy*, for tag-based navigation, was defined based on the content themes elicited during content production and the key messages associated with each term of the primary taxonomy, according to the type of content considered. The logic of assigning tags to particular content items was clarified during the third design session, for the content samples presented in the website mock-up. For instance, content about the poverty conditions under the category 'Life on the road' was tagged 'poverty'.

The *content types* followed the model defined in the first field study and included:

- Storytelling content units made of rich media documents;
- Introductory videos for categories and the homepage; and
- Static pages.

The *interface and graphic design* were replicated based on the model defined in the first field study, and approved with only one modification: avoiding the use of black. Since black had a negative connotation in the tradition of the Kalderash Roma, black backgrounds for bars and titles have been changed to light grey.

The website was implemented using the customized CMS developed in the first field study. The content design – including content types – and the interface, page and graphic design were replicated with no modifications. The template created for the community in Podoleni was emptied and duplicated, and new content instances for each type of content were uploaded.

5.7 Evaluation

Evaluation was conducted throughout the content production and website design phases. Its purpose was to check if the process was on track, aligned to the vision and timeline defined during the *Activity design* phase, and to take corrective measures when the need for these was verified. Assessment followed the evaluation model in CoRA (see Fig. 6.7 in Chapter 6).

5.7.1 Indicators

Indicators have been defined during the *Activity design* phase, based on the project vision. The operationalization of the vision was done by first declining it in three dimensions: *product-related, process-related,* and *publishing-related indicators*. Only the first two dimensions contained usable indicators for assessing the content production and organization experience.

Process-related indicators have been developed by declining a series of parameters (satisfaction, learning, engagement, coordination, and representativeness) at three levels: the individual, the work group and the collective (entire community), into qualitative and quantitative measures.

Product-related indicators have been developed by declining parameters (content quality, adequacy for publishing, content organization quality, thematic coverage) into qualitative and quantitative measures.

Areas and indicators are outlined in Table 5.4.

5.7.2 Instruments and protocols

During the *Activity design* phase, the evaluation instruments have been defined according to their purpose in serving data generation and validation of revision proposals. All the instruments and associated protocols have been modelled on steps of the content production model and the website design sessions.

Table 5.4. Areas and indicators for evaluation. Source: author.

PRODUCT	PROCESS
Qualitative measures	
Content quality ▪ Reflection of core concerns (match with identified themes) ▪ Flow, internal consistency	Individual level ▪ Personal satisfaction with involvement, technology usage, learning and results (self-reported) ▪ Acquisition of relevant knowledge and skills (self-reported and observation-based) ▪ Reasoning associated with increased/decreased participation and contribution (self-reported)
Adequacy for publishing ▪ Presence of private or community-reserved subjects ▪ Alignment to the image to be conveyed (subjective appraisal)	Individual perception of group & collective (all self-reported) ▪ Appreciation of intra- and inter-group results ▪ Degree of coordination with others intra- and inter-group ▪ Awareness of intra- and inter-group work and progress
Content organization quality ▪ Relevance of themes ▪ Match between content and theme assigned	The group and the collective ▪ Groups evolution of composition in terms of age/gender/social and kinship relations (self-reported and observation-based) ▪ Group degree of representativeness for the collective in terms of age/gender/geographical coverage/key professions/key interest groups ▪ Occasions for inter-group sharing and interaction
	Personal advancement ▪ Cases of evolution throughout the initiative in terms of learning and changes in attitude, engagement and intent
Quantitative measures	
Thematic coverage ▪ Content coverage in relation to defined thematic areas (nr. of items per theme)	Engagement: Attendance in key content production activities, e.g. envisioning sessions, content production sessions, inter-group sharing and interaction sessions) ▪ Frequency of attendance (by each participant) ▪ Distribution of attendance by gender/age
	Engagement: Contributions in key content production activities (e.g. producing footage; interventions in discussions) ▪ Frequency of contributions (by each participant) ▪ Distribution of contributions by gender/age
	Engagement (general) ▪ Drop-out rates
	Learning: Skills and know-how transfer ▪ Number of people who learned from peers (Distribution across gender/age)
	Coordination: ▪ Mobility of recording devices intra- and inter-group (nr. of persons using the same device & in relation)

Instruments for data generation

Data were collected through participant observation, short individual interviews, and group discussions, aligned to *Observation, Discussion,* and *Progress overview* sessions (steps in the modified Inquiry cycle, Fig. 5.11) during the content production phase, and around design sessions during the *Website design* phase.

The areas and indicators as exposed in Table 5.4 have been used as starters to develop:

- Questions for *individual and group discussions.* Discussions were organized as conversational activities, using active questioning, but avoiding rigid protocols.
- *Observation dimensions.* Observation notes were completed after each fieldwork session, and added to the regular field notes taken all throughout the project.

Apart from these researcher-controlled data generation tools, *open spaces for community input* have been created, where people could say what went well and what could have been changed in their experience of participating to the project. These sessions were not guided by pre-defined indicators, but remained open for gathering participants' concerns. During content production, they were organized with each family involved in content production around *Observation* and *Discussion* sessions. During the *Website design* phase, space was left for participant input after each design session.

Instruments for validation of revision proposals

The validation of proposals for change was done in *group discussions*, with the presence of the community leader if the changes regarded the process in its collective dimension. These were aligned to steps in content production or website design sessions, following the end of the regular planned activities. During content production, they were best associated to *Progress overview* sessions, while during *Website design* they were held at the end of a design session. If changes did not regard the collective process, but only family-based activities, proposals were advanced and discussed with the members of the respective family or other people directly involved as producers for each.

Protocols

Given people's low literacy and digital literacy levels, and the very scarce interpretive skills, the data gathering and interpretation process was run by myself. To compensate for this control, community input was accommodated in two instances:

- During the open spaces for community input, where participants were encouraged to voice over their opinions on the process and their involvement in it; and
- For validation and integration of revisions.

Table 5.5. Distribution of roles during evaluation between doctoral researcher and community members. Source: author.

Activity	Leading agents
Data generation	Doctoral researcher
Interpretation of results	Doctoral researcher
Advancing proposals for revisions	Doctoral researcher, community members
Validation of revision proposals	Community members

5.7.3 Results

Corrective measures

The corrective measures taken during the project course of implementation are synthesized in Table 5.6. The synopsis highlights the agent who put forward the proposal, the proposal as such, the number of instances (if more were verified), the solution, and a short description of the case (or illustrative examples for multiple instances of the same proposal). The measures taken at the level of each participating family are separated from those applied to the collectivity.

Re-envisioning

After the reconsiderations incurred by the first and second website design session, the vision that had guided the process and evaluation apparatus was modified to reflect the changes (the process followed the red cycle in Figure 6.7, chapter 6). The re-assessed vision for the communication product can be synthesized as:

> *Create a community website that depicts the most representative qualities of the Romani community in Podoleni: the traditional profession of cauldron-making and the semi-nomadic lifestyle; and the way these impact upon and are influenced by the widespread condition of poverty. The website should:*
>
> - *Give visibility to the community's longstanding cauldron-making and metal work tradition.*
> - *Give visibility to the community's state of poverty and its causes.*
> - *Clarify the reasons for seasonal travelling and the effects this has on community well-being and child education.*

Since the changes in the vision regarded only content thematic, the indicators required no

further modification to match the new vision. The same indicators (Table 5.4) have been used until the end of the assessed activities, taking the new themes as etalon for assessing content thematic coverage.

5.8 Conclusion

This chapter described the activities carried out in the second field study. Its design was informed by a preliminary version of CoRA methodological insights, produced during the first 10 months of fieldwork in Podoleni. In this process, these components were tested and refined, based on a comparative analysis with the fieldwork advancing in parallel in Podoleni. The Munteni study also acted as testing bed for the refinement of the two other research outcomes, the design format for community web-based communication and the conceptual contributions on participatory projects for grassroots communication in minority contexts. The local context provided an adequate setting for the above, as it was characterized by identifiable features of similarity and of difference with respect to the Podoleni site. The communities shared aspects related to the minority status, context (rurality), life standard (wide-spread poverty), and central developmental goals (welfare). However, strong features of difference applied: the Roma in Munteni are part of the traditional Kalderash group rather than being assimilated Roma as the Podoleni community. They earn their living by selling traditional metal products and thus contextualize the poverty issue in completely different terms. They maintain a remarkable continuity in traditional life with clearly defined roles and behaviour patterns. They regard community as higher and more important than individual aims and goals and conceive of development only if framed by the maintenance of tradition. Finally, while media usage patterns had some similarities, literacy levels were found to be much lower than in Podoleni.

One difference readily obvious in comparing the results of the two studies was that it was not possible in Munteni to propose a sustainable technological solution, as it was done in Podoleni. The communication solution developed for the Kalderash in Munteni - the community website, was a one-time achievement, a snapshot of the community not likely to be managed and revised to match the evolvement of the members' lives and goals in relation with the content themes treated. The following three chapters outline the main research contributions of this study, brought to completion as a result of this second study.

Table 5.6. Synopsis of revisions done throughout content production and website design. Source: author.

Proposal by	Proposal	Instances	Solutions	Case / Illustrative examples
Corrective measures at family level				
Members	Change training formula	3	Include more members in basic training. Provide technical indications during facilitator-led production sessions while recording. Encourage more people to record during facilitator-led sessions.	In one of the producer families, training was imparted to a man. In subsequent screening sessions, it came across that his wife did all the footage. He could not teach her, hence she attempted and understood camera functions by herself. However, she could not switch to video mode, hence all the videos she believed she had produced were actually pictures. This and other similar cases motivated a more wide-spread training approach, and more involvement of members as producers during facilitator-led sessions.
Corrective measures at collective level				
Community leader	Increase the percentage of collective production sessions	1	More time was invested in production sessions, and the time allocated to screenings was diminished in correspondence.	Halfway through content production, much of the community-led filming had quality flaws, moreover most thematic coverage was oriented toward events that did not match the themes decided for publishing. The leader's proposal was to increase significantly the number of collective production sessions (therefore facilitated by myself) for covering content matching selected themes for publishing.
Member	Add another family as producer	1	Give equipment and instruction to a family from another interest group.	The choice of the initial six families had been done based on the proposal and with the mediation of the community leader. A member from another interest group in the community solicited to be part of production. This proposal was negotiated first with the community leader, before giving out equipment and training to the member.

PART III. RESEARCH OUTCOMES

6 Methodological Contribution. Context-Responsive Action (CoRA) Framework[7]

"It is important to conceptualize a model and methodology of engaging communities to develop and articulate their own goals of information access and ultimately, an indigenous approach toward cultural, political, and economic aspects of development. This approach holds promise to sustain within communities and return on the investment and efforts of the researcher or institution."

- Ramesh Srinivasan, 2006b

6.1 Synopsis

This chapter describes Context-Responsive Action (CoRA), the methodological framework developed as one of the scientific outcomes of this doctoral research. CoRA is a participatory methodology that supports the design, implementation and evaluation of communication interventions in local communities. It was conceived as a tool by which local communities may be assisted to take advantage of the possibilities of digital media for advancing collectively shared knowledge production and communication goals without losing the focus on local knowledge and tradition. It pays particular attention to the needs of communities with a specific cultural system, with low literacy and digital literacy, and affected by physical or social isolation. CoRA supports the design and constant alignment of a communication program in response to local factors through systematic data generation coupled with people's participation in key interpretive and decision-making activities.

CoRA is based on three main *action components*, each providing a ladder step for the succeeding ones: learning, envisioning and alignment. 'Learning', or 'reciprocal knowledge building' provides a common pool of knowledge on which a successful community project may build. 'Envisioning' refers to developing a collectively shared vision for the project and driving awareness of it among project participants. 'Alignment' includes the activities and tools for ensuring that the process is aligned to the vision developed, or for modifying the vision in response to changes in local people's priorities and goals with respect to the project. The *project vision* is the central element uniting these dimensions: learning is instrumental to developing the vision by providing the necessary knowledge foundations; envisioning provides the practical means for formulating the vision; while alignment ensures that the

[7] Early versions of fragments in this chapter have been published in Sabiescu (2011a).

course of action is moving in the direction formulated by the vision.

These three components are set in action in a *four-stepped workflow*: exploration, design, implementation, and evaluation. The exploration phase includes activities by which the local context, technology options and possible communication solutions are investigated jointly by local people and an interventionist team. During the design phase, a vision for the project, a course of action, as well as an evaluation plan are developed. Implementation flows according to the plan conceived and runs in parallel with evaluation, by which the process is constantly tracked and aligned to the conceived vision. CoRA provides indications for activity types, tools, and techniques for each of the four phases. In addition, it looks in-depth at three possible strategic outcomes that a project may pursue: enhancing social change, advancing education and digital literacy, and quality product development.

CoRA is framed by a participatory inquiry paradigm. It fuels research carried out for the benefit of the community involved, oriented toward emancipation, positive social change, and community development goals. It regards researchers and research participants as partners in a knowledge sharing and acquisition endeavour, with growth and development expected to happen on both sides. CoRA shares these principles with other participatory and action research methodologies, and is distinguished within these by a series of features:

- Scope and application area: CoRA targets communities in under-developed contexts or with reduced access to ICTs and scarce communication capacities and resources.
- Communication and technology focus: CoRA was developed specifically for supporting voice empowerment initiatives. It looks at how communication processes and products can help to foster developmental goals. It drives communication technology interventions focusing on how traditional and digital technology can be used as tools for supporting knowledge production and communication practices.
- Balanced focus between program and product design. CoRA is situated mid-way between technology design methodologies such as participatory design, and process-oriented participatory methodologies such as AR/PR variations. It integrates activity design and product design techniques, and allows a program to choose whether it places a focus on the design of new technology for a group, or on developing site-specific creative activities or communication campaigns.
- Evaluation as tool for context-responsiveness. CoRA employs an evaluation model conceived to constantly assess and re-align a project to the vision that drives it in a manner which is un-encumbering for participants and integrated in the regular project activities. It also provides tools and insights for re-configuring the vision to match changes in the way people perceive technology and how it may be used to answer their needs.

6.2 Conceptual Foundations

CoRA was conceived as a tool for allowing a local community to make use of digital media in ways that are relevant and appropriate to its cultural peculiarity, needs and goals. It builds on the premise that relevant design of community-based technology interventions resides in mapping out and understanding the local context as prime mover in forging appropriate technological solutions. This orientation is aligned to the social embeddedness discourse in ICT4D, which sees technology as a social construct and looks at the introduction and usage of technology in a new context in terms of integration with existing social and cultural forms (Avgerou, 2007, 2008, 2009). CoRA builds on the preoccupation with context and context-sensitivity in the social embeddedness discourse (Avgerou, 2001) and adds a dynamic dimension, captured in the notion of *context-responsiveness*. This concept indicates the capacity of a program to constantly adapt to local factors all throughout its course of implementation. This approach is based on the observation that people's perceptions, needs and goals in relation to technology are likely to dynamically evolve while interacting and getting familiar with new technology. *Context-responsiveness* indicates a way to cope with this dynamic evolution of needs in the frame of a developmental intervention. In its ideal form, context-responsiveness embodies a vision of a dynamic process in which local data are constantly fed in an initiative, while the latter consequently adapts in response. To properly understand this notion, a clear exposition of the concepts of 'context' and 'responsiveness' is necessary.

Akin to a participatory worldview, *context* is not an objective reality surrounding people, but a subjective-objective construct emerging from the interaction of agents sharing a particular environment at a given moment. Two important features of 'context' are derived herein. First, context is not separate, but inclusive of human agents as well as their subjective perceptions. Consequently, a true view of a context can only emerge from the people who inhabit and create it at the same time. This has implications at methodological level with respect to the legitimate ways of getting to know a local context when an intervention led by an external party is planned. A first derivative is the key role played by people's participation: only through local people's involvement the context in which an initiative is run can be mapped out and understood in a relevant manner. A second feature is dynamism. Context evolves with each new interactional situation. This implies that data generation as a snapshot of reality at one given point in time is highly elusive. Local reality is prone to evolve especially during an intervention, due to the introduction of new tools and processes.

This perspective is akin to Dourish's (2004) notion of 'context' in the Human-Computer Interaction (HCI) field, as well as the notion of 'ba' (meaning 'place' in Japanese) advanced by Nonaka and colleagues (Nonaka and Takeuchi, 1995; Nonaka et al., 2000) in

organisational studies. Both approaches take context to be an emerging construct from the interaction among agents and between them and the environment, a 'here and now' reality (Nonaka et al., 2000: 15) construed by the actions, perceptions, and thinking of the people, constantly evolving in a dynamic way.

Responsiveness captures the quality of a human agent, a program, or an intervention to cope with the dynamic quality of context. Despite the seeming immediacy of reaction that the term 'response' conveys, two steps can be distinguished in it: 1) getting awareness, understanding, or acknowledgement of a phenomenon or a change of state in a phenomenon; *and* 2) delivering a reaction to this phenomenon or the change of state in it. In CoRA, the reaction is given in terms of alignment or adaptation of an intervention to the local context.

Context-responsiveness of an intervention indicates the capacity to properly single out relevant local processes and phenomena and changes incurred in these, and model itself in relation to them. In its first phases, an intervention can be aligned to locality by a proper identification of the factors that it should integrate, model, or take into account. During its implementation, responsiveness is instantiated as adaptation every time that there are signs that the initiative is no longer aligned, either because it is off-track or because the context has changed itself. *Context-responsive action* in its togetherness indicates that action taken in a particular program or initiative is aligned, or seeking constantly to be aligned to an evolving context.

Responsiveness is therefore a drive for alignment and re-alignment to a dynamic context. Ideally, it implies that the initiative is equipped with a sensorial mechanism that constantly scans the context, first for being aligned to it, and then for identifying signs of dis-alignment, so that corrective measures can be taken. This resides on the identification and interpretation of complex webs of interaction made of people, the activities they perform, and the meanings they attribute to these, in specific settings at specific times. Yet, in practice this is hardly achievable, therefore it is necessary to operate *selectively*: key markers for alignment need to be defined and negotiated at the beginning of an intervention. An intervention will be therefore equipped with sensitivity to certain anticipated patterns of change, or to deviation from standards negotiated as marks for alignment. One of the negotiated standards of alignment in CoRA is the *project vision.*

A project's vision and the process of envisioning are given accrued importance in CoRA as means for linking the local communication goals and needs with the possibilities opened up by an intervention. *Envisioning* refers to the formulation of an achievable end, a solution that can be provided by an initiative in full consideration of local factors. When formulated appropriately, the resulting vision acts as a link between people's efforts in the present time and the envisioned end goal. It is a driver for local people's engagement and intent to fully

engage in a program. For envisioning to be effective, it has to stem from people's interaction and shared understanding of how a program and technology can best respond to community goals. Envisioning is necessarily drawing on effective information, knowledge and understanding of the local context, as well as of the options afforded by technology, and is therefore residing on learning. Envisioning, learning, and alignment are the three pillars of context-responsiveness, and are treated at length in the next section.

6.3 Components and Rationale

CoRA was conceived as a framework for supporting locally relevant design and implementation of community media initiatives, seeking an answer to the questions:

1 How can a communication intervention be *designed* so that it responds adequately to the needs and goals of a local community and prone to result in beneficial outcomes for the same?
2 How can the design of an initiative be constantly *refined and adapted* during its course of implementation?

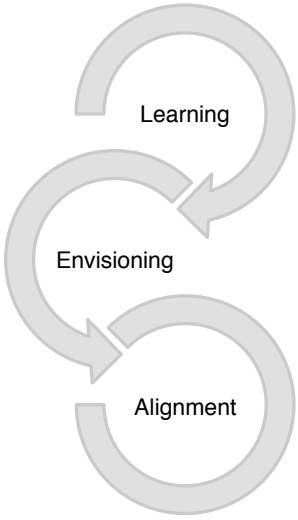

Figure 6.1. The three main action components in CoRA. Source: author.

The answer to these questions, captured in the concept of 'context-responsiveness', is instantiated and put in practice in CoRA through three main pillars (Fig. 6.1):

1 Learning (Reciprocal knowledge building) as a key process supporting and flexibly guiding the integration of technology in a local context;

2 Envisioning as means for linking people's efforts to clear, attainable goals, driver of engagement and intent; and

3 Alignment, a mechanism for ensuring that the design and implementation of an initiative is attuned to the envisioned outcomes.

Further, the *rationale* for these three components is described, punctuated by examples of relevant insights from the two field studies.

The first observation is that at the beginning of an intervention researchers and local people alike are unaware of, or lack knowledge regarding aspects that are fundamental for the success of an initiative. Local people are unaware of the language of digital media, of the opportunities they may offer, or of how they can be used for meeting some of the community long-term goals. Researchers, on the other hand, even in cases where vast literatures on the intervention site have been read, do not possess at the start of the intervention sufficient knowledge about the locale for being able to come up with satisfactory technological solutions. This aspect is especially compelling in situations when an intervention starts in a very sensitive socio-cultural context, with its own, site-specific and culturally-bound norms and rules. The first pillar of CoRA is henceforth a concern with enhancing a process of *reciprocal knowledge building*. Researchers or the interventionist team need to learn about the local context, and the issues, needs and goals of the community. On the other hand, they need to transfer as well to local people sufficient knowledge about digital media and the opportunities they may offer.

A second set of concerns when running a communication intervention regards driving firm intent and engagement. 'Intent' refers to the commitment to act in accordance with a clear purpose. 'Engagement' indicates motivated and dedicated participation in activities that are part of the initiative. In both field studies, it was noticed that the levels of engagement were characterized by fluctuations, and analysed the reasons behind this variation. Four factors stood out:

- The importance of setting and generating awareness of clear goals and outcomes for the project;
- Linking higher-level goals to precise steps and tasks;
- The acknowledgement of sizable benefits associated with project completion; *and*
- Developing a sense of trust in the individual and collective capacity to succeed in reaching the goals, an aspect captured in the concept of 'perceived self-efficacy', which can be individual as well as collective (Bandura, 1998, 2000).

This set of concerns is met in CoRA by giving accrued importance to the negotiation and definition of goals and outcomes in relation to the benefits they can bring directly or indirectly to the community, as well as to the cumulated effort required to reach them. These processes are covered in the second component of CoRA, *envisioning*, which includes the

activities that lead to the formulation of a vision of the pursuable outcome and the process for reaching it, as well as of the role of the people involved in this process. Envisioning is grounded in shared knowledge of the local reality and available technological options, and therefore can only be effective once all persons involved have gone through a solid learning process as described in the first action component.

A third set of concerns, core to the concept of 'context-responsiveness', regards the means for ensuring that an initiative is designed and run in accordance with the local context. One observation coming jointly from the two field studies was that the process of learning is not reduced to the first phases of an intervention, but continues to occur all throughout. Through learning, people become more aware of the opportunities and minuses of technology. Especially for digitally illiterate people, an understanding of how ICTs relate to perceivable benefits takes time. A responsive design, no matter how efficient it may seem at one point in time, can be ineffective in coping with this dynamic evolution of people's knowledge, or awareness of goals and priorities in time. Responsive design needs therefore to be coupled with responsive implementation, where the factors taken into account are not limited to the locality seen in a vacuum (the local context pre-existing an intervention), but to the entire ecology unfolding in response to changes incurred by an intervention.

This observation is not new, and was given ample attention and valuable solutions in particular by action research and participatory research methodologies. CoRA draws on the AR/PR knowledge pool, but goes further and indicates how existing AR/PR models and approaches can be shaped for sensitive contexts and specifically for developmental interventions with a communication/technology focus. In the first field study, responsive implementation was achieved by modelling the PAR constant cycle of planning, action and reflection on the content production process. While it has been found effective, PAR application also met a series of challenges that were further taken into account in designing CoRA, and in particular:

1. Data generation: How can data on the project performance be generated so that the process does not become a cumbersome process difficult to handle by researchers and local people alike?
2. Data interpretation: Who is entitled to interpret the data, and what measures of objectivity can be employed? How can we account for a fast and relevant interpretation of data so that it is useful for immediate feeding into redesign?
3. Implementation of change and decision-making: How can we ensure that the changes are valid and meet the consensus of the people?

These challenges are met in CoRA in the *alignment* component, which includes considerations for responsive design and implementation of an initiative. Alignment resides in taking a constant, critical look at the context in relation to the intervention and identifying

those aspects that can inform the best course of action for reaching out to its objectives. During the design of the initiative, alignment builds on the process and outcomes of reciprocal learning, while during implementation it is driven by using a particular evaluation model. *Evaluation* was conceived purposefully as a device for identifying and integrating needed change and therefore constantly adapting the design of a program throughout implementation. It integrates protocols and techniques for:

1 The definition of indicators by which the effectiveness of a course of action may be assessed;
2 The identification of the dimensions that require revision or change;
3 The collective validation of the proposal for change; *and*
4 The integration of change in the project design.

All these operations need to be fluid enhancers of the overall process and provide for a fast, accurate and useful assessment that can ensure constant refinement of an intervention. To this purpose, the evaluation model also suggests that assessment techniques should be designed as building bricks part of the intervention itself, rather than being additional, cumbersome operations.

6.4 Workflow and Tools

CoRA is enacted across four phases: Exploration, Design, Implementation and Evaluation. Each phase is designed to grow sequentially from progress to date, building on the results of the previous phases. The interdependence across phases allows the communication solution to *emerge* first as a vision aligned to local goals, and then as final product. The emphasis placed on *emergence* is one of the key concerns in CoRA.

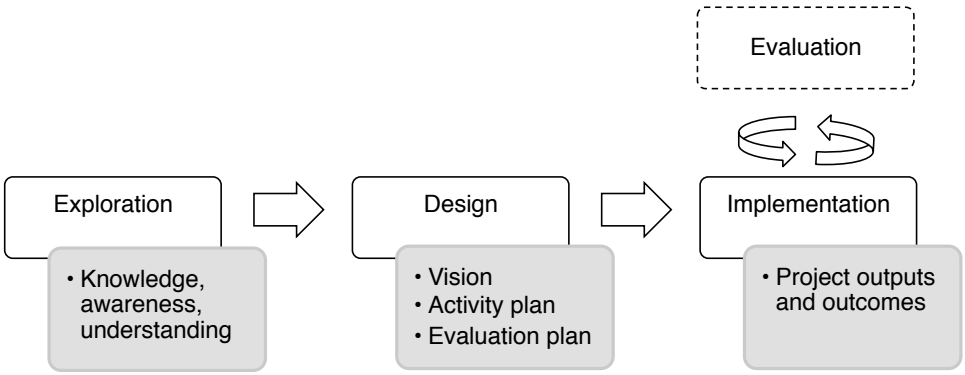

Figure 6.2. CoRA phases and results for each. Source: author.

Table 6.1. Aims, actions and results of the main phases in CoRA. Source: author.

Phase	Aim	Actions	Results
Exploration	Develop knowledge on local reality (1) & technological options (2).	Data generation (1); debriefing sessions (1); lectures, workshops, demos, discussions, hands-on experience (2); synthesis discussions (1, 2).	Structured knowledge on locale, technology & applied solutions. *Forms*: tangible (documentation), intangible (knowledge, awareness, understanding).
Design	Design and plan program activities and evaluation.	Data generation (eliciting data on design dimensions). Group discussions (debriefing; brainstorming; decision-making; envisioning).	Vision. Activity plan. Evaluation plan. *Forms*: tangible (documentation), intangible (understanding, awareness, agreement).
Implementation	Run program.	Program-dependent activities.	Outputs (products) Outcomes (e.g. knowledge, skills)
Evaluation	Align program course to vision.	Data generation, interpretation, validation/integration of revisions (program-dependent instruments)	Intermediary: revisions. Final: evaluation report.

Each phase produces results usable in subsequent phases (Fig. 6.2, Table 6.1):

1 'Exploration' produces awareness and knowledge of the match between local needs and communication technology solutions;
2 'Design' elicits a vision of the final communication product and the process of reaching it and an evaluation plan;
3 'Implementation' enacts the course of action planned, and results in the production of the communication solution; *and*
4 'Evaluation' runs in parallel with 'Implementation' and ensures that the course of action is aligned to the vision developed during 'Design'. The correspondence between the vision and the course of action can be as well dynamically adjusted. During the course of implementation it is expected that the vision will modify to account for local people's evolving perceptions and knowledge of technology in relation to their needs. The vision can be modified to integrate these changes upon consensus reached, while the evaluation plan will be adapted in response, enabling the process to be assessed based on the latest agreed parameters.

The results from each phase have a tangible and an intangible dimension. The intangible dimension refers to assets that participants have integrated such as knowledge and skills, or attributes of shared activities, such as oral agreements. Tangible outcomes include project documentation and tools such as schemes and pictorial representations usable in group discussions. Intangible assets are particularly important for the success of an initiative. The project vision, for instance, is an intangible output of great significance, it is the driving force for the entire course of action on virtue of its having been negotiated, agreed upon and shared among community members, so that they have an awareness and approval of it.

PHASE 1: Exploration

The aim during this phase is to develop the body of knowledge usable for informing the design of the initiative, and make local people and the interventionist team equal shareholders in this knowledge. The knowledge dimensions encompass the local reality, technological options, and applied solutions that match the two. The third dimension is not pre-defined, but emerging in an exchange process (Fig. 6.3).

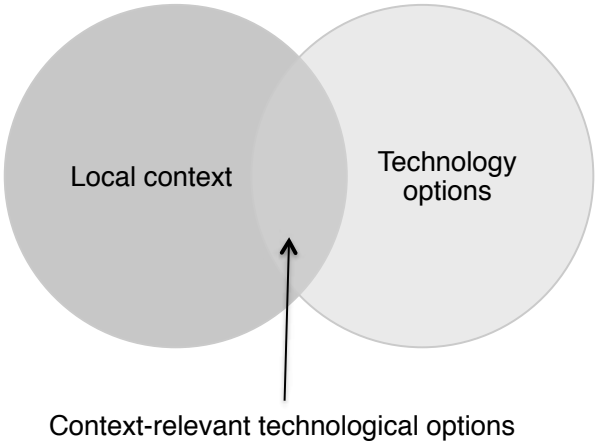

Figure 6.3. Relations among the three dimensions of knowledge pursued during the 'Exploration' phase. Source: author.

For each of the three dimensions, it is important to pinpoint the type of knowledge to be advanced by each agent involved in learning. It is useful in this respect to use the taxonomy in four types of knowledge advanced by some participatory research proponents (Heron, 1996; Heron and Reason, 1997; Reason, 1994). According to these participatory research theorists, knowledge goes from the experiential form, which is grounded in the agent's direct experience, up to presentational, propositional and practical forms. Each form builds on the one below, so that for instance propositional knowledge needs to rely on the presentational and experiential form for being effectively acquired. In applying CoRA, any of these forms

can be advanced, yet it is useful to take into account the conditioning imposed by the relations between the types of knowledge. Consideration should be given to how each form of knowing builds on top of each other in relation to background knowledge (already possessed by the learner) as well as desirable knowledge. For example, when a local participant has zero background knowledge on technology, it is assumed that her/his technological training should start from the experiential, and not directly from the propositional level.

Exploration tools

Specific tools can be employed for knowledge building on each of the three dimensions, categorized according to the agent that pursues knowledge building (Table 6.2).

Table 6.2. Examples of tools for exploration, organized by learning agent and knowledge dimension. Source: author.

		TOOLS BY KNOWLEDGE DIMENSION		
		Local context	**Technological options**	**Applied communication solutions**
LEARNING AGENTS	**Researcher**	Data generation (observation, focus groups, etc.)	-	*Program-dependent* (e.g. Content production demos)
	Local people	Cultural probes (collection)	Lectures, workshops, demos, hands-on activities	
	Shared	Debriefing sessions Cultural probes (sharing and discussion)	Debriefing sessions	

The local context can be explored through systematic data generation by researchers/interventionist team and local people. Data gathering techniques can vary and include both qualitative and quantitative measures. Akin to a participatory worldview, the data gathering tools that are particularly indicated include 1) those that stand by the principle of congruence (Heron, 1996; Heron and Reason, 1997; Reason, 1994) and 2) those that build on group discussion, negotiation of meaning, and sharing. In the first category are included tools such as participant observation and cultural probes. In the second, instruments such as focus groups and group discussions. In some instances, however, these tools might not be sufficient for getting an appropriate mapping of the locale or can be too

time-consuming for involving a sufficient number of members. In these cases, interviews, surveys, questionnaires can be useful, especially when factual data such as media usage profiles are required. When multiple data generation tools are used, it is suggested to employ a holistic gathering and interpretation strategy, such as that provided by ethnographic research. This research strategy allows a consistent mapping of the locale and joint interpretation of data coming from multiple sources, minimizing bias through repeated evidence.

The knowledge gathered in this phase, even if data generation was led by an outside team, should be shared and analysed with local people for two reasons: one is minimizing bias by making local people part of the interpretive process; the second is that local people themselves should develop a new, critical and distant understanding of their own living environment. Despite the fact that they are immersed in it in everyday life, the knowledge they possess is often implicit, enacted, and lacking conceptual understanding and critical distance. In a participatory worldview terminology, people have experiential knowledge but may lack propositional knowledge of their living context. By sharing the results of exploration with local people, important aspects may emerge which can become foundational assets in the subsequent phases of the initiative: real needs and goals are likely to emerge and be acknowledged from this process.

Knowledge on *technological options* can be imparted through lectures, workshops, demos, or hands-on activities. The scope and breadth of these sessions will depend on the goals that a project has set and the resources available. Pursuing education and digital literacy for members, or building toward a sustainable communication solution, are goals which require more ample and deep knowledge to be acquired, and therefore more extensive educational sessions. Small initiatives with reduced resources can devise sessions limited to the bare minimum necessary for enabling local people to get needed information before engaging in the formulation of communication solutions. In either case, the tools should be devised in conjunction with the relations among knowing forms and the background knowledge of participants. For instance, hands-on sessions are likely to facilitate experiential knowledge acquisition which can then be used as basis for the development of propositional knowledge, amplified in further lectures and workshops.

Communication solutions are devised for discussing possible technological options in relation to the needs and possibilities of the locale. These sessions build on the results of the preceding ones. Their effectiveness depends on whether the previous activities have been documented with care, interpreted adequately, and shared, so that communication solutions may *emerge*. To facilitate the emergence of solutions, it is advisable to organize round tables and discussions where the agenda includes a debriefing of quintessential results from previous activities as foundation for negotiation and discussion. The use of schemes,

graphics, audio-visual materials and pictorial representations are likely to facilitate greater understanding and envisioning of solutions, especially when illiterate or digitally illiterate people are involved.

The *results* from the 'Exploration' phase are both tangible and intangible. Tangible outcomes can include documents, diagrams, and pictorial representations as thought relevant and depending on the target for this documentation. It is advisable that, depending on the literacy level of participants, reports are also drafted in accessible forms, so that they can remain in the community as one of the first program outputs. What is deemed to be truly important is the manner of developing and sharing these tangible outcomes so that on the one hand they facilitate understanding, and on the other they offer a basis for sound decision-making in the next phase. Intangible outcomes include the awareness, knowledge and understanding developed by participants on each of the three knowledge dimensions – local context, technological options and applied solutions.

PHASE 2: Design

Based on the knowledge gathered in the previous phase, during the design phase clear goals for the project are set, a vision of the pursuable outputs and outcomes is developed, and a course of action for reaching them is convened. Lastly, indicators, instruments and protocols for evaluation are developed based on the operationalization of the vision.

Design flow

One effective way of sequencing these actions goes through:

1 Goals definition
2 Envisioning
3 Planning activities
4 Planning evaluation.

1 Goals definition

In a first stage, agreement needs to be reached on one or a series of key goals that the program will set out to achieve. The goals indicate long-term achievements that appropriately meet the community communication needs and priorities as identified during the exploration phase. They will be rendered more specific in the next design stages through the definition of measurable outputs, outcomes and long-term impacts. Examples of comprehensive program goals are: enhance community visibility in the regional media landscape, facilitate citizens' constant communication with authorities, support intra-community networking, mediate communication between minority groups in distant

geographical areas.

The designation of goals is best pursued in group meetings. These meetings can have a debriefing, a brainstorming, a decision-making, and an envisioning component. Debriefing includes a summary of community communication needs and an overview of possible technological solutions as emerging from the exploration phase. Brainstorming is necessary when clear goals that meet consensus do not emerge already from the discussions focused on the communication solutions. In this case people can be solicited to come up with ideas, or to elaborate on already emerged ideas. The decision-making process will differ depending on the type of relations and hierarchies cherished in the setting where the initiative is conducted. The important thing is to reach collective consensus over a single goal or a series of related and complementary goals, based on which the envisioning practice can further build.

The experience of the present study was that goals are likely to emerge already from the last stages of the exploration phase, when the array of relevant communication solutions are discussed. If this is the case, the purpose of group meetings is to formulate already emerged goals in a clear and understandable manner and obtain consensus.

2 Envisioning

The process of envisioning refers to modelling available data gathered so far in synthetic and illustrative depictions of the outputs, outcomes and impacts that the project will produce, in full consideration of the efforts required for achieving them. The main result of this process is a vision of the achievable project ends. While some studies tend to illustrate the project vision in terms of an ideal, purposefully high standard rather than an achievable end (e.g. Dick, 1998), in CoRA the vision stands for a realistic, comprehensive, and consistent depiction of what the project is set to achieve and the benefits that the community will derive herein. The vision includes a description of:

- *Program outputs:* These refer to the concrete results attained by the program that can be tangible artefacts (e.g. a community wiki, a website, a digital archive), or other measurable project targets (e.g. number of community members trained, audience reached by targeted communication campaigns). If a program envisages the development of *sustainable* communication solutions (e.g. digital archive, community website), the conditions to be met for supporting their community-led management after project end should be clearly stipulated.
- *Short-term outcomes*: These encompass the benefits derived by community members through program participation, for instance knowledge and skills acquired, or attitude and behaviour change.
- *Long-term impacts* are desired effects meeting the higher-level goals of a program,

for instance higher visibility of the community in regional media, heightened level of local initiative, greater socio-political participation at local and regional level.

The elements of the vision are declined from the main goals served by the program, seeking to ensure an optimum balance between on the one hand community communication needs and goals, and on the other the practical possibilities offered in the frame of the project and the determination of contextual conditions. Vision statements may be very concise, yet very rich in information. Their conciseness is the main advantage, as they can easily be used as reference points, landmarks to which people may refer for understanding at a glance the purpose of a project and the benefits carried with it. The strength of these very short statements becomes more readily evident when they are used for developing indicators and protocols for evaluation. In doing so, their capacity to condense rich information is rendered clear by the very precise evaluation indicators and protocols that can be derived therein.

The strength of a vision lies, moreover, in the *process* by which it is produced. Envisioning is not a one-shot activity. If performed effectively, it is likely it will require several rounds of discussion, negotiation, and decision-making. The more community members are involved in this process, the more they are prone to develop a realistic understanding of program practicalities, its potential achievements and how in the long run it will serve the community. Importantly, envisioning should also make participants aware of the efforts commensurate to the intended results, it should foster an understanding of the link between activities and outcomes in the frame of the project.

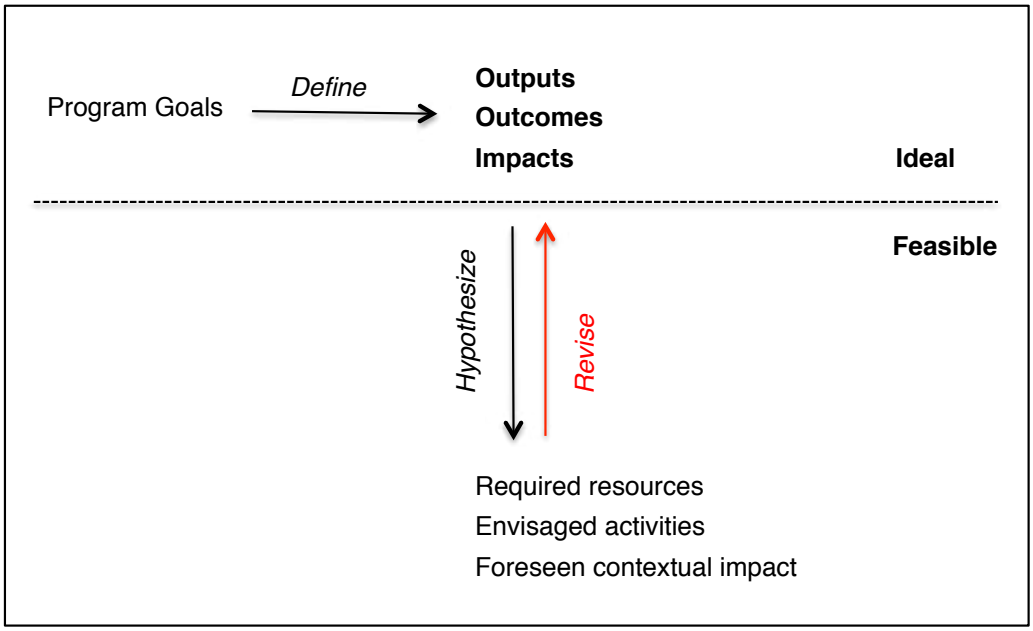

Figure 6.4. Suggested envisioning progress flow, focused on achieving balance between ideal and feasibility. Source: author.

The suggested envisioning flow in CoRA is meant to facilitate this understanding by gradually refining desired effects against consideration of project resources, activities and environmental conditions (Fig. 6.4):

1 Outputs, outcomes, and impacts are defined in an idealistic way from the program goals, aiming to remain as close as possible to community long-term cherished needs and goals.
2 A sketch is done of resources and activities required to attain to these, and a prognosis of how contextual conditions may favour or slow down this process.
3 Outputs, outcomes and impacts are revised based on these considerations.
4 The cycle is repeated until a match between project desired effects and resources and activities needed to accomplish them is reached.

While this process can be quite lengthy, its advantage stands in the potential it has in equipping local members with awareness of program outcomes vs. required resources and activities, and cultivating shared understandings.

The development of the vision can be aided by precise questions about the desired program effects (examples of questions are provided in Table 6.3).

Table 6.3. Examples of questions to be asked for defining the vision. Source: author.

Outputs	What communication artefacts will be produced? What are their main features? Who will be using them? Who will be targeted by them? What other supporting materials will be produced? With what features? How many? What other targets does the project involve? (e.g. people training, audience reach, communication with authorities)? What measurable effects are sought for each?
Short-term outcomes	How will participants benefit from the project? (e.g. knowledge and skills acquisition, attitude change) Are there special groups targeted (e.g. women, children)?
Outputs beyond project end (sustainability)	Does the project envisage the development of a sustainable communication solution? Who will handle the communication artefacts on project end? What types of assets are necessary for managing them? What other conditions need to be met for ensuring community management?
Long-term impacts	What benefits is the community likely to reap in the long run? What will change for the better and how in the community?

3 Planning activities

After a suitable vision has been developed, a detailed plan of action is conceived. The plan should include:

- An allocation of the resources in relation to people's participation;
- Types of activities and their sequencing; and
- Landmarks for intermediary achievements.

The planning sessions are best done collectively, with the involvement of opinion makers or community leaders and can include debriefing, proposals, decision-making, and planning components. The resulting plans should be circulated with the members involved in accessible and easily understandable forms.

4 Planning evaluation

In the last 'Design' stage the indicators, instruments and protocols for evaluation are developed. In CoRA, evaluation serves exclusively for ensuring program alignment to the vision.

The key question that drives measurement is:

> *To what extent on-going activities are building up towards the fulfilment of the project vision?*

The goal is to identify the activities that contribute poorly to attaining to the vision and proceed to their revision. Evaluation planning goes through the definition of:

1. Assessment indicators;
2. Data generation instruments and protocols;
3. Data interpretation instruments and protocols; *and*
4. Tools for validation and integration of change.

Assessment indicators fall in two broad categories:

- Those operationalized from the elements of the vision, therefore the envisaged outputs, outcomes and impacts; *and*
- Those declined from the process, i.e. the program activities.

The indicators derived from the vision stand for measures of accomplishment of outputs and outcomes at given moments in time during the program course. They can be organized in areas or dimensions depending on specific program targets. By way of example, program *outputs* can be operationalized in 1) quality measures for the communication artefacts to be developed, 2) targets for the outreach of communication activities. Program outcomes can be categorized in specific areas such as education and literacy, social development,

infrastructural development, individual growth and development, etc. *The process indicators* are measures of processual dimensions identified on virtue of their role in sustaining progress toward the vision. For instance, they can be measures of engagement, participation, coordination, and effectiveness of communication flows. Both vision-derived and process indicators can be declined in qualitative and quantitative measures and should take into account if the unit of analysis is the individual, a small group, the collectivity, or the activity.

The development of instruments and protocols for data generation, interpretation, and validation/integration of change should take into account a series of considerations:

- Assessment needs to produce precise data, and yet happen very fast, so that corrective measures are taken in due time.
- Overload of participants through too much solicitation as data providers or collectors should be avoided.
- Multiple opinions, voices and perspectives are essential, yet need to be decanted with a view to consensus reaching in a short time.

The first two aspects are best met if instruments for data gathering and for validation/integration of change are designed in association with the regular activities conducted throughout the course of implementation. For instance, for a content production experience they can be integrated in content screening, collective discussion, and progress overview sessions. Examples of data gathering instruments that can be easily aligned to intervention activities are: participant observation, conversational interviews or focus groups. The instruments for the validation and integration of change should take into account the figures with decisional power in the community. They can be organized with the participation of community leaders and representatives, and be layered on three main activities: proposal for revisions, discussion, and decision-making.

An important aspect regards the approach to be taken to assigning roles and the balance between investigators and local people involvement in evaluation, between two poles: a participatory approach, and a community consultation approach. *A participatory approach* implies that people are involved as partners in all phases of the evaluation, spanning data gathering, interpretation, and validation/integration of revisions. This approach has the benefit of providing more accurate and community-relevant data, and moreover it can yield benefits for members with respect to the development of critical thinking, reflexive capacities and increased self-confidence and sense of ownership of the program. This approach requires however the investment of time and resources in people training, which can be particularly high if the program involves a community with low literacy. It is likely that this will pay off if a project has set out specifically to meet goals related to social change, increased self-confidence and community education. Moreover, critical outlooks and reflexive abilities

are cultivated, growing incrementally towards faster and more precise assessment during the course of the initiative. If *a community consultation approach* is taken, the evaluation workload is handled by the investigators and the community is consulted and involved in key decision-making points. Data gathering and interpretation will be done by the researcher/interventionist team. This control over data interpretation is compensated if the sessions for the validation and integration of change are done collectively asking for consensus from local people.

Design tools

A particularly effective tool for program and evaluation design is the logic model. A logic model is a representation of how a program might work under given conditions for advancing solutions to identified problems (Bickman, 1987, McLaughlin and Jordan, 1999, 2004). Logic models can serve to plan a program or evaluation, organize data gathering, and interpret results by providing a framework in which the elements of a program, the causal relationships established among these, and contextual impacts may be understood (McLaughlin and Jordan, 2004). The process of creating a logic program can be particularly effective for allowing members to understand how a program functions (Patton, 2002: 163), and develop shared understandings and anticipation of program results (McLaughlin and Jordan, 1999, 2004).

There are several variations of the logic model, some going by different names, such as “theory of change” (Patton, 1997, 2002) or “performance framework” (Montague, 1997). Each of these provides different interpretations of the relations among the inputs, activities, and outputs of a program. In the CoRA evaluation framework, the logic model has been firstly devised as a tool for communicating to community members how a program functions, the relations established between program resources, processes and results, and allowing them to get a first-hand comprehension of the efforts required to reach out to expected results. Second, emphasis is placed on the process of elaborating a logic model through group discussions, negotiation and collective decision-making as a tool for building consensus and a pool of shared understandings.

The logic model used in CoRA is based on an interpretation of a basic model which links program inputs to its activities and processes, outputs, immediate outcomes and long-term impacts (Patton, 2002: 162). To these CoRA adds contextual conditions, considered to be of particular importance in community-based work. Drawing on Harrell et al. (1996), contextual factors that can impact on a program can be antecedent (pre-existent to the program, such as characteristics of community members, regional policies, economic conditions) and mediating (factors that appear during the course of program implementation, such as new policies or structural changes in community leadership).

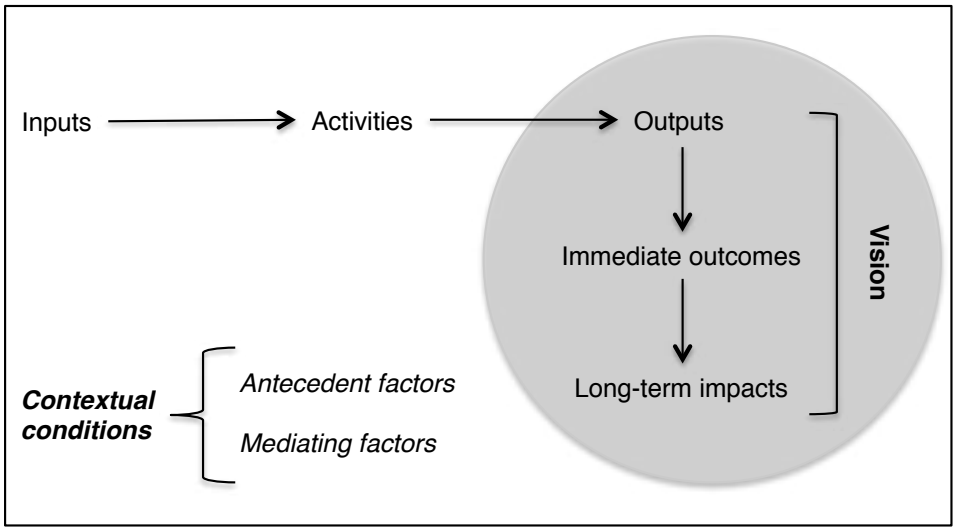

Figure 6.5. The logic model used in the CoRA program and evaluation design. Source: author (drawing on the causal model in Patton, 2002, and insights by Harrell et al., 1996, interpreted in the light of the CoRA vision-focused methodological approach).

As depicted in Fig. 6.5, the logic model is centred on the causal relationships among five elements: inputs are used in program activities which generate three types of results: outputs, immediate outcomes, and long-term impacts. This process is influenced by contextual conditions, some preceding the initiative (antecedent factors) and some emerged during its course (mediating factors). The inputs are the resources used in a program, such as the people involved, financial resources, technical and logistical equipment. Activities encompass all the processes included in a program, for instance people training or content generation. The outputs are the concrete results attained by the program, including tangible artefacts (e.g. a community wiki, a website), or other measurable program results (e.g. number of community members trained). The immediate outcomes are intangible program effects, and can include positive changes in participants' level of knowledge and skills, or attitude and behaviour change. Long-term impacts meet the primary goals of a program and are achievable some time after the project end, for instance higher visibility of the community in regional media, better relation with neighbouring populations, greater socio-political participation at local and regional level.

Contextual conditions (Harrell et al., 1996) include factors to take into account at the start and during the project flow. Antecedent factors include phenomena and processes that existed before the project start, and are identified as potential sources of influence on the project flow and results. They include community characteristics (e.g. low digital literacy, patriarchal social organisation), economic conditions (e.g. poverty, high disparities poor-rich), and socio-political factors (e.g. national and regional policies). Mediating factors materialize

during the implementation of an initiative and can have an impact upon its course. They can include any change at the level of community characteristics (e.g. change in community leadership), economic conditions (e.g. economic crisis) or socio-political factors (e.g. new laws or policies).

The logic model can be used for program design and evaluation. It can be employed at the very beginning, during the sessions concerned with the definition of primary program goals, or during the envisioning sessions. This tool can prove very effective when planning evaluation, as it drives the attention to the relations established among program activities and desired results and can therefore inform the definition of indicators.

PHASE 3: Implementation

The program implementation proceeds according to the planning done in the previous phase, and is constantly adapted and refined through on-going evaluation. The exact workflow during this phase is dependent on the type of program run. Irrespective of the exact activities, evaluation is run all throughout, following the metrics developed during the design phase.

PHASE 4: Evaluation

The primary purpose of evaluation in CoRA is to ensure constant alignment of the program to the local context. It dwells on a continuous scrutiny of the context as it evolves during the implementation of an intervention, the selection of the appropriate data, its interpretation, the identification of eventual change needed, its collective validation, and its integration in the redesign of the experience. The main steps in this cyclic pattern are conceived as open points for critical revision, discussion, deconstruction and reconstruction of the process through the direct participation of the community members, around four key moments:

1. *Critical input generation:* Through observation, discussion and reflection members take distance, see the process and intermediary results with a critical eye, and generate critical input.
2. *Proposal for change:* Specific proposals for change/revision/redesign are formulated.
3. *Validation:* Collective consent for the revision is sought.
4. *Integration:* Upon agreement reached, the input is integrated in the revision of the course of action.

This process is supported by an evaluation model, defined as a tool that has as basic role to offer a framework and sustained guidance in conducting assessment (Patton, 2002: 169).

The distinctive features of the CoRA evaluation model are:

1 *Focused orientation toward program redesign.* The evaluation model is used strictly for monitoring, and does not mix or overlap with summative evaluation. The definition of the techniques and protocols for assessment is twinned with that of the protocols for validation and integration of change.
2 *Vision-focused.* The project vision is operationalized into evaluation indicators and directs as well the definition of the data generation tools and protocols. This allows versatility in the employ of the model, switching between a focus on monitoring the process (e.g. for degree of participation) and intermediary outcomes (e.g. learning levels) according to the priorities each program has set and incorporated in the vision.
3 *Dynamic reference point.* The project vision is the main reference point to which the evaluation dimensions adhere. The evaluation model integrates as well a mechanism for re-configuring dynamically the vision as main reference point and allowing it to evolve in accordance with people's eventual change in goals, understandings, and priorities. The relation between the evaluation model and the project vision can therefore be described in terms of reciprocal conditioning and dynamic evolution.
4 *Blending in program regular activities.* The main actions in the evaluation apparatus are linked with key activities in the initiative. This relieves the burden of a heavy evaluation package with its separate and time-consuming activities.
5 *Dialogicity.* The entire evaluation apparatus is used as a deconstruction tool, a systematic approach to critically assessing the process as it unfolds based on a continuous dialogue among researchers and local people.
6 *Reflexivity.* Evaluation rests on and encourages reflection in participants. Assessment is based on critical observation and reflection on the unfolding process. Reflection is not only a means for retrieving evaluation data, but also instrumental to fostering critical thinking and interpretive and reflexive qualities in participants.

Evaluation is designed, instrumented and run along two main stages: planning and application (Fig. 6.6).

The planning takes place during the design phase (as described above) and results in a definition of:

1 Assessment indicators
2 Data generation instruments and protocols
3 Data interpretation protocols
4 Tools for validation and integration of change

The application is based on a cyclical pattern running all throughout the program implementation course, with the following iterative steps around the main *Action* component (the actual program activities):

1 Data generation
2 Data interpretation in terms of indicators performance
3 Proposal for change
4 Validation of proposal for change
5 Integration of proposal for change.

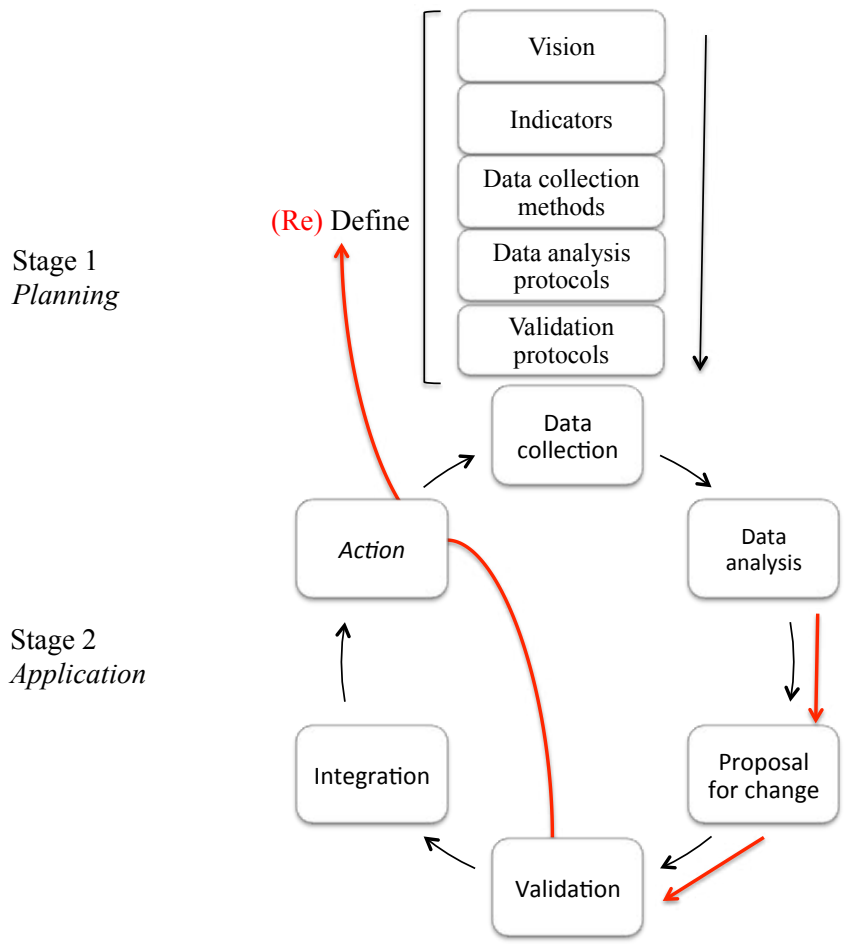

Figure 6.6. The evaluation model in CoRA. Source: author.

This cycle ensures that a program runs in accordance with the vision defined during the design phase. Yet, based on the knowledge building process undergone by researchers and local people alike, this very vision might have to be redefined. To allow space for change, an

alternative cycle can be taken (in red colour in Fig. 6.6):

1 Data analysis: identification of change needed to vision/indicators of success
2 Proposal for change of vision/indicators
3 Validation of proposal for change
4 Redefinition of vision and associated indicators for success, down to methods for data generation and validation (Stage 1 of the process).

6.5 Strategic Outcomes in Employing CoRA

The workflow described can be rendered more specific through the formulation of strategic directions that a program may take, in accordance with the meta-goals it serves. By way of example, if a project pursues heightened digital literacy as prime goal, priority will be given to people training, while the vision and indicators for performance measurement will be aligned to meet higher digital literacy as the most significant outcome. If a project sets out to produce quality communicative artefacts, on the other hand, product quality will become the key determinant, and will be used as standard in defining specific objectives and the project vision down to elements of the evaluation plan.

Three grand types of outcomes that an initiative may pursue are treated in this section: enhancing social change, fostering education/digital literacy, and quality product development. Based on these goals, key strategic directions can be formulated and modelled on the elements in each program phase (table 6.4):

1 Type and degree of knowledge pursued in the Exploration phase;
2 The project vision during Design;
3 Activity types during Implementation; and
4 Indicators and protocols for Evaluation.

These strategic outcomes do not cover the entire range of possibilities that a CoRA-fuelled program may pursue. They have been selected as examples for showing how the key elements highlighted by CoRA will be influenced by the weigh of a particular program meta-goal. The bottom line in employing a strategic direction is to ensure consistency between these elements by aligning them to the goal.

A second observation is that in any program the goals pertaining to tangential - though not central - directions will be attained to some extent. For projects targeting social change, still a representative and qualitative communicative artefact may be built, for instance. However, by pursuing one specific strategic direction the project will be aligned to its dimensions and attain to its associated objectives with greater accuracy.

Table 6.4. Orientation of key elements in each CoRA phase according to three possible strategic outcomes. Source: author.

		Strategic outcome		
		Social change	**Education/digital literacy**	**Product development**
Phase	**Element**			
Exploration	*Knowledge*	Self-awareness, critical thinking, heightened self-efficacy, reflective capacities	Applied usable knowledge on learning dimensions (abstract, hands-on)	Structured usable knowledge on communication solution
Design	*Vision (oriented towards)*	Targeted social change elements	Targeted learning assets	Product quality elements
Implementation	*Activity types*	Technology as tool for reflection/social action	Technology mastery	Technology as product development tool
Evaluation	*Indicators (modelled on)*	Social change dimensions	Learning dimensions	Product quality dimensions
	Protocols (modelled on)	Assessment as critical outlook Local participation	Self-, peer-assessment, and investigator assessment	Critical examination of emerging artefact

Strategic outcome #1: Fostering social change

Certain programs may use communication technology as means for fostering social change, for instance directed toward empowerment, emancipation, and heightened local initiative. Some programs may target a specific local group, for instance youth or local women. Strategic elements in each program phase will be modelled to serve this main goal, as follows:

In 'Exploration', *knowledge* becomes the means to equip participants with reflective abilities, accrued self-efficacy, or critical thinking qualities, aligned to the specific meta-goals of a program. To make this possible, knowledge acquisition sessions should be supplemented by active sharing and discussion and encourage reflection in participants.

The *vision* defined during 'Design' should put emphasis on the intangible assets that people will acquire through the project and how the communication solution envisaged is likely to

serve social change purposes in the long run. Importantly, a program can only give a direction or at most a foundation on which social change can further build by devising other community activities. The vision for the project should be supplemented by a vision of how things will develop beyond project end. For instance, how will the communication program, campaign or artefact developed continue to be used and serve social change goals in the long run? What other activities can be devised for building toward positive social change after project completion?

The *types of activities* proposed during 'Implementation' are significant, since in this strategic direction the process becomes just as or even more important than the results. Technology becomes a tool for fostering reflection and social action. Any type of technology-based creative activities should be supplemented by discussion, sharing, and reflection sessions.

A participatory approach to evaluation should be taken in this strategic direction. The evaluation protocols should be devised as spots for critical reflection with the involvement of community members. The process of tracking the efficacy of the program is an occasion for people to cultivate critical thinking and reflective capacities, rather than a mere end in itself.

Strategic outcome #2: Fostering education and digital literacy

By concentrating on a specific end artefact to conceive and develop people can develop digital literacy by giving a direction and focus to their training. The development of applied skills is favoured, and so is the capacity to contextualize technology usage and apply it to members' personal and collective needs.

A program aiming to foster learning and digital literacy in local participants will be centred on *training* as main strategy from the beginning of the process. The goal is to enable people to master technology usage. The design and production of the technological solution become instrumental to learning. The entire program is a focused training bed in which hands-on, experiential learning is fostered through the development of a concrete artefact. Through the 'Exploration' phase the learning dimensions should be clearly outlined, and learning activities devised with a view to the knowledge and skills that people should acquire. The project vision will be centred on the desirable learning outcomes, from the operationalization of which the evaluation indicators will be derived. With respect to evaluation tools and protocols, these can blend assessment by external experts with peer- and self-assessment.

Strategic outcome #3: Quality product development

Some programs may be focused univocally on assisting a local community to build a quality product that adequately serves their needs. The quality of the final artefact becomes the landmark for the success of the program. Starting from the exploration phase, the

dimensions of ‘quality’ should be pinpointed and outlined from a local viewpoint: a qualitative product is the one that apart from technical and content adequacy manages to represent appropriately community views. Quality is defined in terms of the value assigned by the people from their own perspective and according to the significance they attach to the assessed phenomenon (Patton, 2002: 147). The *knowledge* developed during the first phase should be centred on properly relating local needs and goals with technology options, so that the most relevant communication solution can emerge. The vision of the final outcome should put emphasis on the product features in relation to community goals: What features should the final artefact have so that community goals are adequately fulfilled? What benefits will the community derive from the product? Will they come from its being used internally? From visibility or fostering connections with the outside? What are the key quality dimensions, taking into account all these elements?

In this strategic direction, evaluation tools and protocols may be best devised and run by agents with expertise. If a participatory approach to evaluation is taken, enough time and resources should be allocated to the training of local people to make certain their inputs serve to build a quality end product. Alternatively, trained investigators can take the lead in the data gathering and interpretation process, while consulting with community members for the discussion and approval of suggested revisions. The indicators for evaluation will be operationalized from quality attributes for the artefact and the process leading to it. It should be noted that the product is not assessed only at the end. It is likely that parts of the communication product are developed gradually. In this case, these parts should be identified, listed, and parameters should be defined in relation to these. For instance, in the second field study of this research project, the adequacy of the content produced was evaluated against the vision all throughout the content production and website design process. The indicators developed from the parameters (in the areas of: *content quality, adequacy for publishing, content coverage)*, were used to mark advancement in the production of usable content, and signal whether the content produced was not relevant.

Importantly, if *sustainable* product development is pursued, then this strategic direction needs to be blended with elements from the preceding one, focused on education and digital literacy. For enabling people to continue to use the artefact they developed beyond project end, education and training should become secondary targets pursued alongside product quality assurance.

6.6 Transferability and Limitations

6.6.1 Transferability

CoRA stems from work conducted with and for minority groups, however its transferability scope was not pre-defined, but allowed to emerge during the grounded investigation. The application of GTM allowed to identify community contextual features most likely to relate with or impact upon intervention design sequence and choices (see also section 3.4.2 of the monograph). CoRA is particularly adapt for communities sharing the following features:

- Having a unique cultural system;
- Living in a shared geographical space and manifesting strong internal bonds (the ideal type being Tönnies' Gemeinschaft type, see Tönnies, 2002);
- Having low levels of literacy and digital literacy; *and*
- Characterized by social or physical isolation.

The manner of implementing CoRA can be influenced by further contextual features:

- The degree of openness of the community is likely to impact on the probability of gaining entrance and establishing trustful reports with members.
- In communities with highly hierarchical social structures based on patriarchal models attention should be paid to the design and running of participatory sessions, especially those involving decision-making.

With respect to the outputs and outcomes it may deliver, the usage of CoRA is not restricted to product design, but takes a broader perspective to how digital and networked media can bring benefits to groups that are cut off from participation in the information society. CoRA can be applied for developing communication strategies, as well as digital artefacts and content. The outputs that can result from applying CoRA in a given context range from complex digital communication programs for broad outreach (e.g. a website and a social media communication campaign) to content production, conservation and archiving for internal community use (e.g. a digital archive for audio-visual contents) to intra-community communication products. Apart from these, CoRA can be employed as well for generating intangible outcomes that can range from educational assets to increased capacity for collective action, awareness of collective and personal strengths, ability to communicate effectively with local administration and political bodies, to heightened sense of local initiative.

6.6.2 Limitations

Limits and conditions of transferability

Firstly, CoRA has been designed as a flexible framework for communication interventions, rather than a recipe. This feature is both a quality and a limitation. Due to its flexible design, it can be modelled on the specific requirements a local context raises, but at the same time it requires skill and wisdom for being successfully implemented in practice.

Second, as a condition rather than a limitation, CoRA addresses a certain type of program, based on partnerships between research or interventionist teams and local community members. It requires the expertise of a skilled team of researchers and/or practitioners to work in practice. The entire vision on which CoRA is based draws on conceptualizing the best ways of making the exchanges fuelled by these partnerships effective.

A third limitation is time. CoRA is adequate for long-term partnerships with local communities. Since it requires people's participation, to be effective it implies that enough time is dedicated, especially to the first, preparatory phase. In CoRA, the exploration phase is not only a means for gaining knowledge and information for serving the intervention design. The main focus in this phase is rather on the capacities and understandings that agents are likely to derive from this process. The success of the project will not mechanically draw on eliciting and employing the right information and devising the right design choices, but rather on the interplay between agents, driven by the understandings and insights that they have acquired during the incipient project stages. The exploration phase should therefore be given importance and sufficient time to yield results.

A fourth limitation, which can be assigned to future research work, is that CoRA does not come with a formal summative evaluation framework. The evaluation in CoRA serves project revision purposes. The final evaluation report can give insights in the success of the experience, however based on a series of dedicated elements with a focus on assessing the *process.* A summative evaluation report may give a completely different picture of the success of the initiative. The current evaluation apparatus can be used as starting point for devising summative evaluation, yet this should be done attentively with respect to the choice of indicators and the conception of protocols. Evaluation in CoRA was designed to happen fast, be analysed fast, and yield results prone to be integrated on the run in the project design. Summative evaluation may find indicators in the CoRA evaluation model partially unusable. For making summative evaluation an effective means of digging into the overall success of an initiative, the design of new indicators and protocols might be advisable.

Limits of evaluation as tool for context-responsiveness

The use of evaluation as a mechanism for context-responsiveness carries a series of challenges and limits, some shared as well by other action research and developmental evaluation approaches (e.g. Patton, 2011). Five challenges and means devised for meeting them are discussed below.

1 Coping with change

Evaluation serves in an evolving environment, and directly contributes to this dynamism and evolution. The development of parameters and indicators of success might change as the two parties create their shared spaces of meaning, make their assumptions explicit and create and share new understandings. One way to meet this challenge is to take steps towards redefining the vision and the indicators for success (Figure 6.6, red-coloured cycle). Yet the complexity of the evolution of meanings, understandings and associated goals throughout an experience might not be so easily captured. One other way to meet this challenge is to create open spaces for discussion and reflection, where people are free to share their experiences and thoughts without being constrained by fixed dimensions of inquiry. If people develop a sound vision of where they want to carry the process, these insights and contributions can become important data to take into account for giving the right direction to the process.

2 Complexity of the data generation and interpretation apparatus

Evaluation in CoRA serves a unique purpose, that of supporting constant and relevant redesign. Yet the processes that it needs to track are highly complex, and require in turns sophisticated assessment protocols for ensuring relevant feedback. One step to meet this challenge is taken by integrating the evaluation sessions in the regular program activities. Apart from reducing complexity, this serves as well for capitalizing on the role played by analytical, critical, and reflective processes during a communication intervention.

3 Control of the interpretive process – knowledge & power issues

The evaluation activities most charged with power and control are also those that require most knowledge for being handled: the definition of indicators, data generation, and data interpretation. How much control and ownership can a community have in these processes depends on the capacity of an initiative to provide the know-how pre-requisites, and hence proper training in evaluation techniques in relation to the program. In the field studies of this research project, for instance, proper training of participants could not be performed, and the processes that required knowledge of evaluation and program design were handled by myself. The view taken in CoRA is that the design of evaluation in relation to people participation should treat separately two issues:

- The goal to produce accurate evaluation data; *and*
- The educational goal that evaluation can serve.

The first goal can be met even when investigators lead the interpretive process, as other means for downsizing possible bias can be devised. For instance, bias is counteracted during the validation sessions, where integration of change needs to meet collective community consensus. While for the second issue, if an initiative sets precise educational goals for local people, then implications are much more far-reaching. Evaluation becomes a tool for enhancing reflexive and critical thinking capacities in people, and their participation should be accommodated after due training. The potential of a program to support education needs to be assessed in relation to the resources available for supporting training.

4 Relevance and soundness of community feedback

An aspect that can be easily bypassed regards the assumption that community participation is easily translated into success. In practice, this link is mediated by *knowledge*. Once people have developed a sound understanding of what objectives to reach and what it takes to reach them, there is a higher probability for relevant input. This aspect relates again to the educational valence of the process, but on different dimensions: relevant feedback is not conditioned by knowledge of evaluation design, but depends rather on awareness of the way program activities are related to final outcomes and outputs formulated in the vision. This is one of the reasons for emphasizing the 'Envisioning' dimension in CoRA as a pre-requisite for running program activities: by envisioning people do not only understand what they will achieve and how this will benefit them, but also how their concerted efforts relate to the envisioned results.

5 Rigor and reliability

Evaluation in CoRA has been designed with a view to action, based on active monitoring of the initiative being run. This concern with rapid appraisal and feeding into action might limit the vision and impede the identification of other dimensions of importance for the overall assessment of the initiative. Patton (2011) lists some methodological constraints associated to complexity-sensitive developmental evaluation in comparison with traditional evaluation models: methodological flexibility, eclecticism, and adaptability vs. methodological competence and commitment to rigor. These differences should be read in association with the purpose an evaluation model serves. One observation is that it is important to keep to the coherence and consistence of the evaluation model for the specific purpose it has been designed for. The overall assessment of an initiative implemented with CoRA, for instance, will best be done by designing a different model for the summative evaluation, down to the design of the data generation and interpretation techniques.

6.7 Conclusion

This chapter expounded one of the scientific outcomes of this study, a methodological framework for communication interventions in minority contexts, or with low literate, marginalised or isolated groups. CoRA was conceived as a tool for allowing such communities to take advantage of the possibilities opened up by new information and communication technologies in full respect of their local specificity and tradition. It advocates the blend between the knowledge and expertise of an interventionist team and the local knowledge of a community's members for producing communication solutions that answer appropriately to local needs and goals. The main concern in CoRA is with aligning ICTs to the locale, and not the other way around. This concern is contained in the concept of 'context-responsiveness', or the capacity of an initiative to be constantly aligned to the local context of implementation. Responsiveness is instantiated in a dynamic environment, in which the locale changes and grows as local people develop more precise understandings of their own needs in relation to the opportunities afforded by technology. CoRA provides the mechanism that one the one hand triggers growth and knowledge building, and on the other ensures that a program is constantly aligned to it, by centring all program activities on three action components: learning, envisioning, and alignment. Further, CoRA suggests a particular workflow for instantiating these three components, across four steps going through initial exploration, design, and implementation coupled with evaluation. Associated tools are recommended for each phase (e.g. a customized logic model for the 'Design' phase).

7 A Web Design Format[8]

7.1 Synopsis

This chapter presents the second research contribution, a design-implementation format for minority web communication based on the common template for the two community websites designed and produced as part of the study. As different from CoRA, whose strength dwells on adaptability to context, this contribution provides a fixed template that can be applied as such.

The format includes a design solution, which can be supported by several website management systems, and a suggested technical implementation solution. The web design format is described across an outline of content types, information architecture, and page types, accompanied by a proposal for page layout and graphical design. Its distinctive feature resides in the way it highlights voice and orality by giving a central place to community stories presented in video or audio format. This design solution is however not meant to present a one-sided reflection of a minority community in native, indigenous terms. As dictated by the requirements defined by local people, the format was devised as a communication bridge to the majority culture. It therefore attempts to present local facts, values and concerns in a way that is understandable and digestible by a wide audience. This metaphor of the bridge, seeking to express the genuine in digestible and understandable ways, is declined in two design features:

- The information architecture reflects the core traditions, concerns and values that the community desired to set to the forefront. This reflection of native specificity is made understandable for a wide public by employing traditional web design taxonomies based on categories and tags, and is therefore highly structured responding to the needs of regular Internet users.
- Community voices are given primacy by presenting people's accounts in a direct way, through videos and audios, and contextualized by photographs of local settings and people. At the same time, to favour easy browsing each audio or video content has a downloadable transcript. Also, a layer of interpretive content, which sums up people's views and concerns from an external viewpoint, surrounds the main knots in the information architecture, aiming to provide a quick overview of themes and subjects for a fast browser.

[8] Early versions of fragments in this chapter were published in Sabiescu et al. (2012).

The recommended technological solution to support this format is the Drupal content management system. The customization of the design format for Drupal is described, focusing on the definition of content types.

Further, the chapter illustrates the declination of this format for developing the websites of the two communities involved in the study, highlighting the information architecture, the content, and the homepage. While based on the same format, the values, aspirations and goals transpired through the content are very different. The website of the community in Podoleni is a reflection of community life, traditions, people, aspirations, as well as concerns and problems. It is the website of a community that narrates itself, which values reintegration and presents a genuine image of its people as the first step towards dialogue. The second community website, on the other hand, is focused on a specific message: the value of their metal work traditional profession, embedded in the struggle people go through to maintain a decent life standard. It narrates how semi-nomadism is a valued cultural tradition, but also a difficult to sustain practice dictated by poverty, the need to market traditional products in distant places, and the lack of other opportunities for making a living. In putting forward this story, the community in Munteni does not dwell on other aspects of its traditional life. It is not interested to present its history and its traditions, and has no concern with presenting or reflecting a genuine image of itself. Their website is the narrative representation of the most important social problem people face at the crossroads between tradition and modernity, and how their traditional professions, while still being a pride and a value, are increasingly difficult to maintain.

7.2 The Format

7.2.1 Design

This part describes the website design format without leaning on a specific implementation solution, with respect to:

- Content types
- Information architecture
- Page types
- Page layout and graphical design

Content types

Content types are differentiated with respect to media type (e.g. textual, audio, video, still visuals) and to the producer. This second element is one of the defining features of the design format: content produced by the community is presented separately from content produced by outsiders to the community – for instance an ethnographic account of the themes approached in the website. Accordingly, there are three content types:

1 Storytelling content
2 Static pages
3 Interpretive content

Storytelling content

This type of content gathers all community-produced stories. Content granularity is defined based on semantics: one content unit covers a single theme in a comprehensive way. The theme can be approached from the viewpoint and voice of one storyteller, be derived from an interview, or gather accounts from several people.

This leads to three possible content formats:

1 Story-based, in which the story of a single storyteller is presented in a flowing, narrative form. Story-based content units can also be derived from an interview, if the questions of the interviewer are edited out.
2 Interview-based. It takes the form of an interview or reportage. These content units are derived from interviews and the interviewer himself may be visible in the frame.
3 Theme-based. Testimonials from several people are grouped on virtue of a common theme.

With respect to media, storytelling content can cluster several media, textual, video, audio, or still pictures, with a central media which opens the story. However, it is recommendable that there is preferably a video, or alternatively an audio file, which can give narrative flow to the content. Other media, such as still visuals can give more context to the theme presented. The text can give contextual information, or a transcription of the audio track.

Static pages

Static pages give contextual information on the website, the community, the project which produced the website, people involved, or any other information considered necessary for presenting these. They are prone to include text only, but if necessary images and video can be accommodated.

Interpretive content

The interpretive content is a layer of information that shadows key knots in the information architecture clustering storytelling content units, for instance categories or tags. Its purpose is to provide further contextual information or to facilitate understanding of themes and subjects that may not be easily decrypted by website users who know little about the community. It has been conceived as a conceptual bridge, however it may take any form a particular project deems necessary in association with the storytelling content units it introduces.

Interpretive content can be either textual or audio. It is advisable however to maintain it to a textual form only, to further mark the difference from community-produced storytelling content.

Information architecture

The information architecture of a web portal refers to the organization, structure and labelling of information, and the design of navigation and search systems (Brinck et al., 2002; Courage and Baxter, 2005: 415). The definition of the information architecture implies attention to four aspects: 1) information organization, 2) navigation, 3) search, *and* 4) labelling.

The information organization is done at three levels, which provided as well the main *navigation layers*: by category, by tag, and across static pages.

Categories and *tags* are used to group storytelling content, organized according to different criteria: categories group a higher number of content pieces in a limited number of taxonomic terms, corresponding to large community themes. Tags group a smaller number of content chunks according to more specific local themes. Categories are likely to be more stable over time, while tags are likely to grow and be modified more often, as new content is being added and new themes are reflected in the website. Static pages group exclusively content of the static page type.

Search is enabled by a free text search mechanism which facilitates finding resources, for instance by looking into specific attributes of the compound documents (i.e. author, dates, etc.).

Labelling is to be defined in accordance with each community website developed based on this format. It is recommended to find a thoughtful balance between local terms and comprehensiveness by a broad target audience. However, a community might also wish to put forward cherished internal terms, which may be initially cryptic to users, but function as reflections of the community's cultural specificity.

Page types

Four *types of pages* are being displayed in the website:

1. Homepage
2. Static pages
3. Lists of storytelling content units
4. Storytelling content unit details

The *homepage* is designed to give a rich informative snapshot for the community in the voices of its members. For this reason, the recommended central media on the homepage are video. The central piece is an introductory video that presents the community and gives any information considered relevant for a first-time visitor. It also displays three featured articles selected from the storytelling content units.

Static pages are displayed as standard webpages, with a title and a description. The latter can be a rich description including images and videos, but without a predefined structure.

The lists of storytelling content units are displayed after selecting a category/tag or as a search result. A page displays the list of storytelling content units belonging to the selected category/tag or that satisfy the search criteria. For tags and categories lists, there are two types of content displayed on top of the list, which provide an introduction to the category or tag:

- A *featured* storytelling content unit gives a general introduction to the tag or category from the perspective of a community member, and may include video accompanied by audio, text, and still images.
- Interpretive content introducing the central theme is displayed on top of the list, and can be hidden or made visible at choice.

Storytelling content unit details display the clustered media of a storytelling content unit (video, audio, text, etc.). Several solutions can be envisaged for the way media can be displayed. Below a graphical solution is given, and under the 'Implementation' section further recommendations are provided for rendering images, video embedding, and possibilities of download.

Page layout and graphical design

The strategy for the page design has been to focus on the central media displayed with minimum disruptive information, while at the same time giving the user the possibility to access in one click other categories, tags, and static pages. The stable template for the page design is made of the top and bottom bars and the left hand side bar, which contain the navigation links (to categories, tags, and static pages), as well as the 'Search' field and the

language switch.

The page layout differs for each page type.

In the *homepage*, the layout is distributed among a central header with a representative community picture, and links to four content pieces: the website introductory video, and other three featured storytelling content units that can be rotated.

For *storytelling content unit details*, each page is concentrated on a media type (e.g. video, audio, text), and accompanied by a title and a set of social media sharing buttons on the top bar. The content bottom bar displays icons for the other media options, each leading to a dedicated page on the corresponding media type.

For static pages, the page design is simply balanced between title and text.

For *lists of storytelling content units*, each document is represented by a thumbnail picture with title and indicative icons for the media type contained. Featured content introducing a category is displayed on top of the list, stretching over the page horizontal area. Interpretive content is indicated by the 'More info' button and can be displayed or hidden at choice.

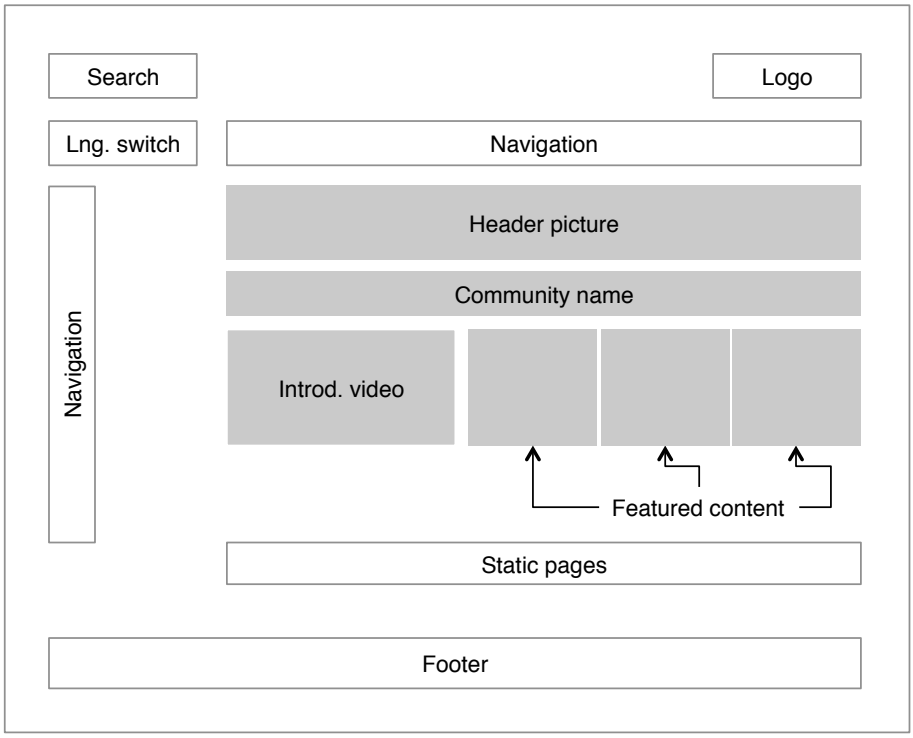

Figure 7.1. Homepage layout. Source: author.

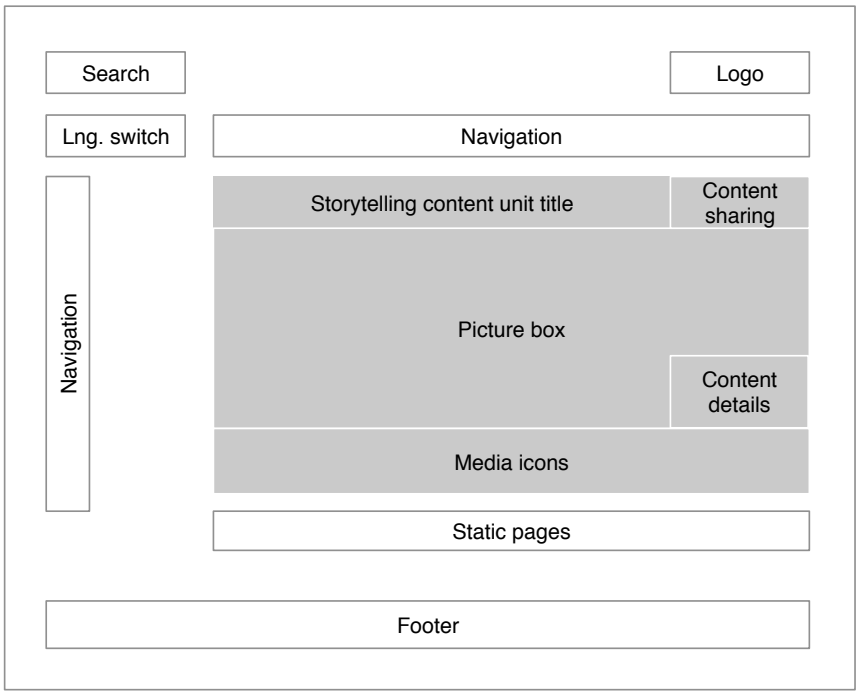

Figure 7.2. Page layout for storytelling content unit details. Source: author.

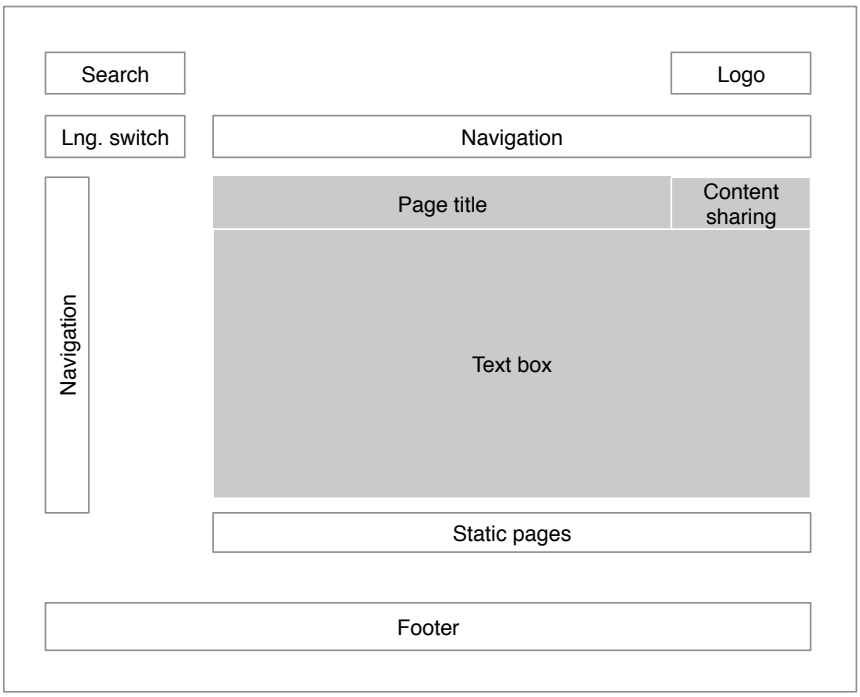

Figure 7.3. Page layout for static pages. Source: author.

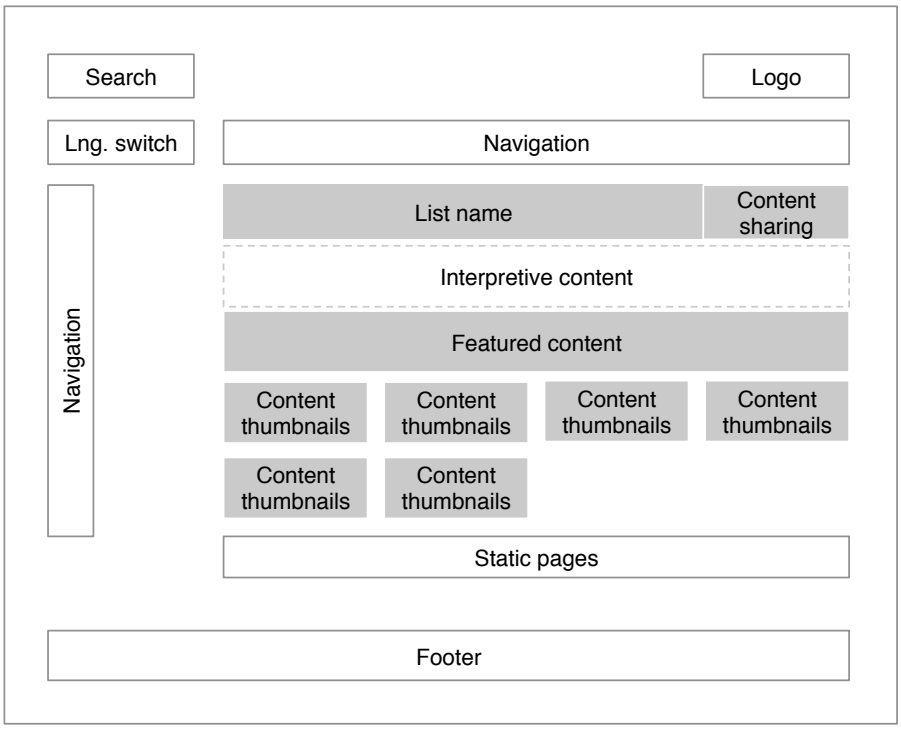

Figure 7.4. Page layout for lists of storytelling content units. Source: author.

The suggested graphic design coming with this design format is the one created and used for the two community sites. The graphic design line has been created standing by the principle of simplicity: reduced colour palette, and straight, minimalist design. The graphics do not reflect any of the two community's cultures, a choice motivated by the notable cultural differences among the two communities. While both are Roma groups, the two sub-groups have very different cultural motives and it would have been impossible to meet them in the same visual line. The strategy chosen instead was to come up with a minimalist and neutral design that could let the culture of each community transpire through the actual content, in meaning transmitted, media, and visuals. Attention has been paid to the colour range – red, for instance, was preferred by both communities, while the community in Munteni wanted to avoid the use of black. This preference caused the design line to be changed, from an initial colour palette of red-black to red and grey. This graphic design line can be used for implementation in other contexts provided the community does not intend to express its cultural specificity also through the graphics.

7.2.2 Implementation[9]

The recommended technological solution for this design format is a Content Management System (CMS), for its potential to speed up the development process and facilitate maintenance. In addition, CMSs provide additional functionalities like content syndication (chunks of contents can be made available for other websites), content versioning, multilingual support, different type of styling (theming), etc.

An initial selection of adequate CMSs shortlisted Joomla, WordPress and Drupal. While all three are free and can be used as technological solutions for this design format, Drupal (https://drupal.org/) was selected for implementation and is recommended for a number of reasons:

- Overall efficiency;
- Capable of managing complexity of content types;
- Capable of representing and managing taxonomies, in an easy and effective way; *and*
- Possibility of customizing the administration interface (including contextual help), therefore dropping the learning curve for non-technical users.

Drupal was customized for supporting the design format in terms of structure and content types.

Content definition

Three content types were identified: static pages, compound documents, and interpretive content.

For *static page*s, the content is generic (e.g. disclaimer, credits, etc.) and weakly structured. The internal structure consists of a title and a body whose content can vary from text to images. These pages are 'static' in the sense that they are likely to vary very little over time.

Compound documents represent the core of the website and are structured in four different blocks:

- *Basic information*: These segments contain a title, a subject (sometimes this can be the name of the storyteller), an author or producer, the production date, and the location where the information has been collected.
- *Description*: It can include the transcript of an audio or audio-visual piece of content, or a comment. In addition to text it can also contain media files, but without a

[9] The implementation solution has been devised with the contribution of a member of the research laboratory TEC-Lab, Matteo Agosti, based on his technical expertise.

predefined structure.

- *Media*: These segments host multimedia resources, including a preview image (mainly used in listing pages), a set of images (used to build a gallery), a video file (linked from YouTube), an audio file, and a document. For a number of reasons, and especially in order to ensure fast streaming, YouTube was used for video storage. In addition, this solution presented advantages for visibility, as each video is completely annotated on YouTube and linked to the website, thus fostering incoming connections.
- *Classification*: It comprises categories and tags. Categories (identified during the core card sorting sessions) are used to hierarchically classify compound documents. Tags or keywords are used to create additional groupings of compound documents based on community-relevant themes.

Figure 7.5. Screenshot of the Drupal interface, editing a compound document, the 'Media' segment.

The interpretive content is associated to information architecture knots – categories and tags. Each tag or category can have only one associated interpretive content. An interpretive content unit can accommodate text or audio content.

7.2.3 Transferability

The format proposed is a ready-made design solution. Yet, consideration should be given to the fact that the format is the result of a process which provided the rationale for each design choice. Transferability in other contexts should balance well the advantages of a ready-made

solution against the possible inadvertencies with the specific needs and wants of the community.

The design-implementation format can be applied wholly or partially, for instance only the design with a different technological solution, or the design without the proposed layout and graphics. The core features of the design format which should be taken into account when considering further employment are:

- Favouring community voices. Community-produced content makes the bulk of the website content and is also emphasized in the homepage and in the layout of every page.
- Favouring orality. Community-produced content can accommodate different media (video, audio, text, pictures), yet video and audio are advisable. The two community websites produced are, for example, almost entirely based on video as central content items.
- Multimedia contextualisation for a semantic unit. Each storytelling content unit has been conceived as bearer of one clear message, put forward through several media from video to pictures.
- Evidencing grand themes and more specific local themes. In the information architecture, categories have been conceived to correspond to grand community themes, while tags capture finer-grain aspects and more specific themes.
- Separation of community-produced and interpretive content. Each category or tag is introduced by two types of content: a featured content selected from storytelling content units and therefore community-produced; and interpretive content, that has been conceived as a textual description easy to read for a fast browser. The interpretive content feature can be adapted to the needs of a website, yet its initial purpose was to account for digested, interpreted content standing half-way between community genuine voices and the users.
- Favouring content sharing. Distribution and sharing through social media services are enabled. In particular, video are embedded from YouTube.
- Minimalist graphical line and spaced page layout. The main idea behind the graphic design was to let the content transpire as through a window. The layout favours centrality of media, in particular storytelling content units, and one-click access to other content units or information architecture knots.
- Keeping costs low. The suggested implementation solution has been selected from the free CMS, on purpose to keep costs low for a community wanting to manage its own website.

7.3 First Community Website

Based on the vision defined with local people, the website of the Roma in Podoleni had to convey a consonant and coherent reflection of community specificity, identity, and traditions, as well as concerns and issues faced by people at present. This vision was declined in the website elements, including the content, the information architecture, and the distribution of information on each website page.

Information architecture

The information architecture was based on the taxonomies developed throughout the web design sessions with community members, centred on categories and tags. In addition, static pages provide contextual information on the project and website. Labelling tried to follow community-used words. Some of them reflect however the views of more knowledgeable members, for instance the tag ‘interethnic relations’.

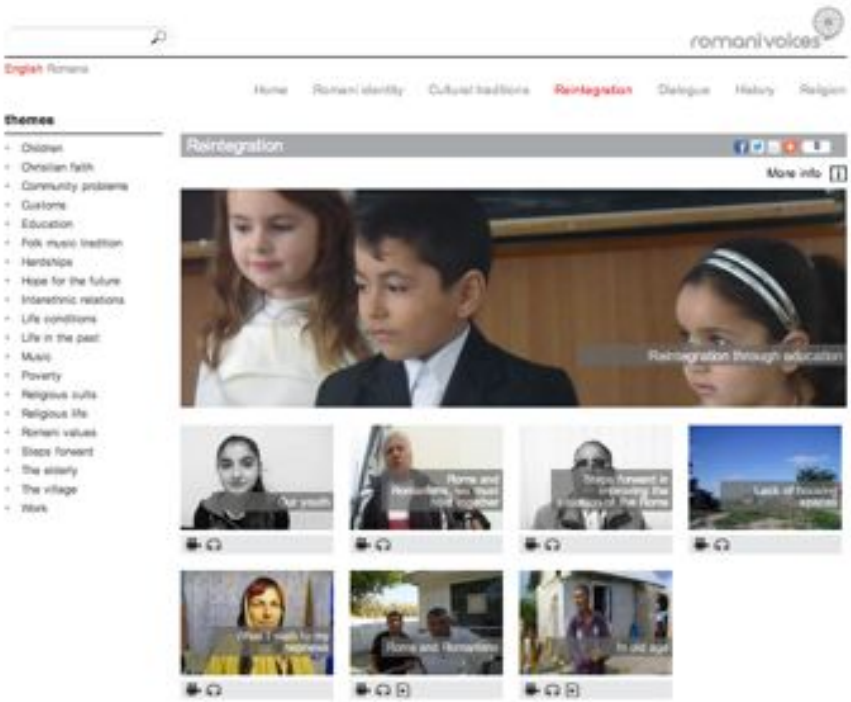

Figure 7.6. List of storytelling content units generated for the category ‘Reintegration’. Source: www.romanivoices.com/podoleni

Categories correspond to grand community themes, the ones deemed to be most representative and most important. The six categories reflect people’s concern with

maintaining tradition while increasing their chances for reintegration and creating a dialogue with the majority population: 'Romani identity', 'Cultural traditions', 'History' and 'Religion' represent the spirit of community life. 'Reintegration' and 'Dialogue' mark people's aspirations to break up the separation with the majority. These two categories include content that express this desire for integration and dialogue, the additional values and aspirations people attach to these processes (for instance education), and the reasons for valuing these (especially the experience of poverty).

The correspondence between a category and the community theme it reflects is described in the website by the featured video displayed on top of the list and the interpretive content item (see Fig. 7.6, Table 7.1).

Table 7.1. Interpretive content for website categories, Podoleni website. Source: www.romanivoices.com/podoleni

Romani identity. The Roma in Podoleni are part of the Romani sub-group of the hearth Roma ('rromi de vatra'), who have renounced nomadic lifestyle several centuries ago. Today's generations take pride in their Romany legacy and the values transmitted from the early settlers in the village premises. Hard work, honesty, solidarity, and warm-heartedness are long-standing community values which guide the moors and lives of its members. People speak Romani language as a distinctive identity mark, and want to continue to teach and transmit it to their offspring. The pages in this category gather testimonials about Romani values, the continuity of the Romani legacy, the value of work and the importance of cultivating Romani distinction.
Reintegration. 'Reintegration' encompasses the efforts and achievements for ensuring a satisfying life standard for the members of the Romani community in Podoleni, inclusive of access to education, literacy and economic welfare. The stepping stone in the process of reintegration is education. For the Roma in Podoleni, education is a widely appreciated value and at the same time the highest goal to achieve for their children and future generations. The pages gathered in this website category present stories and testimonials about reintegration actions and results, people's aspirations, aspects that should be considered in the reintegration process such as poverty and its effects, and, most importantly, the concerted efforts for ensuring Romani children access to education.
Dialogue. These pages have been conceived as the beginning of a dialogue with members of the majority culture. They present a truthful and honest portrayal of the Roma in Podoleni, their values and aspirations, without obscuring concerns and daily life problems. Each page conveys the story of a community member, told in first-person.
Cultural traditions. The Romani community in Podoleni maintains a vibrant cultural tradition, which blends Romani, Romanian and Christian elements. The most significant Romani legacy is maintained in the musical tradition. The Fanfare of Podoleni used to be famous regionally for its music. Nowadays, though the

Fanfare no longer exists, the community still talented musicians skilled in singing by voice or playing the trumpet, accordion, organ, or violin. The community honours the most important Christian holidays, such as Easter, the Easter of the Dead, and Christmas. The pages in this website category contain musical performances, stories about the musical tradition, or narrations about religious cultural events such as Easter.

History.

The Roma have been settled in Podoleni since the end of the 19th century, when a team of skilled Romani builders were called to build a Church. Meanwhile, the community underwent series of important events, such as the famine in the 1940s, or the forced deportation to Transnistria in the 1940s, and the difficult years after the 1989 revolution. This category includes the stories of local people about important historical events undergone by the community, or autobiographic events linked to important historical times, for instance the deportation of the Roma in Transnistria during WW2, life during Communism, or the 1989 Revolution.

Religion.

The religious life of the Roma in Podoleni is governed by intense faith and respect and tolerance for the others' religious creeds. Three religious creeds are practiced in the community – Christian orthodoxy, Adventism and Pentecostals. The pages in this category present stories of faith and religion told by community members of different faiths.

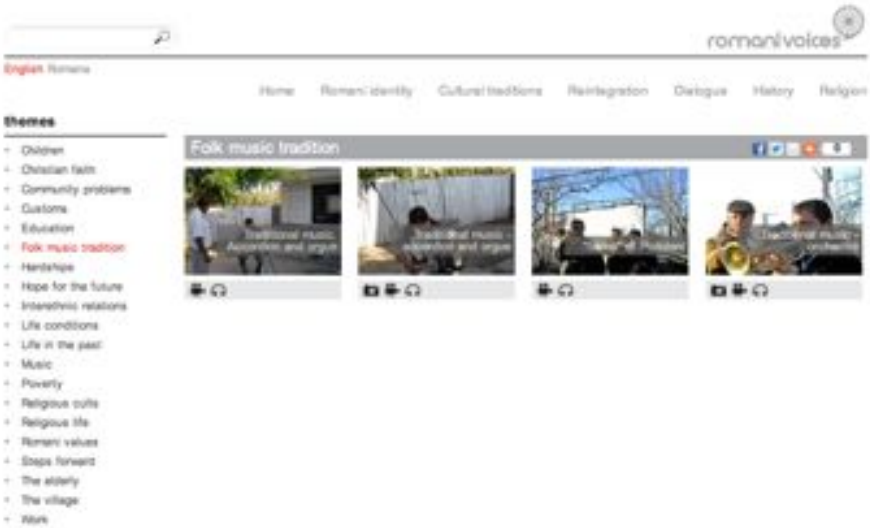

Figure 7.7. A list of storytelling content units generated for the tag 'Folk music tradition'. Source: www.romanivoices.com/podoleni

Tags are closer depictions of the everyday concerns of people. They resemble closely in semantics and granularity the content themes elicited throughout the exploratory and the content production phases of the project. Just as for categories, the rationale for each tag is described by the featured video and interpretive content.

Static pages give information on the project, the website, and credits.

Content

The subject range covered in the website, as illustrated by the way it is clustered in categories, encompasses a depiction of inner community life and the aspiration toward reintegration and dialogue. The community is described by its identity, values (tradition, education, hard work), traditions, aspirations (a better life, education for children), and spiritual life. The first step in communicating with the majority culture is represented by stories shaped as the first line of a dialogue, in the form of testimonials given by community members (see stories in the 'Dialogue' category, Fig. 7.8). Aspirations for reintegration are shaped by people's values, concerns, and goals for a better life. The strong value people place on education is illustrated by the featured video which introduces the category, named 'Reintegration through education'. The aspirations for the future, as illustrated by the stories 'What I wish to my nephews', go towards a better life seen possible only through education. The greatest concerns are related to poverty, especially as faced by old people, as illustrated by the video 'In old age'.

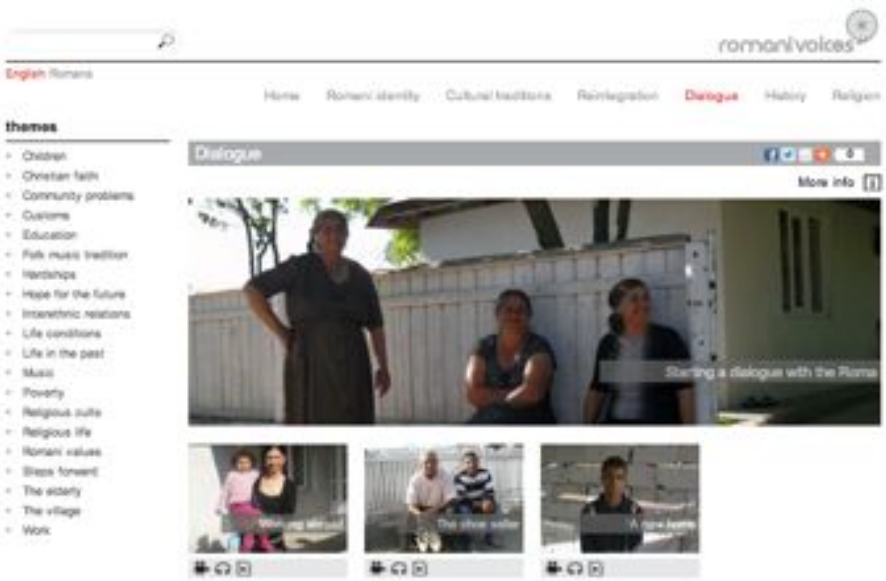

Figure 7.8. A list of storytelling content units generated for the category 'Dialogue'. Source: www.romanivoices.com/podoleni

It is important to look as well at the voices represented in the website, or the storytellers. A first observation is that the featured videos introducing the categories are all done by members that act as leaders, representatives or administrators in the community, with the exception of the category 'Religion', where the speaker is a devout Christian Pentecostal without being a spiritual head. Second, most storytellers and interviewees are in their middle-

age or old. There are few young people who gave testimonials. This reflects also the participation in content production, in which most of the participants contributing as storytellers are middle-aged and elderly.

With respect to the distribution of community content over story formats, it can be noticed that the story-based format was king. Most content units in the website are based on this format. An example of a content unit on a theme-based format is 'Our youth', and for interview-based format, 'In old age'.

Figure 7.9. Details of a compound document for 'In old age', an example of an interview-based content format. Source: www.romanivoices.com/podoleni

There is also in the case of the community in Podoleni a fourth type of format: music. Musical performances have been cherished activities during content production, and a selection of these are published in the category 'Cultural traditions'. The music published is all traditional music. Though the players were skilled in many other music genres, and some of them were played and recorded, it was agreed to give visibility to traditional folk music.

With respect to media, most content units are focused on video[10], always accompanied by audio tracks that can be downloaded separately, as well as written transcripts of stories. Still pictures accompanying videos are present especially for content under 'Cultural traditions'.

[10] The *Romani Voices in Podoleni* YouTube channel: http://www.youtube.com/user/RomaniVoices

Homepage

The *homepage* is centred on the introductory video that describes the community, presented by one of the Romani opinions leaders in Podoleni. The three featured videos initially chosen to be displayed on the homepage were 'Being a Roma', 'Reintegration through education', and 'Starting a Dialogue with the Roma'. The pronounced orientation toward dialogue and reintegration can be noticed from this choice.

For the homepage header, the images chosen (which can be rotated) are snapshots of community life, focusing on people and musical performances.

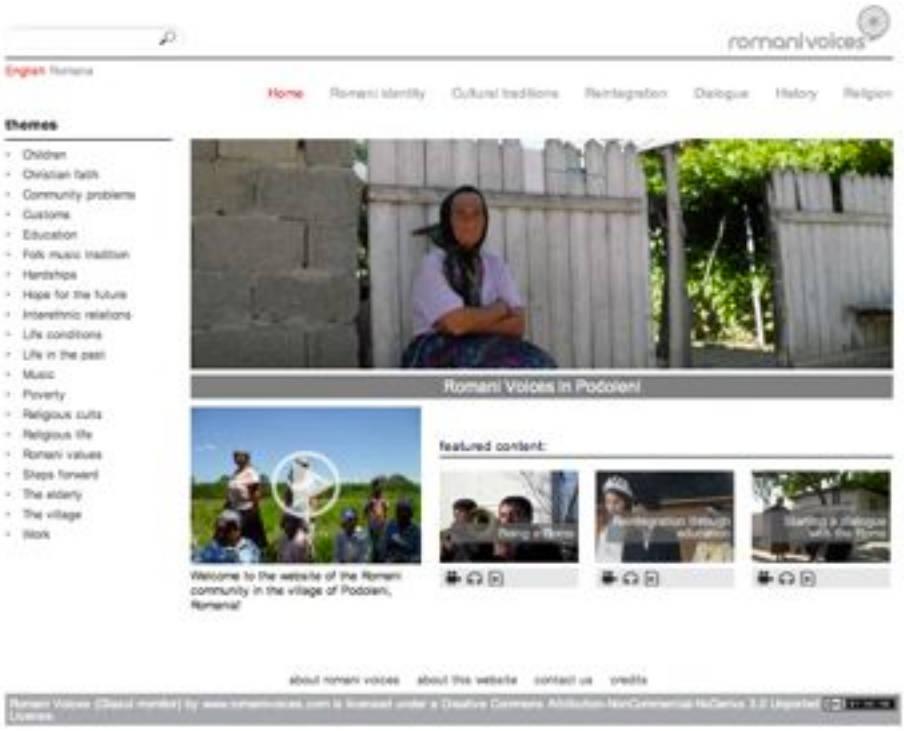

Figure 7.10. Website homepage, Romani Voices in Podoleni. Source: www.romanivoices.com/podoleni

7.4 Second Community Website

The website of the Romani community in Munteni is a reflection of the struggle a community living and working the traditional way faces in the modern society and economy. The focus is on giving visibility to the traditional metal work tradition, and how this conditions people to continue to carry-on a semi-nomadic life. The revelation transpired in people's testimonials

is that, despite appearances, semi-nomadism is not a choice to keep up with tradition, but is rather dictated by economic factors, chief among these being the impossibility to find easier means to market traditional market products. The minimalist information architecture and the direct, sharp content of the stories reflect this univocal concern and provide information on how people deal with it.

Information architecture

The categories reflect the concern with giving visibility to the traditional metal work profession and the way it conditions people's lifestyle, especially semi-nomadic living. There are three taxonomic terms:

1 Life on the road
2 Traditional metal work
3 The masters

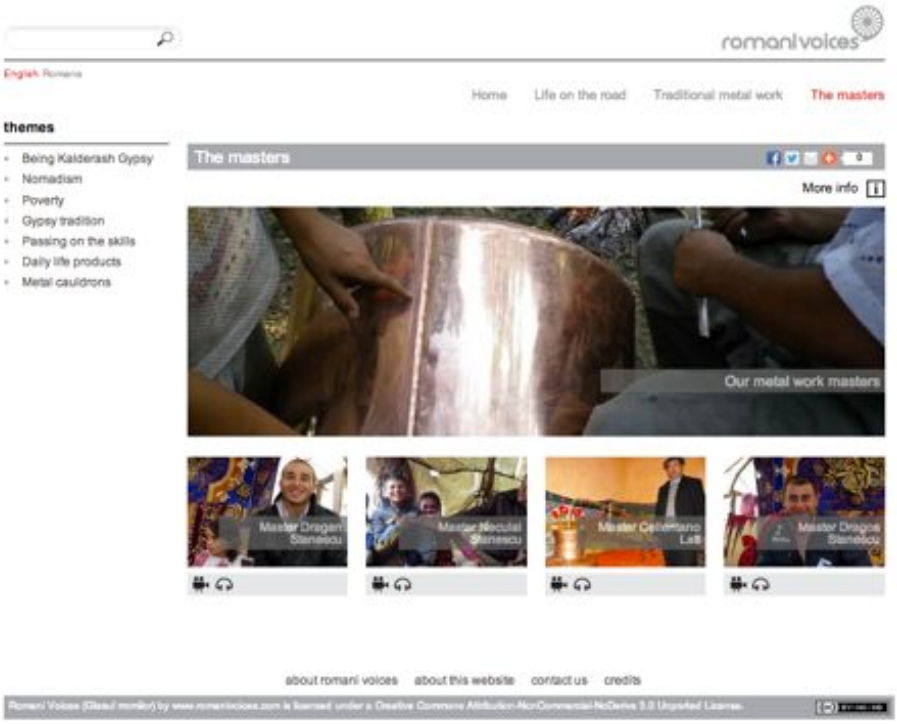

Figure 7.11. A list of storytelling content units generated for the category 'The masters'. Source: www.romanivoices.com/munteni

The content under 'Life on the road' puts forward a key message: that people travel seasonally because they have to, not of their free choice. Travelling and living in the tent is difficult, and has effects on child education, who need to cope with changing places often,

encounter breaks in their curriculum, and can be confused by new teachers and new approaches taken for short periods of time in the places they travel. 'Traditional metal work' includes content that presents the traditional profession, the way it has been transmitted, and also the array of products that can be forged and marketed. 'The masters' gathers a series of testimonials by traditional metal work masters, who present themselves, how they learnt the profession, and the products they are most skilled in producing.

Table 7.2. Interpretive content for website categories, Munteni website. Source: www.romanivoices.com/munteni

Life on the road
For more than six months every year, the Kalderash Gypsies in Munteni travel around the country, accompanied by youth and children. They start traveling early in spring, and cover hundreds of kilometres looking for places where they can find customers for their metal products. These travels are part of tradition, but also a difficult to maintain lifestyle dictated by necessity. People travel not because they want to, but because they have no other way to sell their products and make a living. Life in the tent can be hard especially in the cold and rainy early spring months. Travelling also affects the education of Romani children, who find it hard to keep pace with school during their travels. The pages in this category tell people's stories about life on the road, stories of tradition, but also of hardships and deprivation.
Traditional metal work
Most Gypsies in Munteni earn their living by crafting and selling metal products. A large array of products are made, from large-scale cauldrons for spirits distillation to small delicately shaped items such as metal cups. All of these products are crafted by using traditional means: hammering, fire, and measurement by hand.Apart from being the main revenue-making activity, metal work is also a cherished community tradition. Little boys attend on their fathers in their early years, and start hammering and crafting small items. In their teenage, they are able to craft metal objects and ready to make and sell their own products. Their way of work has not changed with the years, the same tools are used, and the same raw materials.The skill of the metal workers in Munteni is recognized: the masters have faithful clients all over the country. Their products are renowned for their quality, and can be used for years. Yet at present there is less and less demand for the products, a people prefer to buy ready-made items from the commerce. This means that the Gypsy metal workers need to travel farther in remote regions to find clients, and their revenues are diminishing.
The masters
The skill and knowledge of the metal work tradition is embodied in the masters and constantly passed down to their youngsters. The metal workers of Munteni all know how to craft cauldrons of different sizes, which are the most demanded products. Each master is also specially skilled to make a particular type of artefacts: one in shaping delicate little cups, others in daily life objects such as dust pans. Each master has inherited the skills from parents and grandfathers, and continues to pass them down to his sons. To craft a metal object, a master may need to work alone, but also with the help of sons, or even little daughters, wives and sisters. By watching and imitating, little boys learn by doing and continue to pass on the metal work tradition.

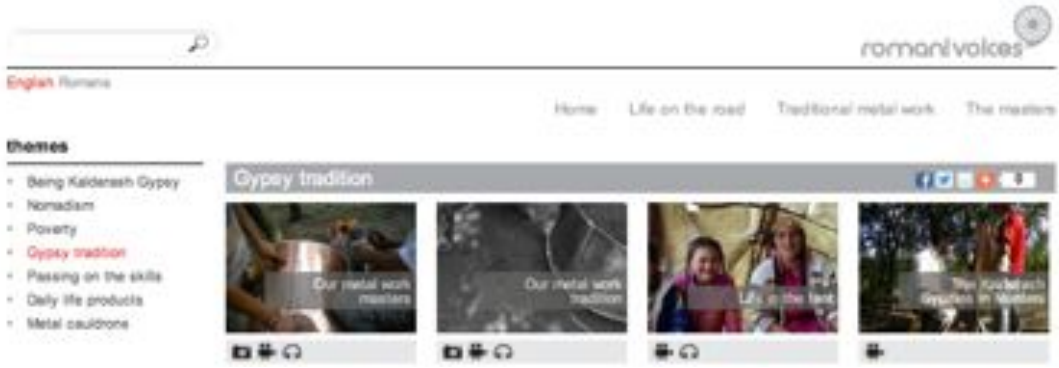

Figure 7.12. A list of compound documents generated for the tag 'Gypsy tradition'. Source: www.romanivoices.com/munteni

The interpretive content (Table 7.2) and the introductory video for each category describe the thematic approached and the rationale for it.

The static pages provide information on the project, the website, and credits. *Tags* have been conceived to delve into more specific community themes. They may focus on the conditions and effects of the semi-nomadic lifestyle (e.g. poverty). Or, the products presented are tagged according to usage, e.g. 'everyday life products', 'cauldrons'.

Content

The content subject range encompasses the two-fold thematic of traditional metal work (including products and masters) and the traditional lifestyle (including semi-nomadism and the problems it entails). 'Poverty' comes out as the most poignant collective problem. With respect to the storytellers, most of these are men, which is explained by the focus on traditional cauldron-making, an activity professed by men. The featured introductory videos for each category as well as the main website introductory video are all narrated by the community leader. With respect to formats, this website employs exclusively story-based content, narrated by a single storyteller. The prevalent medium is video[11]. Practically all content units are centred on a video, accompanied by audio and at times pictures.

[11] The YouTube channel of the Kalderash Gypsy community in Munteni: http://www.youtube.com/user/romanivoicesmunteni

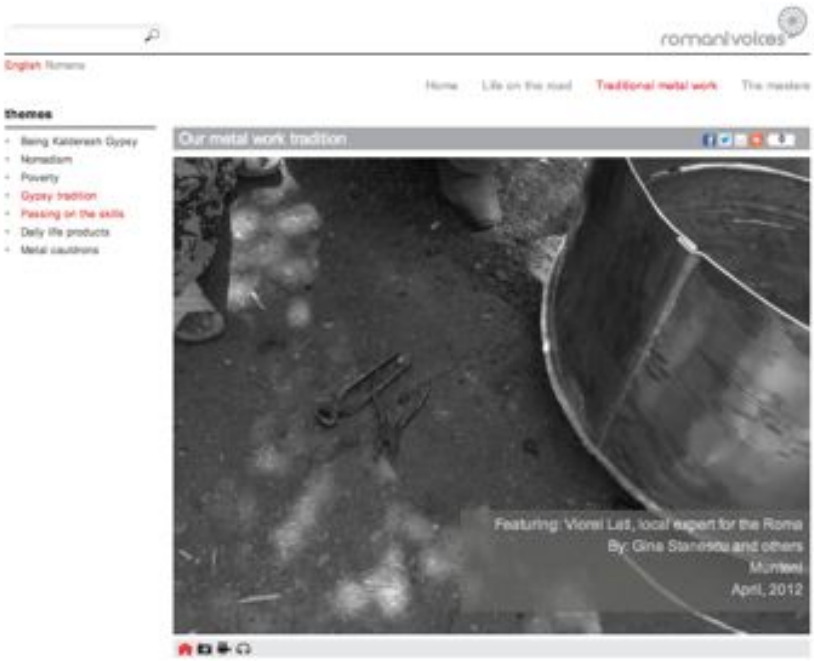

Figure 7.13. Featured content for the category 'Traditional metal work'. Source: www.romanivoices.com/munteni

Figure 7.14. Featured content for the category 'The masters', focus on video content. Source: www.romanivoices.com/munteni

Homepage

The introductory video on the homepage, presented by the community leader, goes straight into the problematic that the website approaches. It introduces the community, the way it carries on tradition in lifestyle and in its core economic activity, while struggling collectively to do so. The other three videos initially featured on the homepage include a testimonial that depicts the semi-nomadic lifestyle and the stories of two metalwork masters.

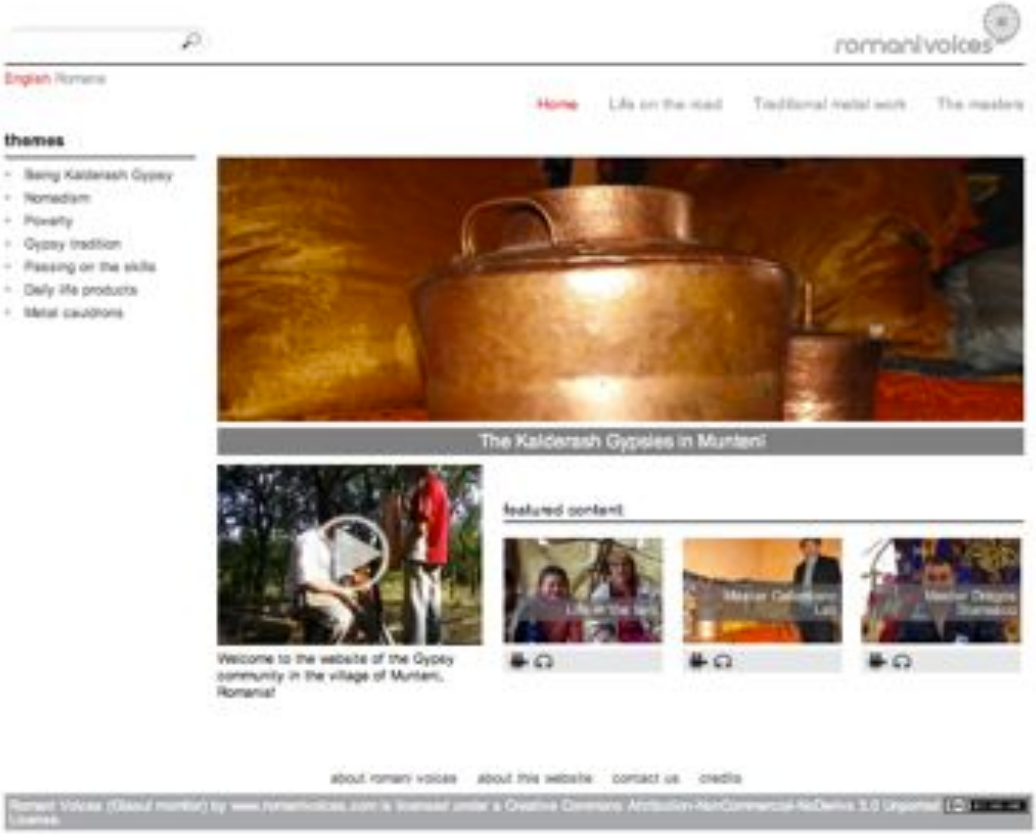

Figure 7.15. Website homepage, The Kalderash Gypsy community in Munteni. Source: www.romanivoices.com/munteni

7.5 Conclusion

This chapter described a design format for community websites. The format was crafted based on the template used for the two community websites produced as part of this research. As such, it reflects the common feature of the communication goals cherished by the two communities: the desire to be understood by outsiders. The design features reflect this preoccupation with speaking out to an audience, and embed community views in a form that is easy to browse and understand for regular web browsers. The format is meant to reflect genuine community voices by favouring video and audio content, and an information architecture that captures grand and specific community themes. The needs of regular Internet browsers are met by using a traditional information architecture (in categories or tags), a spaced and minimalist layout, and content units focused on single themes and messages. Fast textual access to each category is provided by interpretive content that captures the significance of the theme in community life.

In seeking to apply this format in other contexts, it should be considered that each design choice has underneath it a long process which ensured that the final outcome would reflect the community's communication goals as well as the views members wanted to convey. Transferability conditions should be weighed by deep consideration of goals and needs of targeted communities. The format can also be a source of inspiration, rather than a recipe. In this case, it should be read in conjunction with the chapters describing the two field studies, which detail the process leading to this result.

8 Conceptual Contributions: Technology for Voice between Product and Process[12]

8.1 Synopsis

This study looked into the conditions for empowering minority voices as part of communication interventions where new technology is introduced in communities. In a nutshell, empowering minority voices as part of communication interventions is about creating the conditions in which community members identify their expression, knowledge production and communication interests, devise the processes for reaching out to these, have access to and learn to use the tools for carrying on these processes, and develop the capacity to continue with no external assistance. This chapter outlines insights into how these steps can be achieved as part of participatory projects, and in particular participatory content creation. A series of lessons learnt from the two field studies are described, organized in two parts:

1 Community participation: conditions, forms, and impacts
2 Voice through participatory content creation between product and process

The first part presents insights that have a broader applicability in participatory communication interventions. It proposes an operational conceptualisation of the notion of 'community participation', outlines factors that condition people's effective participation in a project, and identifies potential impacts of participation on developing a community's sense of ownership of a project, that can be further linked to increased potential for sustainability.

The second part singles out relations and processes to be taken into account when seeking to cultivate minority voices through participatory content creation, focusing in turns on the process of conducting it and on its products, and dwelling on such issues as: externalisation and explicitation of knowledge, creating community-representative communication artefacts, and the inherent tensions between community views and audience reception requirements in designing web-based public communication artefacts.

The conceptual contributions presented in this chapter were formulated to trigger reflection or be applied in practice in other contexts. Each relies on conceptual relations established among features of the local context, features of a participatory project, and processes triggered while running it. Each proposition is organized as a conceptual argument on a

[12] Early versions of fragments in this chapter were published in Sabiescu et al. (2012).

particular topic, accompanied by methodological implications and an outline of empirical evidence from the two field studies.

The contributions described herein are strongly connected to the philosophy of research that this study employs. Participatory research assumptions such as the value of practical knowledge, the importance of co-research, and the imperative of producing community-beneficial outcomes are permeating these insights. They are therefore to be understood and read in this spirit. They are meant to inspire community media practices that bring benefits and rewards to the community, the researchers, and research as knowledge-making endeavour, and support local expression and communication through appropriation of ICTs and thoughtful integration in the existing socio-cultural reality.

8.2 Considerations on Applicability in Other Contexts

The conceptual contributions expounded henceforth were derived from research with minority communities, yet they are not necessarily applicable only in akin minority contexts. The analysis conducted in the two field studies highlighted the community features most prone to have an impact on the processes conceptualized:

1. Degree of cultural distinction with respect to the implementation agency;
2. Community type (geographically bounded vs. dispersed; strong vs. weak bonds);
3. Literacy and media literacy levels;
4. Degree of social, physical, and/or informational isolation;
5. Economic standard/poverty levels;
6. Attitude towards the outside: open vs. closed; *and*
7. Attitude towards cultural continuity vs. integration.

The degree of applicability of the propositions is likely to be particularly influenced by the contextual features outlined. In particular, they are bound to be particularly adequate for describing issues encountered in participatory projects conducted with communities where the first four attributes take the following values:

1. The existence of a specific cultural system different from that of the implementing agency;
2. Geographically bounded communities with strong bonds;
3. Low literacy and media literacy levels; *and*
4. High degree of social, physical, and/or informational isolation.

The values of the last three attributes in the first list should be taken into account for finer-

grain aspects and processes. For example, the economic standard should be taken into account during the negotiation of benefits in the frame of an initiative. The openness of the community is essential when negotiating entry, but also impacts on building relationships and driving engagement. The attitude toward cultural continuity is likely to have a bearing on the production and usage of local content. Communities with a strong cultural ethos may have strict protocols for safekeeping knowledge, or for the image they would like to convey to a broad audience, in case of public communication programs.

8.3 Community Participation: Conditions, Forms, and Impacts

Community participation is, according to the results of this study, the most significant factor determining voice empowerment when technology is introduced in a community through the involvement of an external party. The entire socio-technical apparatus created throughout a communication intervention is a scaffold by which the conditions for fostering voice are boosted or created. In its frame, it is essential to cultivate community agency for all processes of expression, knowledge-production and communication. The degree and forms of community involvement throughout an initiative are therefore of paramount importance for the exercise as well as the product of community voices. Nonetheless, when communication interventions are not conceived by a community but proposed by an external research or interventionist team, people may shy away from participation, even after an agreement for cooperation has been confirmed. The two field studies conducted provided a rich data set useful for understanding the factors conditioning people's participation in research. Moreover, data analysis highlighted how community involvement was itself a factor of impact on important aspects of the intervention. The set of propositions presented in this section describe:

- Factors and conditions for effective local participation in communication interventions.
- An operational definition of the construct 'community participation'.
- Relations of determination among participation and project ownership.

#1 The first step in an effective participatory process is the development of a solid mutual understanding of the purpose of the participatory project, the reciprocal benefits derived therein, and the commitment required to obtain these benefits.

As demonstrated by the experience of the two field studies, conducting participatory projects effectively implies that the two parties involved have developed a common pool of

understandings with respect to the purpose of intervention, the tenets of participatory approaches, and the way the project can benefit both the community and the researchers. These understandings act as a set of *premises* for the project to be designed and run, in which several subsequent layers can be identified:

1. Awareness of the purpose and value of research/developmental initiatives: Understanding that research is a knowledge-pursuit activity that has value and importance by the nature of the knowledge outcomes it produces. In the case of practice-oriented developmental initiatives, this translates into properly conveying to local people the higher-level goals of developmental initiatives.
2. Awareness of the purpose and value of *participatory* interventions: Understanding that participatory research or participatory communication initiatives have a humanistic and developmental purpose. That they are meant to benefit the group involved, that they require participation of local people, and can be accompanied by training and education.
3. Understanding that each party involved in the project will derive benefits of a different kind.
4. Mutual agreement on the benefits carried out by each party.
5. Awareness of the commitment required to obtain these benefits: understanding that reaching out to benefits and project outcomes requires *joint* action, involving local people and the interventionist team.

The response in the two field studies indicate that these understandings build on top of each other and gaps in these understandings can have significant bearing on people's acceptance of and participation in the project even at very advanced stages. Of particular importance is the negotiation of benefits. The community's acknowledgement of the project benefits might take time, and in the case of technology projects it is likely to depend on the exposure that members have had previously to technology so that they are able to link its potential to their needs. One aspect that can easily be bypassed is the need for the community to understand as well the benefits of the party conducting the research or the development intervention. If bypassed, lack of acknowledgement of these benefits can be replaced by mistrust or assumptions of hidden benefits, in worst cases even apprehension of being exploited.

The fourth aspect listed links understandings and awareness to a call to action and engagement. Once community members have acknowledged the nature of the initiative, its value, and benefits carried on both sides, they should also understand the type of effort required to reach out to these benefits. The fact that commitment on their side is required is an important aspect to convey. In some communities, even if exposed to research or other types of non-participatory developmental projects, members may assume that giving agreement for the interventionist team to act is enough. The importance of their engagement

needs to be properly conveyed, and its legitimacy built gradually in people's own eyes.

Methodological implications

Acknowledgement of the aspects raised can have a significant impact on community commitment to the project, engagement in its course, and the relationship built with the interventionist team. Paying attention to these from the beginning can significantly increase the chances that a participatory project meets community acceptance. Discussions and other activities for negotiating these aspects can be pursued in parallel with exploratory studies preceding the design of an initiative. It is important to understand in these phases if the community has been exposed to similar experiences before and therefore can more easily relate to the type of involvement required. In communities with severe knowledge gaps with respect to the points raised, it can be wise to first discuss and negotiate with a handful of opinion leaders and further allow this knowledge to flow from them to other people. Local people are more prone to understand these aspects if presented by their fellows, who can describe them from a perspective rooted in the local worldview and with local terms.

Empirical insights

The participatory project with the two Romani communities required the development of a mutual understanding with respect to the goals and scope of the project and benefits envisaged on both sides. For this, at a deeper level, it was necessary for local people to come to grasps with the purpose of research as knowledge-building activity, and the fundaments of participatory research as a community-beneficial endeavour. At a first level, the purpose of scientific research and its concern with knowledge production was difficult to convey. People had been exposed to one-shot research activities such as surveys, and had seen in television how such surveys were interpreted. Yet the present research project was spreading across a much longer time, and delved deep in the community's culture and lifestyle. There was a difficulty with making clear the importance of research *per se,* as an activity oriented toward knowledge advancement and bettering the human condition. People questioned the value of the data they could provide, and of the importance that their culture, lifestyle, and problems could have had for anybody outside the community boundaries.

At a second level, the premises and approach of *participatory* research were even more difficult to convey. I presented the project as an endeavour meant to produce community benefits, based on an approach that valued consultation and joint decision-making with community members. This raised several issues. First, the developmental premises of the project were difficult to grasp. People found it difficult to understand that an outsider could come on the village premises and invest long time and effort with the sole purpose of doing something useful for the community. Disbelief was so pronounced for some initial

participants that it changed into mistrust and made them back up from engaging in further activities. As it came across, people did not understand my own benefits from this process, commensurate with the efforts invested. Second, people's role and the importance of their decisions in the advancement of the project was met with disbelief. People wondered why would their opinion matter when I was the expert in my field? These issues were even more pronounced in the second field study, with very low literacy levels. Responding to these issues took time and dedicated persistence. One aspect that had to be accepted was that doubts could not be clarified for all people involved, but rather with a handful of people that participated in most project activities. The involvement of community representatives and opinion leaders has been found to be essential: information could be communicated easier and with better results from opinion leaders to other community members.

The process of acknowledging and negotiating community benefits presented interesting patterns of variation in the two sites. While the process was different for the two, in both it was noticed how acknowledgement of benefits is a slow process that is constructed little by little, and mere agreement on the project outcomes cannot count as real acknowledgement of benefits.

In Podoleni, it was agreed in the first rounds of discussion that the closest match between what could be done in the frame of the project and community needs was to give public visibility to testimonials presenting a realistic view of community life. Despite this agreement, publishing was not perceived as an important benefit and it was not the main factor that drove people's engagement. People were happy to participate for the sheer novelty of the process, and though they were happy as well with the thought of becoming visible for a wide audience, they did not relate this with significant return or positive change for their lives. It was only in the second part of the project, when the local councillor for the Roma was involved, that the idea of having a community website became a significant driver for collective efforts in content production and later in website design. His involvement conditioned a redefinition of the project vision, with a clearer stipulation of benefits, when the project was already well into the content production phase.

In the second community, on the contrary, the idea of publishing came spontaneously from the locals, in one of the first meetings in which the project was discussed. Some of the local young present in the meeting who had been exposed to the Internet and video publishing before asked if we could make movies and publish them online. This early acknowledgement of benefit, though verbalized and though coming from the community, proved however to be still shallowly defined and an insufficient driver of engagement. As it came across later in the project, it was only by getting at the core of the messages that the community wanted to convey – its metal-work tradition and economic difficulties – that the precise community benefits were outlined. With these acknowledged, the participation of people, especially the

metal-workers, was significantly boosted.

#2 The crux of an effective participatory project consists in building a project vision dwelling on a foundation of shared understandings, and a common language for putting it through.

The encounters between researchers/development workers and local communities can be seen as clashes between two worldviews, this being particularly the case when there are high cultural differences among the two. The effectiveness of the process by which outcomes can be reached depends on the ability of the two sides to forge a common project vision and a common language for externalizing it. The common vision of the project consists in shared understandings with respect to the project goals, the benefits expected on both sides, and the commitment required to reach these. It dwells on a common outlook on what is important to achieve and to avoid in the frame of the project, things of value and trivial ones, and how the project fits in with the existing milieu.

Importantly, this vision needs to be externalized, to make certain both parties have arrived at the same understandings. For this, there is a need to reach consensus on the meanings attributed to things and processes, and the terms used to indicate them. In technology projects, terminology can act as a barrier, new words can be abstract bare formulations for people that have not been exposed to the objects and realities that the terms point to. At the same time, terms referring to community lifestyle and values can remain obscure for an external team. Cultural protocols, values, norms may be difficult to grasp by externals especially since these are likely to be implicit for the local people, and never brought up in dialogue.

Methodological implications

The existence of a common vision for a project and the language for expressing it is important for driving people's engagement, for ensuring smooth joint operations, and in the longer run for ensuring that the solution agreed is a sustainable one.

Building a common vision and reaching consensus with respect to terms to convey dwells firstly on prolonged interaction in which the two parties exchange knowledge, views, opinions, and observe each other. If the cultural and knowledge gap among the interventionist team and the locals is wide, time is required for gradually constructing it. Targeted sessions that have as precise objective knowledge sharing and learning can be effective, especially for conveying meanings and terminology associated with ICTs.

A solution for bridging the knowledge and worldview gap is to identify and involve key members that have had greater exposure to technology and communication and that are

prone to understand with greater easiness the language and the outlook of the interventionist team. These can act as valuable mediators, on the one hand putting through community meanings to the external agency, and on the other transmitting the latter's views to members in a language and from a perspective residing on local ways of seeing.

Empirical insights

The field studies provide insights with respect to the process of constructing the project vision, the common outlook or perspective lying underneath it, and a common set of terms and signifiers.

The explicit project vision was negotiated in both sites throughout the first phase of the project. The expected outcome of this was not a mere verbal agreement, but the development of a set of shared understandings on what we wanted to do, how it could benefit the community, and what kind of effort it required. The importance of the process of negotiation came across particularly in the Munteni site. Project goals, outcomes, and envisaged benefits were defined very early, yet even if verbally agreed they failed to drive people's commitment. As it appeared later, the communication message had not been defined precisely and was too broad, since people hesitated to put through clearly what messages they wanted to convey. Only when, later in the project, the message was focused only on the key desired messages – regarding the metal-work tradition, poverty, and the difficulties of the life in the tent – the project outcomes met acceptance and significantly drove people's commitment.

Gaps in understandings associated with terms used was also most evident in the Munteni site. Technological terms such as 'website' were unknown for some people, in particular the elderly, and understood poorly by others. Some elderly people assumed that what we filmed will be aired on television and some time after a production session wondered how come they could not see it on TV. Youth that knew about the Internet thought that a password was needed to view online content, and asked for one so that they could see the community blog. To align these views to technological realities, I used a combination of presentations, questions and answers sessions, and especially I used the example of the community blog, the temporary publication we had devised before the community website was created. With respect to the local context, several terms that pointed to community practices were poorly understood by myself, or the exact practices that they indicated were not clear. For instance, people used the term 'going to the village' for indicating travelling with the tents and assumed its meaning was clear. For understanding community terms, I was only to listen and ask whenever matters were unclear, and interact as much as possible with local people, including participation in community events and gatherings.

#3 *Community participation* is an umbrella term covering heterogeneous forms, which can be distinguished by degree of control, degree of autonomy, stakeholders involved, initiative stage, and decisional impact.

The notion of 'community participation' is an umbrella term which covers a diversity of hybrid forms of participation. To speak of high or low community participation is reductionist. For instance, high community participation can hide situations when one or a handful of members have taken decisions that do not reflect the views of the majority of members. Also, constant involvement of members at all project rounds can be elusive if the scope of their involvement and decision-making is reduced and does not affect significantly the project course. To understand community participation and meaningfully link it to other aspects of interest in a project (e.g. sustainability), it should be operationalized into a clear set of attributes for each activity that at one point or another in an initiative can be labelled as 'participatory'. This study concluded that the most important of these attributes are:

1. Degree of control
2. Degree of autonomy
3. Stakeholders involved
4. Program stage
5. Decisional impact

Participation patterns across an initiative are likely to fluctuate in accordance with these attributes. The *degree of control* refers to the influence members have over the project course of action. This can vary between being informed to having full control. The *degree of autonomy* gives further insight into how members contribute to the initiative in conjunction with the implementing agency: the members can be assisted, can perform tasks in the frame of an agenda defined by externals, can cooperate with the interventionist team, can act autonomously based on decisions taken with the external agency, or can initiate their own actions based on the identification of new priorities. The *stakeholders* are the people who share an interest in bringing a project to completion. It is therefore important to understand if the stakeholders involved are an adequate representation of people who share an interest in the project. They can also be differentiated based on the role and influence they have in the community: are they regular members, opinion leaders, or community leaders? With respect to the *program stage*, members can participate in setting the agenda for the project based on the identification of priorities; pre-design, in which information for the project design is collected; design; implementation; and assessment. The *decisional impact* refers to the effect a decision has in the frame of the project, which can vary between limited and broad. The effect can also be defined with respect to the locus of the decision in the frame of the project, from simple task to management decisions.

The patterns of participation in a project are defined by the way these attributes meet in the

project activities where the community is involved. Each attribute characterizes a single activity or a set of activities. Patterns can be identified by aggregating sets of attributes for activities, depending on the relations to be emphasized. For instance, the values for the degree of control, autonomy and the initiative stage can be aggregated to shed light on how members' involvement has fluctuated on a timeline and whether an increase in their autonomous decision-making can be noticed.

Table 8.1. Attributes and values of community participation. Source: author.

#	Attribute	Values
1	Degree of control	Information, consultation, partial control, full control.
2	Degree of autonomy	Assisted, task-based, cooperative, autonomous activity, self-initiated action.
3	Stakeholders	Coverage with respect to interest groups: representative / un-representative Influence/role in the community: member, opinion leader, administrator/leader
4	Program stage	Agenda-setting; Pre-design; Design; Implementation; Assessment.
5	Decisional impact	Limited, broad. Task, managerial decisions.

Importantly, an overview of participation patterns in a project can be only approximate. Assigning a value to each of these attributes is by necessity an interpretive act. Yet with a strive for even approximate reflection of community involvement, important insights can be yielded when seeking to explain achievements in other project dimensions or goals, for instance empowerment or sustainability, or in targeting specific groups such as women or children.

Methodological implications

Patterns of participation can be planned in advance considering the extent to which they are likely to impact upon the capacity of a project to reach its foreseen goals, or can shed light, retrospectively, on the reasons why for the success and failure of a project. Various relations can be established between the attributes described and other features or goals of a project, such as empowerment or potential for sustainability, or the targeting of special groups such as women. For instance, if a communication intervention is run with the goal of leaving behind, beyond project completion, a socio-technical environment that can be managed autonomously by the community, it is relevant to understand to what extent:

- The stakeholders involved cover – or are likely to involve other people that can cover

– the range of activities required for managing the project;

- The degree of autonomous action in relation to each project stage; *and*
- Whether an increase in autonomous decision-making and acting can be verified on the project timeline.

Empirical insights

Table 8.2 illustrates the participation patterns in the Podoleni site, according to the initiative stage. The table values for each attribute represent an approximation, an interpretation by which clusters of activities have been assigned a label describing best the degree of community involvement. The degree of control and autonomy across the stages have been as follows:

1. For agenda-setting, local people had a high degree of control over the decision of local communication priorities and how they could be met in the frame of the project. The relation with myself could best be described as cooperative, instantiated in discussions where information was exchanged and decisions were taken upon consensus reached.
2. During the pre-design phase, members' views were solicited for data generation, and had a higher degree of involvement during the gathering and interpretation of cultural probes. Their degree of control increased in this stage as data converged into insights based on which design decisions could be taken. The relation with myself can be described in terms of assistance.
3. During the design stage, members had control over essential aspects such as timing, workflow and people to involve. Yet they needed to be assisted by myself in putting all the elements necessary in a frame for action.
4. During content production members' control was higher, as the members involved already for some time got hold of the intricacies of carrying out the process. Cooperative activities were alternated with autonomous sessions by members. In my absence from the field members decided what type of content to produce and whom to involve.
5. For the website design, people had full control over some aspects (e.g. content to include or exclude, the design of the information architecture) and partial control over other aspects (e.g. over graphical and technical aspects, where they were presented with solutions and could only ask for modifications).

This overview of participation patterns has the advantage of explaining key aspects in the project being run. For instance, it can be noticed that community leaders were involved only from the Implementation stage, during content production. Yet their participation was so important as to determine the re-design of the project. For the first three stages, while

community leaders were interviewed, they did not take part in the project activities. In those stages, the project was carried out having as principal stakeholders opinion leaders and members, and in particular a family of musicians with a high standing and extended relations in the community. The involvement of the principal community leader, the local councillor for the Roma, was essential, as it was through his input that the possibility of ensuring a sustainable communication solution began to emerge and the importance of having a website spread as well to other people. His involvement caused a re-consideration of the project vision, and motioned us to go back to the design phase.

Table 8.2. Community participation patterns by program stage in the Podoleni field study. Source: author.

	Control	**Autonomy**	**Stakeholders**	**Impact**
Stage				
Agenda-setting	Full control	Cooperative	Opinion leaders, members	Broad
Pre-design	Information → Partial control	Assisted	Opinion leaders, members	Limited, task-based
Design	Partial control	Assisted	Opinion leaders, members (community leaders in re-design)	Broad
Implementation – Content production	Partial control → full control	Cooperative to autonomous activity	Community leaders, opinion leaders, members	Broad
Implementation – Website design	Partial control	Cooperative	Community leaders, opinion leaders	Broad

#4 The main factors that can drive or impede people's participation in research revert on issues of perceived legitimacy, perception of researchers' authority, perceived self-efficacy, know-how, and time.

The studies conducted demonstrated that a lack of awareness of aspects influencing people's participation, and capacity to deal with them in time can have a significant impact on the success of a participatory project. The insights presented herein are developed from the analysis of several instances in the two projects in which participation levels fell, including an assessment of the factors behind this fall and of what proved effective (and what not) in dealing with it.

The impediments for driving local people's participation in research have been found to lie in a blend of deeply held convictions, attitudes, and (self-perceived) knowledge levels combined with objective impediments, for instance lack of time. The most pronounced factor determining low participation is related to the perceived legitimacy of people's endeavour. This factor is also the most difficult to tackle, as it is embedded in a set of deep convictions regarding the legitimate involvement of people in work and activities in relation to their area of expertise. Local people are prone to think that it is legitimate for the outside team to handle the project in all its intricacies, as it has the expertise to do so efficiently. At this point, perception of legitimate involvement relates with the perception of the researchers' authority and acknowledged expertise. At the same time, people think little of their own capacities to provide a meaningful input through participation. Bandura's (1998) concept of 'perceived self-efficacy' can shed some light on this aspect. According to Bandura, an agent is compelled to act when s/he thinks that the action is likely to reach out to the desired results (Bandura, 1998: 52). Perceived self-efficacy indicates "beliefs in one's capabilities to organize and execute the courses of action required to produce given levels of attainment" (Ibid.). If local people have a low perceived self-efficacy, they may feel less inclined to participate, and even to take the training needed for raising their know-how levels and being able to provide a relevant contribution.

The first three factors can be considered psychological barriers. They are perceptions and beliefs people hold of themselves and of the interventionist team. Other two factors have a more direct bearing: know-how and time. Lack of know-how can reduce people's intent to participate, when perceived, but also make their participation irrelevant if the area of contribution is beyond one's knowledge and skills. Lack of time can be accused by the people who may be best entitled to take part in a project – community representatives, leaders, administrators, and opinion leaders.

Methodological implications

The observations raised imply that enabling effective participation requires dealing jointly with psychological barriers (beliefs, perceptions, attitudes), calming gaps in knowledge and skills, and meeting factual impediments (lack of time). The most straightforward methodological guidance can be given with respect to know-how, pointing that training and education is a necessary pre-requisite to informed and effective participation. More complex methodological implications are raised by the way these factors are related, and how coping with one can boost another. While these aspects are highly context-specific and can be hardly approached through recipes, it is worthwhile to put forward two possible strategic directions for boosting people's participation in research, verified in the two field studies.

A first strategy is to start from raising the know-how. A raised know-how translates into

higher perceived self-efficacy and boosts the intent to participate. This in turns can change people's stand on legitimate involvement, and make them feel more equal in relation with the outside team. Increasing know-how through training and other educational activities can therefore be effective not only for raising knowledge levels, but also for dealing with psychological barriers.

There may be cases however when psychological barriers can be so high that people may shy away even from training. This can happen especially if people are still not convinced of the usefulness of the project and the importance of their participation, or when there are local cultural barriers, for instance in relation to gender. This was the case in the second field study, when women shied away from engaging with the camera, even when I explained how easy they were to use. In this case, psychological barriers need to be dealt with first. A suggested first step for dealing with perceived lack of legitimacy and perceived self-efficacy is to drive *commitment*. Once a person feels personally committed to the project, then intent to participate may overcome low perceived self-efficacy and the person may feel driven to try out and engage until s/he succeeds. This again was verified with women in the two localities, who committed themselves to the success of the project and came up with some of the most appreciable contributions.

Empirical insights

A critical overview of the approach taken in the two studies highlighted a series of challenges to instating research partnership as advocated by PAR. People felt shy to intervene in matters which affected the project course for reasons which blended a perceived lack of legitimacy of their input, knowledge to back it, and efficiency of their proposals. My authority as one who could best perform and decide on project activities was unquestioned. Since I feared the instalment of paternalistic attitudes in which I made decisions acting for a projected community good, I encouraged people by listening, living open questions and expressing my own doubts, while expounding several options each with its own benefits and risks and delaying decision-making. This strategy incurred risks as it could alter people's confidence in my own expertise as project manager, yet it was fruitful as it built up people's self-confidence, and encouraged them to intervene, put forward proposals, and take action.

Another factor impeding people's participation was the lack of know-how. This feature was especially pronounced in the second community site, where education and literacy levels were very low. This lack of know-how could only be backed by solid training, which could have contributed as well to raising people's perceived self-efficacy levels. Yet the project resources – financial, logistical, and human – were low and allowed for limited training for a limited number of persons. The strategy adopted was to train a limited number of people and encourage them to train others according to needs. The mutual determination between

know-how, perceived self-efficacy, and participation was noticed in both studies for people that had engaged thoroughly in the project throughout its length. People who mastered cameras usage, had key organisational roles, and acknowledged their important contribution to the project proved to have enduring participation patterns. High know-how was seen to result in heightened perceived self-efficacy and commitment to engage in the project. On the other side, high perceived self-efficacy in one area of activity encouraged people to want to learn and know more in other areas. For example, in the Podoleni study, a local woman that had initially a core organisational role was shy to engage in content production. Yet given her commitment to the project, and the acknowledgement of her key role, she became enough self-confident to learn to use the cameras and take a leading role in content production as well.

Not all impediments to participation could be met in the studies. In particular, it was difficult to transfer know-how of project practicalities beyond content production organisation and camera usage, so that people could have taken the lead in project management. Another difficult to overcome issue was time: community representatives and opinion leaders, who had an essential role in the project, were also the busiest people. Given their limited availability, they preferred to deal only with aspects concerning strictly their authority, and entrusted other activities and decisions to myself. Taken together, these aspects gave rise to uneven and fluctuating participation patterns that at times took the form of community consultation rather than informed, motivated and direct participation in all project phases.

#5 The AR/PAR cycle of action and reflection is an effective tool for raising members' perceived self-efficacy and can contribute to legitimizing members' inputs into the project in their own eyes.

The AR/PAR cycle of action and reflection has been adapted in a variety of forms, with the addition of other steps such as 'planning' and 'observation'. The cycle employed in this project included the steps Plan-Act-Observe-Reflect (Hearn et al., 2009; Kemmis and McTaggart, 2005). One of the advantages of employing this cycle is that it allows people to see the results of their actions. When tangible intermediary outputs begin to emerge from a project, people's acknowledgement of these outputs can contribute to raising their perceived self-efficacy. If people tended to think of themselves as unable or illegitimate in carrying out certain activities, constant exposure to the results of their actions can strengthen their self-esteem and build legitimacy for participation in their own eyes.

Methodological implications

The bearing on increasing people's perceived self-efficacy is just one of the benefits of using cyclic activity processes, as amply documented in the AR/PAR literature. Cyclic activity

models that combine action, observation of results, and reflection upon these are particularly adapt when involving people from marginalised and poor contexts that mistrust their capacity to bring a valuable contribution in the frame of a project. These processes are particularly strong when results are presented in group settings, shared and discussed, so that people see the results of their actions and gain legitimacy from the way these are acknowledged by other members as well. These activity patterns can be significant factors for boosting engagement and participation levels when, as discussed above, the main impediments to participation are found in psychological barriers related to people's perception about their capacity to contribute effectively in the frame of a project.

Empirical insights

Two illustrative cases in which levels of perceived self-efficacy and legitimation of input have been verified in the field studies are represented by women that overall had a crucial role in the advancement of the project. In the Podoleni site, one of the local women, involved from the early stages of the project, had a fundamental role in the organisation of project activities. She advised on timing and called on people depending on the type of activity planned. Yet she was very reluctant to use the camera herself. Her first experience with filming was very bad, and after seeing what she filmed she became even more reluctant. Yet she continued to advise, much in the role of director, on how to film, how to arrange the camera and how people could sit. By watching the films in collective screenings sessions, she took pride on the results, and also gathered more courage to take initiative and conduct filming sessions during content production. A similar case occurred in Munteni, involving a woman in one of the families that had been given the camera. At the beginning she did not know how to use it, as training was provided only to her husband. The first results were of very poor quality, as she did not know hot to switch between the camera and the video mode on the camera. Yet she was determined to try and after I had explained her how to use the camera, she continued to use it and produced the largest number of usable video pieces in the project, including aspects of the nomadic life and her husband crafting metal cauldrons.

#6 Involving the right stakeholders is fundamental for building commitment, creating the bases for effective mediation with the community and effective representation of its interests in the project, and contributing to consensus-reaching.

Involving the right people can make a fundamental difference for the success of a participatory project. In identifying them, it is important to consider not only the formal role of conspicuous community members, but also the type of relations cherished with the community and the authority invested informally. When the right stakeholders are identified their role can be crucial, insofar as

- They may be prone to manifest heightened sense of initiative and commitment driven by the importance of their role;
- They can act as aggregators and motivators for people;
- They are prone to gather consensus from their people giving strength to their decisions; *and*
- They can act as effective mediators with community members, using the adequate terminology for putting through project messages.

A related aspect is that of *leadership.* While participatory projects may be seen as fields of equalitarian endeavour, and in many cases they are, the experience of the two field studies demonstrated that community leadership can be essential for driving the project on, ensuring consensus-reaching, and assigning responsibility. Groups may tend to acquiesce, stagnate, or not put through their own views either because members follow a group logic or because they are shy to intervene. When people do have initiative in group settings, agreement on the steps to take might not be easily reached. In both cases leadership can make the difference on whether a project moves forward or not.

Methodological implications

Most projects will be carried out with a handful of community leaders or representatives, selected through high-level formal channels. The insight brought by this study is that it is important to identify those people invested with authority and held in high esteem by the community itself. At times the formal and informal role may coincide in one person, while in other cases different people may fill these roles. The member with informal authority is bound to ensure community engagement, act as mediator, and drive people's commitment. The formally invested member, on the other hand, can act legitimately in representing community interests, and her/his involvement can be a fundamental condition when the goals pursued regard the community as a whole.

Empirical insights

The Podoleni case has had an unusual progression with respect to the people involved, as it did not start top-down, but bottom up. A family of musicians provided access and was involved throughout the project course, having a determining part in its advancement. Its reputation and the relations cherished with the other members contributed to driving other people's engagement and making the project widely known and accepted. It was through their mediation that some time during the content production stage one of the community leaders was involved. He was a formal as well as an informal leader. A tireless fighter for people's rights, he enjoyed popularity and people's affect. His role was essential for piecing up and concretizing what had been achieved thus far in creating a representative and

manageable community website. There are two aspects that stand out in this process. Firstly, the importance of involving people with informal authority and popularity. The head of the musicians family as well as the local councillor both filled this role. They were irreplaceable people that marked the project advancement. Second, the importance of leadership needs to be highlighted. The involvement of the community leader, the local councillor for the Roma, contributed to carry the project to its goal at a moment when decisions were taken that regarded the community as a whole. His position was such that he could act as the main decision-maker in processes where groups could not formulate decisions and reach consensus, nor act and decide on behalf of the entire community.

#7 Getting relevant community input and feedback requires a foundational pool of common understandings on matters treated.

The relevance of community feedback means that responses provided in the frame of a research – be it data generation or field activities – are aligned to members' views. Misalignment between views and feedback may be due to members' misunderstanding on issues treated, either in substance or in terminology; or situate itself at the receiving end, therefore on the side of the researcher/development worker that may be misguided by the use of terminology or derive a wrong understanding of the views expressed by associating these with other aspects than those intended. To bridge these potential gaps in understanding, there is a need for the local people and the external team to reach consensus on meanings attributed to phenomena and processes relevant to the project, and the terminology used to convey these.

Methodological implications

Reaching out to common understandings and arriving to use the relevant terms can take time and necessitates prolonged interaction with the local community. Two strategies can boost this process:

For data gathering, inductive approaches are advisable. Pre-packaged data generation tools may yield data misaligned with members' views. In particular, progressive construction of the data generation apparatus, as advocated for instance by grounded theory, can be effective in minimizing potential biases. One effective way tried out in this study is to start with emergent interviews, based on a limited series of open-ended questions done with a small sample of participants. Based on the results of these interviews, further data generation instruments can be designed. The best results are achieved when this progressive approach is pursued in cycles of data generation and analysis, so that each new round of data generation uses revised instruments and protocols based on the results of the analysis of previous data generation rounds.

Second, with respect to field action, the effectiveness of cyclic activity models should be underlined. Cyclic activity models constantly put people in front of decisions they made, views they expressed, and the results these yielded in practice. They allow also to take corrective measures when there is acknowledgement that inputs are misaligned to true views and interests. In the long run, through repeated iterations, consensus on the attribution of meanings and the terms used is reached in a natural way, so that there is less and less need to go back on one's steps.

Empirical insights

Surfacing genuine community views in the two studies was essential, as the goal was to arrive at a communication solution adequate, representative, and useful for the people. The entire methodological apparatus has been designed with this goal, inclusive of an progressive approach to data generation as advocated by grounded theory, and the cyclic activity model as advocated by PAR. There were a good number of cases in the early stages when, as proved by repeated evidence later on, people's feedback had been misunderstood by myself, or had been expressed by people based on a distorted understanding.

One of the significant drawbacks in the early stages was that there was a tendency for people to acquiesce straightforwardly with proposals put forward. Community initiative at the beginning was very low and at times the project advanced on the wrong premises. Most significantly, in the Munteni case the entire website content strategy had to be redefined during the web design stage. Seeing my genuine curiosity for their tradition, people did not express their lack of interest in publishing content about their cultural traditions. The initial information architecture for the website embedded people's core concern – cauldron-making and poverty – in a story of their history and traditions. It was only on seeing samples of how the website looked like that people's lack of enthusiasm for cultural representation became apparent. People's interest was to put forward their metal-work profession, speak of poverty and the hardships of nomadism without packaging this in a story of cultural traditions. These insights motioned a re-thinking of the entire website content development strategy to re-focus it on the core community interests.

#8 Conviviality in the organisation of project activities is bound to elicit genuine views from members, foster engagement, strengthen relationships, cultivate community openness, and build trust.

An external intervention in a local community carries with it an aura of artificiality, understood in terms of novelty from native processes and patterns of social interaction, but also as a straight-jacket for new processes and activities where the rules of the game are dictated by externals. As an effect, local people may either shy away from taking part, either attempt to

enter the straight-jacket, understand and play by the rules newly defined, or derive distorted understandings due to clashes between their views and perceptions and those compelled by the new frame. Given its core concern with local appropriation of technology, this research project paid particular attention to how intervention activities could be embedded in the social fabric and contribute to minimizing distance and artificiality in their course. Data shed light on the one hand on the effects of artificiality and on the other on ways to effectively counter-balance it.

Artificiality is the result of imposing a novel referential frame made of new terms, understandings, codes for attribution of meaning and codes of conduct, which guides human activities. From the viewpoint of local people, this frame is a container of many unknowns, and can act as a barrier for entry (lowering engagement and openness), but can also be a factor of distortion for understandings that can further affect the authenticity of views put forward. Conviviality is an effective way to counteract the effects of artificiality. Conviviality describes the quality of interaction among participants in a program activity, characterized by openness, friendliness, and natural flows of conversation. Conviviality can contribute to:

- Eliciting genuine views, triggered by participants' openness in a setting in which they feel at ease;
- Spreading project acceptance in community, openness;
- Encouraging people to provide feedback and contribute of their own accord;
- Strengthening relationships;
- Driving engagement in activities that could otherwise be considered heavy or time-consuming, e.g. data gathering sessions.

It should be noted that the characteristics of a community can imprint different interpretations and directions to how conviviality is understood and enacted. Attention should be paid in particular to the degree of openness of a community to outsiders.

Methodological implications

The dichotomy between artificiality and conviviality can guide methodological choices in the design of the data generation apparatus as well as in the design of project activities.

For data generation, conviviality is preferable when members' *subjective* views are elicited. Artificiality in instrumentation of data generation (e.g. structured interviews in first-time encounters) and in administration protocols (based on cold, distant relationship in which the researcher is extracting data from the onlooker) can create barriers to expression, compel members to cover certain aspects or strive to express them in a form that they believe is desirable to the researcher. Conviviality can make people feel at ease, and by avoiding blunt ruptures with everyday life activities, can activate streams of thinking that are closer to their natural ways of being.

The organisation of project activities as convivial events does not undermine their soundness and effectiveness. Conviviality makes for the outer atmosphere where activities are embedded, instantiated in attitudes, approaches to verbal interaction, and the choice of places. It can also be driven by small tokens of appreciation as simple as serving refreshments. In this frame, formal processes requiring deep thinking, decision-making or creation activities can be embedded.

Empirical insights

Taking the example of the Podoleni study, the importance of conviviality was particularly evident in driving people's engagement. The project purpose, goals, and benefits were discussed within a limited circle. Yet numerous people were called upon for data generation sessions (e.g. focus groups) or project activities such as content production sessions. Moreover, numerous other people dropped by, stopped to watch, or engaged in activities. These people were not provided with an extensive briefing each time they dropped by. With the project goal sketched in fast lines, for most people engagement was motivated by taking part in an experience rather than a vision of benefits to reap. In particular, the house of the musicians family became a place of gathering and encounter. This friendly atmosphere was beneficial for embedding a large series of activity types, from focus groups to content production to card sorting sessions. Conviviality was instantiated in openness, friendliness, easy and flowing conversation, and little details, such as serving refreshments. The tools and approaches of formal data generation (for instance written focus group guides, audio-recorder, written consent forms, my notebook) were used, and their need was explained, with attention to avoiding too stiff, high power-distance interactions. The overall atmosphere contributed to integrating these as natural tools used to keep track of what was happening and also motioning people's attention to the importance of their role in carrying forward the project.

#9 Committed participation leads to increased sense of project ownership, which in turns can be a boosting factor for self-initiated action and autonomous involvement.

'Ownership' refers to the sense of owning and being responsible for an initiative, subjectively felt by participants. As a subjective state, it is difficult to measure and assess and bound to be always approximate. In the approach of this study, increased self-initiated action in the frame of an initiative is taken to be the principal indicator of ownership. This can be further verified in verbal accounts of members and explanations for their actions. Project ownership presents importance in particular when a sustainable solution is sought by a technology intervention. There are two aspects treated herein: 1) how participation impacts on and is impacted upon by developing a sense of ownership; *and* 2) how this in turn increases the

potential for sustainability.

Committed participation has been found to be a significant driver for project ownership. Using the operational definition of participation outlined above, 'committed participation' refers to the involvement of one or a group of community members where they exercise reasonably high degrees of control for all or significant parts of an intervention in a prolonged and enduring way across intervention stages.

When committed participation is also resulting in reasonably broad decisional impact, it can significantly increase the sense of ownership. In turns, the sense of ownership may drive an agent to take initiative in the course of a project. Two conditions by which the sense of ownership may lead to self-initiated action have been singled out: increased know-how and heightened perceived self-efficacy. Self-initiated action has been described above as an instance of highly autonomous involvement. It appears therefore that participation and sense of ownership are mutually determining in a virtuous circle:

- Committed participation can heighten the sense of project ownership;
- When increased know-how and perceived self-efficacy are verified, the sense of ownership may drive the agent to initiate activities of her/his own accord, leading to a pattern of autonomous involvement.

With respect to the relation between project ownership and sustainability, the hypothesis put forward is that the sense of ownership is a determining boosting factor for sustainability, in particular when the agent has developed as well increased know-how and perceived self-efficacy. These relations have been indicated by data patterns in the Podoleni study, yet data were insufficient to dig further into other determinants of sustainability. Further research is therefore needed to gain an in-depth understanding of the relations between ownership, participation, and sustainability.

Methodological implications

These insights can inspire methodological choices, or can serve to look back on the reasons for the way a project succeeded in achieving its goals, in particular when sustainable solutions are sought. Importantly, the sense of ownership of an initiative is cultivated by doing and involvement. The relations described can help to get a clearer picture of the type of involvement required for cultivating a sense of ownership, in particular:

1. The importance of entrusting local people with high degrees of control;
2. Ensuring prolonged involvement of the same stakeholders across initiative stages; *and*
3. Making explicit the impact that their decisions and involvement have in the scope of the project.

With respect to the first point, it is important wherever possible to involve members in the beginning stages, for agenda-setting. This allows for an overview of the process as it unfolds, and can also favour the development of a mindset by which priorities and goals are linked to the activities needed to bring them to completion. The third point presents particular significance, as while the sense of ownership is cultivated by doing, people need to arrive at a conscious appreciation of their effort and the results of their actions. The presentation of results in group settings, where the input of members is underlined, can be useful devices for this purpose.

Empirical insights

In the Podoleni site, there were a series of key people where a high sense of ownership was verified, especially the active members of the main contact family, and the local councillor for the Roma. The informant family has been involved from the very beginning. The patterns of involvement of its members present high values associated to committed participation: members took part in all project stages, had a high degree of control over important aspects, and were aware of the broad impact of the decisions they took in the scope of the project. It was interesting to note and compare how gradually more members became involved and enlarged the scope of their actions. For instance, one of the teenage sons, mostly a spectator all throughout the project activities, yet present in many of these, became involved of his own initiative in the very last stage, when the last pieces of content were being produced for the community website. For this case, even if he had practically had no control over previous activities, he knew how to use the cameras and also learnt enough about story elicitation and interviewing. The footage produced by him focused on themes we had treated in previous content production, and had the same approach and questions, which showed that he had a good grasp of the process and tools despite his passive involvement. For this specific case, it appears that know-how is linked to taking initiative in the case of prolonged, even passive participation.

The involvement of the local councillor for the Roma presents a different facet of the relation between participation, ownership, and autonomous action. The councillor had not been involved from the beginning (apart from being interviewed for initial data generation). Yet by gaining more awareness of the project goals he realized how these could fit in with community goals he was already committed to. He was interested if the website could be entrusted to the community after the completion of the project, and once we had agreed on the terms and conditions to be met for producing the website and passing it on to the community, he became a tireless supporter of the project. Many activities in the second part of the content production phase, and in particular after the first website design session, were organized by him. It appears, in his case, that the development of a sense of project ownership was boosted by acknowledging how the project could serve already cherished

goals for community development. In this process, the role of participation was that of allowing him to get acquainted with practicalities of the process of producing website content and publishing it, so that he could feel in control of these processes and confident he could carry them on autonomously.

8.4 Voice through Participatory Content Creation between Product and Process

This part focuses on the appropriation and usage of technology for knowledge production and communication as part of participatory content creation initiatives. The conceptual propositions are organized around:

- Conditions and processes around the appropriation of technology for collective knowledge production and communication;
- Factors to take into account for creating community-representative communication artefacts;
- The special case of public communication, focusing on achieving balance between cultural representation and audience reception.

With respect to transferability and fit in other empirical contexts, the propositions described herein can give general insights in processes by which local communities may engage with ICTS for producing communication artefacts reflecting collective themes. In particular, the propositions can prove inspirational for a certain type of communication interventions, which:

- Have as purpose to document or preserve community memory through members' accounts;
- Go large-scale involving a great number of community members;
- Include members as producers as well as storytellers; *and*
- Are meant to produce a product that aggregates the narrations produced in a sense-making communication artefact – whether a blog, an archive, or a website.

#1 Community-driven creation of communication artefacts drawing on its culture or present-day concerns resides on effective explicitation, externalisation, and objectification of knowledge and experience.

In the experience of this research, the process of explicitation and externalisation of knowledge and experience was an essential step for ensuring that the community had

agency over the communication goals it has set, the content it decided to produce, and how to go about producing it. Explicitation of knowledge is used here to refer to investing knowledge with an almost tangible quality, objectifying it, making it external to the source that produced or vehiculated it. This process applies equally to tacit knowledge (embedded in action and difficult if not impossible to share and convey, Polanyi, 1962) as well as verbalized, or explicit knowledge (Nonaka et al., 2000). The accent is placed here on giving knowledge an object-like quality, so that the agent consciously takes distance from it and is able to see it as separate. It is important to note that this process does not apply only to explicitation of tacit knowledge, which has been amply treated in the knowledge management literatures, but to tacit *and* explicit knowledge. In daily routines, people constantly verbalize their knowledge and experience as part of regular conversations, yet it is often the case that these are not consciously perceived by members as *external* to themselves. As an example, people may know that they are poor, they may speak of poverty in their regular interactions and complain about its effects. Yet poverty is perceived in an undifferentiated whole in the local milieu, together with the flow of everyday life, imbued in the life fabric and actions of the members. Even in speaking about it, people do not take distance from it to see that poverty is *something,* an object, a name. Objectifying poverty refers to taking distance from poverty, perceiving it as an external entity or concept, separate from the agent's life and behaviour.

Providing knowledge and experience with these object-like qualities that favour distance-taking has been found to be the most important foundational element for allowing people to properly relate their life and experience with the realm of representation afforded by digital media. This process produces a quality of *awareness* that something is external to oneself, and can therefore be verbalized, shaped, and manipulated much like an object. Developing this awareness has an important bearing for community-driven media creation for two reasons:

- Digital media stand for a different level of representation that while transparent and easy to manipulate by literate and digitally literate people, presents many unknowns for illiterate or digitally illiterate people. It is only by giving this objectified quality to knowledge and experience that people are further able to consciously relate with the representations in digital media, and direct the process of media production for creating community-representative artefacts.
- This quality also enables people to combine, relate, structure and give hierarchy to their knowledge and priorities. This aspect is fundamental when there is a need to create a community-driven taxonomy. Only by manipulating knowledge and aspects of their life like conceptual objects external to themselves can people opportunely place pieces of content in an architecture and establish relations in this architecture.

It should be emphasized that the level at which this process of explicitation starts depends to a great extent on the members' profile and their exposure to conceptual work as well as literacy and digital literacy. It can be argued that externalisation and objectification are matters of conscious and voluntary practice rather than an effect of literacy or conceptual exercise, yet the process may be more straightforward for literate rather than non-literate people.

Methodological implications

Processes by which externalisation and objectification of knowledge can be fostered are treated in detail in one of the propositions below. It is useful to anticipate, in here, the most important factors and processes deemed to foster externalisation effectively, as they came across from the grounded analysis. The process of objectification has a component of expression or externalisation, and one of gaining awareness of the external quality of what has been externalized. The necessity to arrive at tangible and observable outputs for externalisation makes it opportune to conceive externalisation processes in conjunction with creative activities. Therefore, at methodological level, to put in practice these steps an intermediary *creation* act can be added to give a tangible quality to the externalisation. A possible sequence can be:

- Driving verbalization or externalisation, for instance in discussion or active inquiry sessions;
- Giving a tangible quality to it by recording, or by designing the act of externalisation as a creative act (through performance, drawing, etc.); *and*
- Driving observation of what has been externalized, either individually or in group settings.

For participatory content creation, this can be done by spreading the process of externalisation and objectification across the timeline of content production in cycles, so that people express, create, and observe the results of their creative activities.

#2 Creating community-representative communication artefacts requires sensitivity to and awareness of how live knowledge and experience are reflected in the content and structure of the artefact.

This proposition builds on the one preceding it. Explicitation and externalisation are necessary to give an objective quality to knowledge or communal issues. Further, this objectified knowledge can be used to create a communication artefact. The notion of 'community-representative communication artefact' indicates that a community's views as acknowledged by its members are adequately captured in a communication artefact, and

also that the reflection of the community image in it is consonant with members' way of life, thinking, and acting. To produce it there is a need to manipulate the objectified knowledge in ways that correspond to local thinking and ways of being. In complex digital artefacts such as archives and websites, this can be done by looking at the content and its mapping and relating on a structure. A correspondence can be established between relations established in communal knowledge or issues *and* the relations among content pieces in the architecture of the artefact. To be able to work with local knowledge and digital media in ways aligned to local epistemologies, it is necessary, therefore to derive an understanding of the correspondence between two levels: that of the lived experience and that of the representation in digital media. By working and manipulating segments at the second level (representational) an agent should be able to consciously draw on existing patterns and relations at the first level (experiential) .

Methodological implications

Implications at methodological level can be formulated differently depending on *who* leads the content creation and design. In a community-centric optic as adopted by this study, the main insight is that for a community to be involved effectively in design and development of communication artefacts, it must have arrived at an acknowledgement of the correspondence between its knowledge luggage, lived experience, issues and values *and* their representation in digital media. This can be done by constant exposure to digital media artefacts, how they work, and illustrative examples of already produced community artefacts. This study has found, moreover, that certain tools can aid in this process if applied constantly on the timeline of a participatory content production experience. Two tools used in this research were a list of community themes and (only for the more literate community) an oral history guide. The list of themes was drafted early in the project, from the first elicitations of community views through focus groups. It contained a listing of subjects that were deemed important by participants, in no particular order and without a defined structure. This list was used to guide content production, in which process it was expanded and revised. Finally, the list of themes was used during the card sorting exercise in which the website information architecture was created, alongside content samples. The oral history guide contained questions to ask in eliciting stories from members, on subjects corresponding to the main themes. The guide was used all throughout the content production phase.

Empirical insights

Data that indicated the importance of externalisation and objectification of knowledge (re. proposition #1) in relation to the capacity to manipulate representations in digital media (re. proposition #2) added up all throughout the interventions, yet the core insights they indicated

became evident only during the first website design session. In both communities, the first website design session had as purpose to sketch the information architecture and start to map content on it. The technique used was card-sorting (Courage and Baxter, 2005: 415). The tools employed were content themes (important community themes put together in the preceding phases), content samples (both written and playable on the computer for video files), and white cards. The exercise in the Podoleni study was to group the themes in the desired information architecture for the website and then check the emerging architecture by mapping content samples on it. In the Munteni site, despite that fact that content themes were as well included in the tools set, only content samples have been used, as the double process of grouping themes and then content samples appeared too complex to handle for participants.

Participants' initial response to this exercise betrayed a difficulty with handling the concepts indicated by the themes and content samples and appropriately manipulating and grouping them. In particular, it was difficult for them to come up with a higher-level category grouping themes of a finer level of granularity. In both cases, it was sufficient to give some examples for participants to take initiative and forge their own groupings. Yet reading through hesitations and the intricacies of the process, an important observation can be made. To group themes and items effectively, participants were actually required to work at two levels: One conceptual, which enabled them to treat the themes and content samples as objects that could be manipulated and grouped. At a second level, they had to relate the bare concepts written on cards with their own issues, features, and values that had been documented all throughout content production. While apparently participants were required to group concepts designated by words, in reality to do so effectively they had to delve into the life matter that the concepts indicated. What they had to do was to relate facets, aspects, features, values, needs, and aspirations characterizing their lives.

Once this invisible bridge between the conceptual and the lived was clarified, participants were able to come up with groupings reflecting their own perspective. Particularly illustrative is the way the local representative in Munteni grouped a series of content samples that for myself, even if exposed for so long to community life, appeared unrelated: 'Travelling with the tents', 'I want to go to school!', 'Lack of work places', 'Child education', 'Poverty and everyday life', and 'Life in the tent'. All these were grouped under the category 'Poverty'. The fact that he grasped the logic of relating community issues to the concepts on cards was evident from the leader's response to my question to clarify his choice: poverty conditioned all these aspects in community life, and was therefore the appropriate name for the cluster of samples grouped.

#3 Processes based on cycles of inquiry, creation, observation, discussion, and reflection can support effective externalisation and explicitation of knowledge, externalize needs and interests that had not been acknowledged beforehand, relate live knowledge and experience to digital media representations, and facilitate awareness of how local themes are related.

This third proposition completes the vision built by the first two by focusing on the process by which people can externalize knowledge and relate it do digital media representations. Attention to the cycle inquiry-creation-observation-discussion has been motioned in this study by applying and studying the employ of an existing content creation model, The Inquiry Cycle, made of five steps *Ask-Investigate-Create-Discuss-Reflect* (Bruce, 2002; Bruce and Bishop, 2008). In assessing the employ of the model on the field, the role of each step and their sequence has been clarified in relation to three dimensions:

1 Explicitation of knowledge, values, interests, and communal issues;
2 Generating awareness of ties and connections among these; *and*
3 Relating the realm of experience and orality to digital media representations.

Four distinct steps have been singled out from the model as essential in driving these processes: inquiry, creation, discussion, reflection. In addition, one step that may be thought of as implicit in the Inquiry Cycle has been added - observation. The role of each step in relation to the three dimensions can be described as:

- *Inquiry* refers to digging into a subject aware and actively, ideally in in group settings. Its role is to surface knowledge, opinions and beliefs. The quality of interaction in group settings favours distance-taking and prepares the ground for creating tangible and manipulable representations of these expressions.
- *Creation* refers to pursuing the lead opened by inquiry for creating a communication artefact. The role of creative activities is to confer expression and knowledge with the objectified quality that has been discussed in the first proposition above. Creation can involve manipulation of digital media, but can also take the form of verbal expression, for instance a story told by voice, on condition that it is recorded or represented in some form that can be later manipulated.
- *Observation* refers to critically inspecting the artefact produced. The direction of this critical inspection can be guided according to the goal this cycle serves: observation can trigger associations with other stories, knowledge aspects, beliefs or concerns; it can motion attention to inadvertencies between what has been captured and real life. Importantly, at this step the objectified quality of knowledge is consciously acknowledged by an agent.
- *Discussion* can be a means to trigger and direct observation before, during or

immediately after an observation session. It can also be done retrospectively some time after. In the two field studies, it appeared that discussion is particularly valuable for investing observation with a quality of active pursuit, given by verbal interaction in group settings. Therefore joint observation and discussion sessions are advisable.

- *Reflection* is an effect, the result of going through the steps mentioned, rather than an activity consciously planned and guided. It is a pause for thought where ideas and insights are triggered by the steps before and in relation to what the agent already knows and can be related to the object of the creative acts. Observation and discussion have precisely this role, to direct attention to the results of creative acts and motion reflection. The results of reflection may be shared in groups, and therefore reflective activities can be interweaved with observation and discussion.

There are two important points to raise when this process is enacted in community settings and where the knowledge pool on which everything draws is represented by communal knowledge or problems and issues faced collectively.

First, the process is cumulative. Each new iteration of the cycle contributes to creating a pool of knowledge that has an objective, external quality. This quality of objectiveness can be instantiated in keeping some form of archive of all the representations created, but is also taking place in people's minds. Some time into the process, for instance, people may be able to speak of how 'poverty' conditions 'access to education' and 'happiness'. Relations of this type stem from the conceptualisation of community issues into units that can now be related and manipulated in the mind as well as in the real/virtual realm by working with their digital counter-parts.

Second, the process is collective. Not all members will be able to participate at all times. Yet as long as the process draws on communal knowledge and experience, each new externalisation contributes to piecing up a collective pool of conceptualized, externalized, objectified knowledge that bears significance for the community as a whole.

Methodological implications

The employ of these steps in a community setting depends on the type of activities they are meant to support and where the accent falls: On creative activities? On the process of externalisation? On sharing for reinforcing a group ethos? There can be many goals and many approaches and every time the cycle can be adapted to respond to a specific purpose. In this study, the focus was on creative activities and on enabling representation in digital media while staying true to a community's views. Therefore the relations described above are derived from a take of perspective that gives a privileged position to the creative act and the use of digital media tools. Methodological guidelines on three key aspects are provided below, applicable when the goal is to enable a community to create digital media

representations.

The first regards the use of tools that can support these processes in collective settings, so that results can be tracked in time and made available for people that may not be present at all cycle enactments. Above two examples of tools have been given – listing community themes as they emerge, and using an oral history guide. Others can be devised, including visual representations of emerging themes, relations, contributions, the content produced, or progress tracking to the envisioned goal.

The second concerns the attribution of roles in this process and their distribution among community members. It is likely that roles in content production will be filled depending on interests and prior knowledge and skills. For instance, externalisation of knowledge through storytelling may involve a storyteller, a person eliciting the story, and one recording it. Not all people will be invested with each role. Yet as long as they are drawing on communal knowledge, they are equal shareholders and observers of what is being externalized and represented, and it is this concerted effort that contributes to creating community-representative artefacts.

The third regards the enactment of the cycle on a timeline and the benefit of re-envisioning and re-configuring local communication goals in the light of what has been already achieved. Each new iteration of the cycle contributes to establishing relations in the objectified knowledge produced, and motions attention to new knowledge instances, beliefs, or issues. This may trigger a constant redefinition of priorities for expression and communication, as people become more aware of what they truly want to create for themselves or for an outside audience. It is advisable, therefore, to pursue an open-ended strategy in which communication goals and the decisions over the communication artefacts to create are not nailed from the very beginning. Space should be given for this redefinition to happen even in late stages of the process. All in all, this sequence of iterated cycles equates to a community's rediscovery of oneself from a critical stance, a process where conscious planning and directing are as important as spontaneous emergence, and the goals can be constantly redefined to fit the quality of this emergence.

Empirical insights

In both field studies, content creation has started on the basis of the Inquiry Cycle (Bruce, 2002; Bruce and Bishop, 2008), and adapted through several iterations following leads from the assessment of results and community response. The role of each step in the cycle, as well as the logic of sequencing them can be illustrated through a series of vignettes:

- *Inquiry sessions* were based on discussions characterized by active questioning, usually led, in each community, by members that had an active and prolonged involvement all throughout the initiative. The role of inquiry was to delve into

themes that we could document. Leads were pursued from people, myself, or by browsing through the themes in the list compiled for each community.

- *Creation activities* were focused on recording stories, events, interviews, or musical performances. Creation sessions could be done in my presence, as well as entirely organised by community members. Roles in these processes were devised in accordance with people's interests and knowledge. Little by little content production teams were formed, in Podoleni two, while in Munteni seven.
- *Observation* was done by visualising content produced – footage, first edited content, and in advanced stages final edited content ready for publishing.
- *Discussions* were permeating all these phases, yet the most important part played by discussion was in relation to observation sessions. It was noticed that visualisation of content coupled with discussion was an effective means for triggering associations between content pieces, surfacing ideas for new content to document, and externalize needs that were not treated before.
- *Reflection* was not purposefully controlled, but rather an effect. To trigger reflection, it was necessary for members to take an active interest in the process, and relate their experience of taking part back to their daily life. What could be done to generate reflection was to create the conditions for this by involving each member in first person and encouraging active thinking, distance-taking, and genuine interest in the themes treated.

The community-specific models included other steps. In particular, a 'Planning' component was added in both studies to cope with time constraints and be able to reach the people that we wanted to involve. In the Munteni study a seventh step was devised for sharing content produced in several disparate groups. These additions reflect the versatility of the model, and how it can be employed and refined to serve specific needs in specific contexts.

#4 Presentation of local content to public audiences should ensure an optimum balance between reflection of community views and effective transmission of the key messages contained.

This study has had a core concern with adequate representation of community views in digital media. Both communities involved have chosen to create a public web-based communication artefact, which added a new dimension of concern: How can community views be adequately represented in a form that is at the same time understandable and interesting for a wide audience?

The adequacy of the communication artefact needed to be judged according to two dimensions:

1 Is the digital content aligned to the views of the community members in both meaning and form?
2 Are messages transmitted effectively to the target audience?

Each can be broken down in several facets that can shed more light on how a digital artefact can be designed to meet them. Adequacy to the locale can be reflected in content meaning, media choice, structure, and visual clues. For the audience, if a generic audience of Internet users is considered, several elements should be taken into account to trigger attention, engagement, and understanding: aesthetics, structure, labelling, and attributes of the content units (e.g. conciseness, clarity, single-pointed message). This operationalization can help to arrive at a clearer picture of how an artefact is a vehicle for meaning that has been encoded and further needs to be decoded to get hold of the meaning within. Yet it is difficult to establish clear hard-bound connections among views conveyed and their representation, as well as firm boundaries between meanings encoded and meanings decoded. It is likely, rather, that this balance will be met by each specific case, taking into account contextual elements and in particular the elements that are of particular vale to the community. For this proposition, the focus falls at the methodological level, and in particular on how this balance can be achieved in cases where due to social and informational isolation communities may be unable to control this process in full awareness of implications.

Methodological implications

The design and production of a community-representative public communication artefact requires on the one hand an insider's view of the community, and on the other expertise in the language and style of the Internet and generic browsing and usage profiles. What are the implications for this in the case of a participatory or a community-driven process? If among community members there are people skilled in designing for the chosen transmission platform, chances are that working from an insider's perspective they will be able to meet local and outside requirements in a balanced way. In the case of communities with low or no digital literacy, or groups that are socially isolated, a course of action is likely to depend on the outcomes that a project has set out to achieve. In particular:

- If an initiative has an educational and digital literacy agenda and not only a concern for producing a communication artefact, then the entire process leading to its creation should be oriented towards enhancing the relevant knowledge and skills in the people, for instance by exposing them to best practices, examples, demonstrations early in the exploratory phases of a project.
- If on the other hand there is a focus on quality product development, then roles in

the design and development of the artefact can be devised with the intervention of an outside team, provided the community is in control of the process and has decision-making power.

Below, an example is given of how this balance has been achieved in cooperation between myself, the university laboratory and the community, and the way these choices are reflected in the final communication artefact.

Empirical insights[13]

The Romani community in Podoleni had a key concern with presenting an authentic image of their life, including both problems and positive aspects, coupled with the desire to reach a wide audience. Faithful portrayal of community concerns was as important as successfully reaching an audience. This boiled down to understanding the optimal match among three dimensions: local content, audience to be reached, and technological solution. As far as content is concerned, community members were involved in identifying the main content themes (starting from the needs assessment phase), producing associated content (content production phase), and selecting it and categorizing in the final website (website design phase). The identification of the audience was a collaborative process involving the community and myself during the needs assessment and vision definition phase. The technological options were assessed by the research team, including myself and a technical expert, in the light of the communication goals, the type of content produced and the audience to be reached. Visibility per se (audience expansion) was considered a priority requirement. The technological solution was designed with a view to search engine optimization and social media were used for content spreading. To make the content appealing, outside involvement has been higher during content editing and preparation for publishing. A professional graphic designer was hired, for instance, and briefed to produce a relevant yet simple and visually compelling website.

[13] For extensive details on the process of designing and developing the community websites please refer to Chapters 4 and 5, while for relating to the final output please see the relevant sections of Chapter 7.

8.5 Conclusion

This chapter exposed a series of conceptual propositions derived from the application of grounded theory methodology in the two field studies. Maintaining the action-oriented approach of this study, each proposition has been accompanied by an outline of methodological implications. To illustrate how the processes occurred in practice, and also as a measure of providing grounds for critique, illustrative examples from the two field studies have been provided for each conceptual proposition.

A first series of nine propositions focused on the role and conditions for community involvement in participatory technology projects proposed by an outside agency. As evident from the place given herein, this study found community participation to be the *sine qua non* condition for initiatives concerned with voice empowerment. These propositions capture some of the most important barriers for participation as verified in the two field studies in relation to contextual features, and hypothesize further on how they may be instantiated and coped with in other contexts. It has been argued that barriers to participation are likely to be particularly poignant in communities affected by marginalisation and stigmatization and in many cases fearful of outside intervention. Attention should also be paid to the forms that participation can take. One of the propositions proposed a model for patterning forms of community participation according to five attributes. Conceiving participation forms in relation to these attributes is likely to shed light on the fine articulations of participation impacts on desired outcomes, for instance the potential for sustainability of a project.

The second part of this chapter looked at the process of participatory content creation in community settings. Four selected aspects were treated: the process of externalizing knowledge and techniques that can foster it, dimensions and factors to take into account for creating a community-representative communication artefact, and considerations on modelling the design of web-based public communication artefacts.

PART IV. RELATED WORK AND DISCUSSION

9 Related Work[14]

"(P)roducing alternative media messages implies much more than simply challenging the mainstream media with 'campesino' correspondents as new communication and information sources. It implies having the opportunity to create one's own images of self and environment; … being able to recodify one's own identity with the signs and codes that one chooses, thereby disrupting the traditional acceptance of those imposed by outside sources; … becoming one's own storyteller, regaining one's own voice; … reconstructing the self-portrait of one's own community and one's own culture. … What matters is that, for the first time, one's shy languages, languages used to remain within the familiar and the private, take part in the public arena of languages and discourses."

- Rodriguez, 2001: 3

9.1 Synopsis

This chapter surveys the literature studying the interplay between ICTs and minority cultural expression, knowledge production, and communication. Its purpose is twofold: First, it aims to offer a broader theoretical outlook that can give the results of this study relevance and soundness. The theoretical framework presented herein has emerged by following leads from the grounded investigation to identify the most consonant literature approaches. It is the grand conceptual frame asked by the results of this study, rather than the pre-defined framework that guided it from the onset. Second, this chapter overviews state of the art research against which the study outcomes can be positioned, with a focus on methods and techniques for the design of ICT products and ICT-enhanced processes for cultivating minority voices. Accordingly, the chapter has two broad sections, the first providing the conceptual underpinnings for this research; and the second focused on methods, processes, and techniques for voice empowerment.

The first section outlines the relation between voice and ICTs from a developmental perspective. It describes 'voice' as a multidimensional concept that can account for the various facets of the processes and products of minority knowledge production and communication. From a developmental viewpoint, 'voice' stands for capacity and exercise of expression and communication, but also inclusion in socio-economic and political processes.

[14] Early versions of fragments in this chapter have been published in Sabiescu (2010), Sabiescu (2011a,b), Sabiescu (2012), and Sabiescu et al. (2012).

The concept of 'voice poverty', in which these dimensions are denied, resonates closely with the situation of disempowerment, exclusion, and silence of minority cultures. The factors and resources that condition voice and lack of voice can be analysed at three levels: the agency layer (capacity to communicate), the discourse layer (the exercise and product of communication), and the audience layer (being listened to). When ICTs come into play, the exercise of voice at any of these layers needs to be reconsidered, as do the resources for capacitating voice. Further, this part discusses the role of ICTs in the exercise of voice from a theoretical perspective drawing jointly on sociological and social psychology research that emphasizes the social embeddedness of communication technology, and critically assesses the resonance of this position in studying the mastery, appropriation, and usage of ICTs. The implications of this theoretical approach are further examined with respect to the appropriation of ICTs in minority contexts informed by three possible local agendas:

1 The inclusion agenda, by which ICTs are both conditions and resources for meaningful inclusion of marginalised groups in fundamental socio-economic and political processes.

2 The cultural agenda, by which ICTs can support knowledge production, collective expression, and cultural representation, in alignment to local ontologies and epistemologies.

3 The transformative agenda, by which ICTs can contribute to overcoming minorities' position of marginalization and exclusion and reaching empowerment, self-determination, and positive social change.

The second section focuses on processes, methods, and practices by which the three agendas can be realized, and overviews:

1 Participatory approaches to the introduction of ICTs and associated socio-technical environments in minority contexts through developmental initiatives or research programs. It outlines literature positions on the role, condition and impacts of local participation in such initiatives. Further, it provides examples of participatory methodologies that are particularly appropriate for minority communities and/or for technology interventions.

2 Community-centric technology design. This latter part is particularly relevant for the case of minorities, as it gives emphasis to the localization of design to serve the needs of representation and communication of cultural minorities. It overviews approaches that go beyond pre-defined methods and ready-made plans, and allow the design process to unfold drawing on a dialogue between the community and the design team.

9.2 Voice, Technology, and Development: Theoretical Underpinnings

9.2.1 Voice and development

The notion of 'development' was infused with different meanings and interpretations according to the dominant social discourses circulated in a given historical era. Each discourse carries with it a model of the world, of higher goals and finality in its realm, and of paths or ways to reach out to these goals. The Enlightenment ideas of progress as the joint product of rationality, science, and technology have fuelled for a long time Western views of development and alimented 20th century discourses concerned with material production and the eradication of poverty (Unwin, 2009: 7). These discourses gained importance in the aftermath of the Second World War, in the context of the growing gaps between modern, developed states, and underdeveloped or Third World countries, especially those freshly emerged from colonial domination (Servaes, 1995). In a modernisation paradigm, development equated economic growth, and this could be achieved by the states left behind by copying or adapting the socio-political and economic models of the modern, advanced capitalist states (Servaes, 1995; Waisboard, 2001). This vision was fuelled by evolutionist thinking, wherefrom societies are bound to grow linearly towards a state of advancement represented by the nation state with a liberal political system and a capitalist mode of production (Servaes, 1995; Waisboard, 2001).

To relate the notion of 'voice' with that of 'development', it is necessary to go beyond reductionist interpretations of development as achievement of material progress, towards people-centred approaches that take into account not only material but also subjectively felt and relational wellbeing (Tacchi, 2010). Alternative conceptualisations of development have been put forward based on a critique of the modernisation paradigm, that emphasized multidimensionality and cultural identity in pursuing developmental goals (Servaes, 1995). These alternative models challenge the universalist, Western reference point for conceiving human values, growth, and progress, and leave space for localized formulations of development and modernisation (UNESCO, 1996: 7). Local culture, knowledge, values, and norms become central boosting factors for development (UNESCO, 1996; Warren et al., 1999). A definition of 'development' that acknowledges local variation and the impossibility to provide ready-made values and standards to reach has been given by the 1990 UNDP Human Development Report, in which 'development' is defined simply as "a process of enlarging people's choices" (UNDP, 1990: 1). The vision of development laid out in the report emphasizes the importance of *freedom* concretized as freedom of choice in economic markets, having a say in determining political frameworks and decisions, and leading a life

akin to one's own interests and needs (Ibid.). For disadvantaged groups and poor countries, reaching out to these goals requires a process happening from within, taking due account of outside innovation in knowledge, science and technology, but integrating it in harmony with the local culture (UNESCO, 1996).

It is in this multidimensional and localized formulation of development that the concept of 'minority voices' can be positioned and its importance can be duly emphasized. In a developmental perspective, 'voice' can be defined as:

> "inclusion and participation in social, political and economic processes, meaning making, autonomy and expression."
>
> - Tacchi, 2010

In the same optic, 'voice poverty' refers to "the denial of the right of people to influence the decisions that affect their lives, and the right to participate in that decision making" (Tacchi, 2008). The concept of 'voice poverty' has gained a rich charge of significance for the status of disadvantaged, marginalised, and out casted groups, of which minorities are emblematic examples, so that "the reconstitution of voice has nearly become synonymous with the emancipation of the racial, gendered, and ethnic other" (Mitra and Watts, 2002: 482). The multiple issues afflicting these groups, ranging from socio-economic exclusion, discrimination, and negative stereotyping boil down to their lack of agency in controlling and determining their life paths at individual and collective level. In this process, voicelessness suggests one the one hand the inability to produce genuine expressions of a group's interests, values, wants and needs, and on the other the failure of these discourses to be listened to and take effect in the social, economic and political spheres.

Of particular relevance for the status of minority cultures is the holistic definition of 'voice' provided by Nick Couldry (2010). Though advanced from the viewpoint of a media studies scholar, his characterization of voice runs transversal to socio-cultural, political, and economic spheres. For Couldry, voice is a fundamental feature of the human condition, as it is related to the basic human capacity to narrate. The holistic take on defining voice encompasses a processual and an axiological dimension: voice as process and voice as value. Voice as process refers to "giving an account of one's life and its conditions" (2010: 7), "the expression of a distinctive perspective on the world" (Idem: 1). Distinctive attributes are associated with the processual dimension of voice:

- Voice is "socially grounded", insofar as voicing requires material resources produced in social life (e.g. language), and also as narrating requires an exchange, alternating telling and listening.
- Voice requires "reflexive agency", which implies the narrator's agency over the process coupled with constant reflexivity. Reflection also enables individuals to

make sense of their lives through narratives told or listened to.

- Voice is embodied, in the sense that it is articulated from a distinct position and perspective on the world.
- Voice dwells on a material form, expressed at individual, collective, and distributed level. The lack of access to the narrative resources at each of these levels implies a denial of voice. Unequal distribution of resources in a society for expressing voice is also form of voice denial for social groups or individuals. This characteristic is of particular importance for the status of minority cultures.
- Society may produce and perpetuate "voice-denying rationalities" by the very organization of social life and the distribution of resources for expression and communication (Idem: 7-11).

The axiological dimension of voice conceptualized by Couldry builds on the processual dimension. 'Voice as value' describes the societal reality in which voice as process has been recognized as having an intrinsic value. As a result, the basic frameworks for the organisation of social life are conceived in a manner that encourages the exercise of voice and leaves no social actors aside. These frameworks naturally leave out discriminatory or exclusionist discourses and practices (Idem: 2). Couldry's vision is an idealistic point of reference, a reality to adhere to when envisaging how the voices of the disadvantaged and out casted can be integrated and make their way in the natural flows of communication and participation in a societal system.

The notion of 'voice' appears therefore to be multidimensional and intimately linked with other dimensions of development. The World Bank publications 'Voices of the poor' (Narayan et al., 1999, 2000; Narayan and Petesch, 2002), which gathered poor people's views on poverty in underdeveloped countries, has identified cross-country common threads by which voice and poverty are interlinked. Firstly, voicelessness has been found to be a psychological dimension of poverty, alongside powerlessness, dependency, and humiliation (Narayan et al., 1999: 7). It is acutely felt by poor people as an affliction, an incapacity to speak, claim, complain, and be heard for fear of retribution, exclusion or maltreatment (Idem: 77).

> "Nobody hears the poor. It is the rich who are being heard."
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> - Narayan et al., 2000: 2, Quote from Participant, discussion group of men and women, Borg Meghezel, Egypt

Second, voicelessness can take the form of lack of representation or exclusion from participation in the socio-economic and political sectors. The views of the poor are ignored by local administrations and public institutions (Narayan et al., 1999: 83). Ethnic minorities represent social groups most predisposed to exclusion, alongside children, women, the

elderly, and the disabled (Idem: 195).

To make ground for cultivating voice as a developmental goal it is necessary to understand the various facets of the concept and gain practical insights into the resources and actions needed for advancing each. A first distinction can be done between the root sense of the concept in communication sciences, and the enlarged meaning it came to acquire in relation to people's inclusion and participation in socio-economic processes. There is a dimension of voice that is communicative, and can be described and studied from a communication sciences perspective. And there is a metaphoric dimension of voice that indicates emancipation, action-taking, and agency in pursuing self-designed goals, which has more profound implications for the status of minority cultures. In communication sciences, voice can be conceptualized as a human capacity or as a linguistic function, what can be termed the 'agency' and the 'discourse' components of voice (Mitra and Watts, 2002). The earliest distinction in these terms has been made by Aristotle (350 B.C./n.d.), who distinguished between voice (*phoné*) and speech (*logos*). In Aristotle's view, *phoné* was reduced to the utterance capacity of the human being, while *logos* carried with it the power and exercise of expression and communication, for instance in the political sphere. The concept of 'voice' can include another component: the listener, or the audience (Couldry, 2010; Mitra and Watts, 2002; Watts, 2001). Speaking or expressing entails that a second party is listening, taking in what has been expressed. In this sense, voice transcends its individualistic dimension and becomes a dialogic act (Watts, 2001), a "public occurrence" (Mitra and Watts, 2002: 483), or a socially embedded phenomenon (Couldry, 2010). This communicative take on voice outlines the principles facets of the concept, yet falls short of allowing a sound grasp of the relation of voice and lack of voice to minorities' condition. For this, it is necessary to understand the meaning of voice within the intricate interplay of socio-cultural and economic factors that condition the role and position of minority cultures in a society. This metaphoric take on 'voice' has been analysed in the literature from economic, political, developmental, and media studies perspectives. The studies considered most relevant for the situation of minority cultures are categorized and reviewed below in relation to the insights they bring to each dimension of voice as conceptualized in communication sciences: *agency* as capacity for utterance and communication; *discourse* as exercise and product of communication; and *the audience* as the dialogicity feature of the speech act, as well as the potential of being heard and listened to.

Voice and agency

In a developmental perspective, agency can be defined as "what a person is free to do and achieve in pursuit of whatever goals or values he or she regards as important" (Sen 1985: 203). Building on Sen's definition, the 'agency' component of voice implies the ability for

expression and communication in accordance with the agent's inner drives, for instance their values and goals. Agency for voice also implies speaking from a perspective rooted in one's worldview, using the meaning-making systems, codes, and language of one's own culture. It is this root layer of voice that has been denied to minority cultures, and in particular indigenous peoples under colonial rule. In one of the landmark texts of postcolonial studies, 'Can the subaltern speak?', Gayatri Spivak (1988) denounces the 'epistemic violence' of the West against colonised populations. By mainstreaming Western ways of knowing as the only valid ones and denouncing non-Western knowledge as naive, popular, simplistic, or unscientific, Western colonialism left colonised peoples with two choices: to stay silent, or to speak out by embracing Western codes and languages (p. 76-7).

Cultivating voice as capacity for disadvantaged groups requires the possession or access to a set of *resources*, the denial of which is one of the primary causes for the perpetuation of their condition (Appadurai, 2004; Tacchi, 2008, 2010). At one level, there is a need for practical resources such as language, symbolic resources (Couldry, 2010: 7-8), and codes of meaning attribution that are part of the socio-cultural system of the agent. At a second level, the agent needs to have built up internal resources, such as knowledge and skills for expression and communication (Tacchi, 2008, 2010). These skills are defined in relation to the type of communication envisaged and the tools and channels that support it. For instance, being able to communicate in writing requires literacy skills, while being able to communicate via computers and the Internet requires digital literacy skills.

Voice poverty resides in lack of access to these resources, and has a collective and an individual dimension. At collective level, a community may be denied the means to express and communicate using resources that are part of its own cultural system. At individual level, an agent may lack the personal resources that enable her/him to give shape to his expression needs. Minorities' lack of agency for voice needs to be assessed from this dual optic. *At a first level,* as has been denounced by postcolonial studies writings (e.g. Spivak, 1988; Said, 1978), minorities have been denied voice by the systematic deletion of their cultural ethos and ancestral ways of knowing, and therefore deprived of the needed resources for cultivating an authentic collective voice. By imposing their languages, education systems, standards as to what makes relevant and irrelevant knowledge, and prohibiting the practice of the indigenous ones, colonialist policies have cut the possibilities for communication of indigenous people from the roots. In so doing, they have defined new systems, resources, and channels for expression and communication that conditioned the exercise of voice at *the second level*, that of individual capacities. Literacy and digital literacy, for instance, are resources for voice in societal systems that value writing and digital technologies (Bolter, 2001). They may fit little or be completely irrelevant in minority contexts that privilege orality, performance, and storytelling as main modes of expression and communication. Yet when minorities are integrated as parts of a societal whole that defines

the rules and channels for expression and communication, these sets of skills become by necessity important for enabling members to exercise their voices (Spivak, 1988). It is interesting to employ this perspective when reading through statistical reports that highlight how members of minority cultures are likely to lack skills such as literacy in a greater number than the members of majority populations (see for instance reports on scholarly performance of Peruvian indigenous populations in World Bank, 2000: 28). Are minority members doing less well because they are less able, or are causes to be found in misalignment to their inherited epistemologies and value systems?

Voice and discourse

'Discourse' (Aristotle's *logos*) indicates the exercise of the capacity to express and communicate, as well as the product of it. At this level, voice makes its entrance in the public arena. People's participation in social, economic and political processes are an exercise of the discourse function. A compelling argument on voice as the exercise of the *logos* is given by Albert Hirschman (1970) who proposes the concept of 'voice' as an alternative to that of 'exit' with applicability to economics, and by extension to the socio-political behaviour of social groups. 'Voice' refers to taking action when an agent meets unsatisfactory conditions, by expressing their dissatisfaction, taking corrective steps, or opposing openly the conditions or the systems that perpetuate them. Voice is a clear and open articulation of opinion and therefore "political action par excellence" (p. 16). 'Exit', as counter to 'voice', implies that the agent leaves the scene or cuts contact with the system that fails to meet her/his expectations. 'Exit' is an economic concept, characterizing those situations when a customer's dissatisfaction with products and services or a firm employee's discontent are expressed by turning towards alternative products and services, or alternative employees. Exit is impersonal, it is a withdrawal from the battlefield allowing market forces to decide the outcome for the market actors. Exit and voice are two alternatives for social minorities that face discrimination and exclusion. Both exit and voice can be manifested by individuals or by collectives. For instance, exit can be taken up by individual members when they leave one's minority community and try to integrate in the majority population by taking up their customs, moors, and values. At the other end, voice as action can be attempted by individuals fighting the system or by minority collectives, most extreme forms being rebellions or revolutions. The upwards movements made by minorities or other marginalised groups have been possible, in Hirschman's view, when collective action has been taken, in either peaceful forms (e.g. founding interest groups) or in extreme violent forms (revolutions).

Building on Hirschman's argument, Arjun Appadurai (2004) argues that voice plays a vital part in development as a cultural capacity and a form of action that is expressed and can take effect across the social, economic and political sphere. Voice is fundamental for

changing what Appadurai calls the "terms of recognition", indicating the patterns by which social statuses and inherent limitations are maintained in society on virtue of ideologies, doctrines, and social values. Poverty and marginalization can be perpetuated through the unquestioned approval of such terms of recognition. An example is the way the position of the untouchables in India has become widely accepted and transmitted through the years by creeds and norms about the rightness of the caste system in relation to the rebirth doctrine. Appadurai proposes, using Hirschman's terms, that the poor and the disadvantaged have three ways of coping with their condition: exit, voice, and loyalty. Voice means that they will stand up for their rights and challenge the social values, doctrines and ideologies that serve latently to keep them in their disempowered condition. If successful in their endeavour, they will be able to change 'the terms of recognition', and have a solid basis for the new position that they have earned for themselves in society.

The *resources* needed for the exercise of discourse bridge agents' capacities to the social environment. For cultivating discourse, there is a need for external resources - the channels, platforms, and technologies for expression and communication (Tacchi, 2008, 2010). The type of tools and platforms needed at this level are defined by the prevalent means of communication used in a society. As Bolter (2001) argues, each epoch has its own privileged platforms for encoding and transmitting knowledge. Before the expansion of print technology, the medieval cathedral was a great library in which the Church engraved its messages and symbols for the believers (p. 1-2). Writing and print technologies have defined new ways by which discourses can be actuated, together with inherent values and conventions associated with accessing them (Bolter, 2001; Ong, 2002), while digital media and the electronic word challenged these and instated others. For instance, if writing tends to be associated with stability and authority, digital publishing invokes, on the contrary, flexible and interactive qualities, and speed of distribution (Bolter, 2001: 3).

Audience for voice

The 'audience' component of voice can be articulated in conceiving voice as dialogue, or by stressing the importance of reception, internalization, and recognition of communication messages. As illustrative of the first approach, voice can be conceived as a form of cooperation and exchange which requires the involvement of two parties. In this view, giving voice is not about enabling a party to speak out and express itself, but means creating the conditions for dialogue.

> "(T)o speak of finding a voice is to talk of a sort of collaboration or transaction, not a discovery."
>
> - Mitra and Watts, 2002: 484

Second, the stress on the audience calls attention to the *impact* of communication. An

important concept in this respect has been advanced by Taylor (1992) who speaks of the "politics of recognition" indicating the obligation we have in multicultural societies to listen to and connect to worldviews and systems of otherness, different from our own. 'Recognition' is one crucial aspect of voice in developmental terms. Appadurai's (2004) "terms of recognition" as expounded above integrate and build on Taylor's concept. In Appadurai's view, *recognition* refers to the acceptance on a wide social scale of doctrines and ideologies that can fundamentally influence the position and roles of social groups. Social groups can be blocked in disadvantaged positions because society in general, and even the disadvantaged groups themselves adhere to certain doctrines and social values. Only by reshaping these ideologies and social values and ensuring their wide recognition can the situation of disadvantaged groups truly change. Recognition of voice implies affecting these fundamental social structures, the old terms of recognition, in ways that make possible changes in the social condition of the disadvantaged groups. Tacchi (2010) makes a similar argument that listening to the voices of the disadvantaged necessarily implies action-taking and change effected at social, political and economic levels.

> "If what is communicated is not articulated by government into wider economic, political and social change, then voices have been heard but not 'listened' to."
>
> - Tacchi, 2010

The *resources* and conditions for having an audience depend on the agents' sphere of power, but also to the external world. For instance, social status may be needed for enabling people to be heard and listened to (Couldry, 2010: 7-8), yet this has to be accepted and recognized by a potential audience. Recognition as conceptualized by Appadurai (2004) and Taylor (1992) can make the difference for people whose discourse is listened to or not in a society.

9.2.2 ICTs in the exercise of voice

The role of technology in the exercise of minority voice at any of the levels outlined is ambivalent. ICTs can be seen as strong boosting factors, but also as potential threats for local forms of expression. They can be thought of as enabling tools, but coming along with inherent conditions and constraints. To explore the role of ICTs in the exercise of minority voices in all its complexity, it is necessary to clarify the nature of ICTs and shed light on their relation with the social sphere, human agency, and the type of instrumentality they can acquire. These aspects are treated below from a theoretical perspective that emphasizes the social embeddedness of ICTs. This perspective has received ample attention in technology studies, and considered one of the most viable alternative to technological determinism, in particular in ICT4D scholarship (see Avgerou 2007, 2008, 2009).

Feenberg (1999) proposes that theories on technology can be categorized with respect to the way they depict its neutrality and the degree of control humans can exercise over it (Table 9.1).

In this categorization, technological determinism is characterized by its tenets that technology is neutral, exercises a great impact over the social sphere, and technical development evolves in relation to needs in an evolutionary fashion, with humans' ability to control it being minimal (Feenberg, 1999: 9). In short, technological determinism assumes technical development to be self-generating (Lievrouw and Livingstone, 2006; Williams, 2003).

Table 9.1. The varieties of theory on technology. Source: Feenberg (1999: 9).

Technology is	**Autonomous**	**Humanly controlled**
Neutral (complete separation of means and ends)	Determinism (e.g. traditional Marxism)	Instrumentalism (liberal faith in progress)
Value-laden (means forms a way of life that includes ends)	Substantivism (means and ends linked in systems)	Critical theory (choice of alternative means-ends systems)

By contrast, theories acknowledging the social embeddedness of technology posit that technology is not neutral, but value-laden. These can take, moreover, different approaches with respect to human agency over technical development, and lean towards 1) the view that technology develops and evolves autonomously (or driven by objective needs and interests linked in complex socio-technical systems) or 2) the assumption that people control technical evolution and can choose between technical options leading to different chains in technical developments (Feenberg, 1999: 9). The social embeddedness discourse employed in this study takes a mid-position that emphasises the social construction of ICTs and the high degree of human agency over its design and usage, but acknowledges at the same time that technology can in turns be a factor of transformation for human activities, thinking, and meaning-making, as well as more broadly for societal processes, in a negotiated rather than deterministic manner. This position resonates with mild *social constructivism/constructionism in sociological scholarship*, and *the sociocultural theory (also referred as cultural-historical theory) in social psychology.* These two theoretical traditions have significant affinities, yet it should be noted that they give insights that are to be regarded as complementary rather than overlapping or alternative, as the first employs a sociological angle for analysis and the second a social psychology one. For the first, the analytical focus lies on the interplay

between technology design and usage and the social sphere, and may focus on the interplay with social systems, networks, and processes. As a social psychology theoretical approach, sociocultural theory is, by contrast, concerned with studying *mind*, yet not mental processes taking place in the individual head but in the interplay between the individual and the social system, tracking evolution in historical time. What makes sociocultural theory particularly appropriate for the study of technology is the perspective it takes towards the role of human-made tools and mediation in thinking, meaning-making, as well as externalized human activities.

Social constructionism is a perspective on studying technology that highlights the way technology, just as any human-made artefact, is a social construct (Pinch and Bijker, 2012). Social constructionism can take the position that society and technology are intertwined and mutually determining in a "seamless web" (Bijker et al., 2012: xli) where social and technical units are linked and interact as equal actors in a network or a system (Callon, 2012; Latour, 1992). Alternatively, the impact of the social sphere on technology production and usage is emphasized. Technology is socially shaped during its development, which is driven by problem-posing reflecting the needs and interests of the creators and the meanings vehiculated in their socio-cultural context (Pinch and Bijker, 2012). Further, the usage of technology is subject to interpretation and negotiation on the user's side and adapted to a particular context of implementation (Weick, 1990).

Sociocultural theory is concerned with understanding the nexus among human action and the cultural and historical context that embeds the action (Erstad and Wertsch, 2008; Wertsch, 1998: 24). Its core tenet is that human action is mediated by the use of tools that have been created in a socio-cultural system and transmitted to future generations that modify and pass them on (Lantolf, 2000; Rogoff, 2003: 51). The study of ICTs and any other human-made tools is therefore focused on their instrumentality, on their capacity to mediate. Yet, this instrumentality has different valences from the one put forward by deterministic approaches that link the agent and the tool on virtue of objectively assessed functions, amply criticized by critical theory studies of technology (see for instance Feenberg, 1999). Sociocultural instrumentality is distinguished by two important attributes. *First*, the instrumental quality dwells on socio-cultural and historical factors. The capacity of a tool to mediate certain kinds of activities reflects axiological systems and complex codes of meaning attribution prevalent in a socio-cultural system, and evolving in time. *Second*, the study of instrumentality does not incur a blunt separation between agent and tool, as in functional analysis (i.e. linking agent and tool on virtue of a clear relation, such as object function), but sees the agent, the tool, and the action as composing a whole. Mediated action, the core unit of analysis in sociocultural theory, refers to the "agent-acting-with-mediational-means", an expression that suggests there is an almost inseparability between the agent and the tools that enable conducting an action (Wertsch et al., 1993; Wertsch, 1998: 26-7).

Drawing jointly on social constructionism and sociocultural theory, there are a few aspects around the social embeddedness of technology that can be highlighted. With respect to their definition, ICTs are not only the technical tools, they include the artefacts, the associated practices they enable, and the social arrangements that facilitate their production, distribution, and usage (Lievrouw, 2006; Lievrouw and Livingstone, 2006: 2-3). Technologies can be seen as concretisations of social relations instantiated in specific cultural contexts, so that their impacts cannot be anticipated when the same tools are used in different settings (Suchman, 2007). Established social practices and social arrangements can become routinized and taken for granted, unquestioned, and fixed, so that their social shaping is obscured (Feenberg, 1999; Latour, 1992; Lievrouw and Livingstone, 2006). Moreover, proponents of the actor-network theory (Callon, 2012; Latour, 1992) argue that not only are technical devices intimately linked to social practices, but also embody them in their design: technology reflects social values, norms, and meanings. There is an underlying symmetry between technical and human agents, so that on the one hand society shapes technology by investing them with meanings, norms and values and then the latter are reinforced by appearing to be concrete, obvious, and compelling in technical design features. ICTs are therefore at the same time social products and bearers of social consequences (Lievrouw and Livingstone, 2006). Feenberg (1999) outlines three essential arguments of the social constructionist perspective with respect to the role of society, culture, and ideology in shaping technical development:

1 Firstly, technical design and development are not driven by function, but by socially negotiated meanings. While a device does serve a function, this, Feenberg argues, is only one aspect of the complex set of attributed meanings that shape the design of a product. An illustrative example is given by Pinch and Bijker (2012), who show how the design of the bicycle has been socially shaped and constantly negotiated under the influence of social groups across time.

2 Apart from embodying social meanings, technical design is also limited by cultural assumptions deeply embedded in the social fabric and taken for granted by members. These can be analysed as the “cultural horizon of technology” (p. 86). These are fuelled jointly by religious thinking, social norms and accepted patterns of interaction, economic thinking, etc. Once these assumptions are incorporated in technical design, their social source is obscured. An example is the way 19th century factory machines were built for the height and size of children, who were the regular workers in factories at that time. Today mainstreaming child labour in advanced capitalist economies is believed unthinkable, yet at that time it was rather considered unfeasible giving up and banning child labour. Technology design reflects these deeply held assumptions at each historical time.

3 Technology design submerges to “technical codes”, that can be defined as containers of social meanings and values that arrive to impose limits to technical development in a given context at a given historical time. They are a measure of linking the social and the technical in a reciprocated relation of determination. The social sphere produces values and norms that become, therefore, standards defining the limits for visions and choices, in domains covering as well that of technical development (Feenberg, 1999: 85-9).

Sociocultural theorists argue, moreover, that technology affects significantly the quality of human activities, along with the patterns of thinking and meaning-making that their employ enables. Human-made tools involve constraints alongside empowerment, and are to be seen not merely as facilitators of an activity, but as factors of qualitative transformation in the same (Erstad and Wertsch, 2008: 27; Wertsch, 1998: 38-9).

To shed light on how technology affects human thinking and activities, it is useful to introduce the sociocultural parallel between physical tools (such as ICTs) and abstract or psychological tools (such as language, equations, formulas, symbols). Both types of tools have been created by human beings to facilitate their life and expand the range of mental and physical activities they could conduct. Both types are essentially *mediators:* their purpose is to facilitate physical or mental activities (Wertsch, 1998). For instance, Lev Vygotsky differentiated between psychological tools, or signs, and technical tools; an example of a psychological tool is language, and speech is an instance of mediated action (Erstad and Wertsch, 2008: 26). For Vygotsky, all psychological tools are characterized by two features. *The first* is that they can modify the mental functions flow and structure. *The second* is that they are social, rather than individual, therefore their genesis and their evolution needs to be assessed in relation to socio-cultural factors. All the knowledge of a society is in some sense embedded in these tools, that can include, asides language, mathematical formulas, counting systems, systems of codes and meaning attribution, etc. (Erstad and Wertsch, 2008: 26-7). Just as psychological tools, ICTs and other physical tools embody and give concreteness to what people think and value at particular times. Their role is to facilitate activities that are aligned to these thinking patterns. Yet in their drive to enable, ICTs also constrain, as their design limits the range of activities that can be supported. By repeated interaction with technology thinking patterns can be affected. Technology appears therefore to be in a mutual cycle of determination with the social sphere: social norms, meanings, and values are infused in technical design, while the resulting technologies perpetuates these by embodying them in their design features and imposing constraints during usage.

An important aspect of the constructionist and sociocultural discourses is that technology cannot be defined separately from its context. ‘Context’ can be understood from two

theoretical perspectives: from one as a stable construct surrounding, but separate from people and their actions, prone to be mapped and represented though observation. Or, as a dynamic and evolving entity inclusive of people and their actions and imbued with encoded meanings that can be difficult to decipher from the outside. The first stance is well represented by a positivist outlook, in which context is the outer environment surrounding people and the activities they perform (Dourish, 2004). In such a perspective, studying the context involves a separation between agents and their actions, and a focus on outer conditions that agents do not determine nor influence. While this perspective can and has been employed in accounting for the local context in technology interventions, it has some important drawbacks. Especially, it tends to see it as a stable entity open to be studied and represented from an outer, objective stance, and it disregards the relation with people and their activities (Dourish, 2004: 4-5). By contrast, in constructionist and sociocultural theory traditions context has a quality of dynamism and evolution, and includes equally physical places, artefacts, and people. The focus falls on invisible patterns of relatedness that link people, artefacts, and activities. Two illustrative conceptualisations have been advanced by Dourish (2004) and Nonaka and colleagues (Nonaka and Takeuchi, 1995; Nonaka et al., 2000).

Dourish (2004) proposes a view of context in interactional terms, a construct emerging from people's interaction rather than an outer environment surrounding them. He outlines four principal features of context:

- Contextuality draws on relations among agents, objects and activities;
- Contextual features are dynamically configured and re-configured;
- Context has a circumstantial quality, it is defined in report with particular settings, actions and people; and
- Context emerges from and encompasses activities, rather than being external to them (Dourish, 2004).

On a similar note, Nonaka and colleagues (Nonaka and Takeuchi, 1995; Nonaka et al., 2000) describe 'context' with the Japanese term 'ba', referring to the time-space instantiations in which knowledge gets created, distributed, and interpreted, a "shared context in motion" (Nonaka et al., 2000: 14). Just as in Dourish's account, the key feature in the definition of context is interaction. 'Ba' is a shared context of action and interaction, and its limits and boundaries are set by the interactions occurring. Therefore, there may be countless *ba*-s, defined by countless interactions happening in time-space instances. These *ba*-s can be connected and can contain one another. Nonaka and his colleagues use the *ba* construct to speak of knowledge production, yet its employ can be expanded to account as well for how ICT is conceived, developed, used, and shaped in trajectories that carries it in numerous *ba*-s defined by interactions in the present time.

The arguments exposed herein need to be further related to a question of importance for this study: how does the social embeddedness of ICTs play out when they are introduced in a new context of use? In particular, what are the factors to take into consideration when there are significant differences between the socio-cultural context in which technology has been designed, and the one in which they are introduced? These questions are treated below by tackling the concepts of *mastery* and *appropriation* of technology in relation to the concept of *literacy.*

In socio-cultural theory, these concepts are used in relation to the usage of cultural tools, therefore human-made artefacts that can be both physical (e.g. ICTs) and abstract or psychological (e.g. language). James Wertsch (1998) takes mastery and appropriation to be two stages in the relationship between agents and cultural tools. 'Mastery' refers to knowing how to use a tool, therefore developing skills around its usage through repeated interaction with the artefact (p. 50-53). Technology appropriation refers to "making it one's own", a process that involves tension and resistance, as the agent is attempting to mould her/his drive for action in the affordances and the constraints of the tool (p. 53-55). For Wertsch, mastery does not necessarily translate into appropriation. An agent may learn how to use a tool, yet have resistance towards using it, as s/he does not feel like the tool is one's own (p. 56-7). For Barbara Rogoff (2003) appropriation is a transformative activity, and not merely an acquisition of faculties and skills. "Participatory appropriation" is, for Rogoff, the process by which members of a society learn to use cultural tools and in this process they actively change the manner of thinking, perceiving, understanding, and assigning meaning. Appropriation is the fundamental means by which individuals develop as society members, through active participation in its practices. The appropriation of cultural tools is a measure of their active transformation by which they acquire perceptive and cognitive capacities embedded in the socio-cultural milieu. *Literacy,* rather than a set of faculties is itself a cultural tool, in the sense that it gives the agent a design for thinking, and by being incorporated in cultural practices, it can give prevalence to particular forms of thinking (Rogoff, 2003: 261). This view is at odds with most definitions of 'literacy' as sets of reading and writing abilities (e.g. UNESCO, 2005; Withrow, 2004).

In the literature on technology and literacy, constructs such as 'digital literacy', 'media literacy', 'information literacy', 'computer literacy', and 'multimedia literacy' have been coined to capture various facets of the sets of abilities needed to access, manipulate and produce content across different media. Just as for the concept of literacy, their definition tends to revolve on the successful acquisition of related abilities. Some of these maintain a strong technological focus, for instance 'computer literacy', which refers to the ability to use computers with a focus on being able to use computer functions rather than employ it for a range of activities having to do with information access, manipulation and production (Warschauer, 2003: 111-112). 'Information literacy' and 'media literacy' are concerned rather

with the manipulation of data delivered through ICTs, and the usage that is made of this. 'Information literacy' places a stress on abilities to locate, identify, and critically assess information, and is less concerned with active production of messages (Livingstone and van der Graaf, 2008). 'Media literacy' indicates "the ability to access, analyse, evaluate and create messages across a variety of contexts" (Christ & Potter 1998: 7). Each of these concepts, just as the one of 'literacy', captures an inherent dichotomy between reception and production of messages, and for both there is the tendency to focus on the first, seeing individuals as passive recipients rather than producers and senders of information (Livingstone, 2004: 7). This tension between literacies as sets of skills enabling reception *and* literacies as practices enabling equally active production of messages reflects well Wertsch's (1998) difference between mastery and appropriation of ICTs. Taken in its limited, skills-oriented sense, digital literacy equals mastery of digital media. Yet if the agent has not appropriated the enabling tools, there is the possibility of resistance, or refusing the tool altogether. Appropriation of digital media and expansion of digital literacy as practice goes beyond mastery and therefore beyond digital literacy, it signifies making it part of one's system. For instance, MacGay and Gillespie (1992) see appropriation of technology as a social activity in which agents engage creatively with it, interpret it subjectively and make it part of their social interactions. Livingstone and van der Graaf (2008) argue that in an enlarged perspective in which digital literacy balances information production and reception, it can become an important asset for enabling 1) civic participation, including reception and production of relevant information and ability to make one's views heard in the socio-political sphere; 2) economic inclusion and the ability to compete effectively on the labour market; *and* 3) personal and cultural expression and lifelong learning.

9.2.3 ICT uptake in minority contexts

The role of this section is to overview the place of ICTs in the exercise of minority voice by employing a local point of reference. The appropriation of ICT in minority communities is assessed in relation to three grand agendas for ICT uptake, targeting inclusion, cultural affirmation, and social change. Each of these agendas is associated with different positions on the role of ICTs, and the dimensions to boost for their thoughtful integration in minority contexts.

The inclusion agenda: ICTs for participation in the information society

The inclusion agenda positions minority voice and voicelessness in the theoretical discourses on 'the information society', a global description of how present-day socio-economic systems have been marked by the progress of science and technology. The premises are that technological innovation and its rapid adoption at virtually every level of

socio-economic activity, the growing importance of information and knowledge and its ubiquity, create new conditions, albeit provide new resources for the exercise of voice, be it personal expression, in social interaction, economic, or political. Manuel Castells (1993, 2000, in Warschauer, 2003) outlines four features that distinguish a society of information, or 'network society', from the prior industrial age: the role of science and technology for driving the economy; a passage from sheer material production to increased accent on information processing; the appearance of new organizational forms in the industry, characterized by networking; and the rising phenomenon of globalization (p. 13). Theories of the information society give emphasis to how innovation happens in the technological, economic, occupational, spatial, and cultural spheres, or a combination of these (Webster, 1996). At technological level, ICTs for information processing, storage, and retrieval have become increasingly affordable and wide-spread, while computer networks are ubiquitous in industry, communications, and administration systems. This ubiquity of computers and networked devices has changed the way communications are conducted and businesses are done, over-imposing an 'information grid' that links and connects industry offices and centres and shapes a new, informational infrastructure for society. Rapid technological innovation and spreading reverberates in changes in economy and employment, the organisation and fruition of space, and the production and consumption of culture (Idem: 7-26). In short, technological innovation affects not only communication and the economy but virtually all aspects of social organisation (Warschauer, 2003: 24).

The information society is not a levelled and equalitarian system. It is characterized by pronounced inequalities in access to ICTs, as well as the usage that is made of them. Inequalities in ICT access tend to exacerbate existing social inequalities (Warschauer, 2003), a situation which affects minority groups if these are already socially excluded. Several terms have been coined in the developmental literature to capture the imbalance between groups with and groups without privileged access to ICTs. The most prominent of these are 'digital divide' and 'digital inclusion/exclusion'. For the situation of minority cultures, the latter is particularly meaningful, as it provides conceptual bridges relating to the phenomenon of *social* inclusion/exclusion. Yet to get hold of the dimensions of voice deprivation that ICTs condition, it is useful to present digital divide and e-inclusion/exclusion approaches in a mirror, singling out the passage from a univocal concern with physical access to ICTs (as characteristic of digital divide discourses), to a broader and more comprehensive vision of how complex factors around the usage of ICTs play out in fostering voice and inclusion (as prevalent in e-inclusion/exclusion theories).

The access barrier

The concept of 'digital divide' was advanced in the 1990s to indicate the gap between groups and individuals who enjoyed and those who did not enjoy access to ICTs (Hilbert, 2011). The concept has been meanwhile employed in a heterogeneous way to indicate manifold manifestations of these disparities across nations, social groups, and individuals, fuelling a plethora of definitions, conceptual frameworks, and theories. The definitions and conceptualizations of the concept advanced thus far tended to favour either a technological focus (in many instances betraying a technological determinist position – Srinuan and Bohlin, 2011), or a social science and economics perspective. As an illustration of a social science perspective, Hilbert (2011) maps the various approaches to conceptualizing the digital divide based on a framework informed by Everett Rogers' diffusion of innovation theory (Rogers, 1983), according to: 1) the types of ICTs considered; 2) the subject involved; 3) their attributes; and 4) the different levels of adoption (for alternative conceptual frameworks see Norris, 2001; and van Dijk, 2002). The 2001 definition of the digital divide by the Organisation for Economic Co-operation and Development (OECD) illustrates, for instance, a focus on access and type of ICTs usage:

> "(T)he gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard to their opportunities to access information and communication technologies (ICTs) and to their use of the internet for a wide variety of activities. The digital divide reflects various differences among and within countries."
>
> - OECD, 2001: 5

The most direct indicators for measuring the digital divide are the availability of computers or alternative access devices such as mobile phones, as well as access to the Internet (OECD, 2001: 5). For instance, a 2001 report by the OECD specifies that the most important indicator used by the OECD for measuring the digital divide is the number of access lines per 100 persons (OECD, 2001: 7). In addition, the penetration of mobile phones or other mobile access devices have been used as indicators (e.g. OECD, 2001; ITU 2003, 2009, 2011). Measuring the digital divide only by considering the technological infrastructure and the levels of access to digital and access devices is however reductionist. Some measurement tools make use of more complex conceptual frameworks around the concept of digital divide. For instance, the ICT Development Index (IDI) is a complex cross-country measurement tool modelled around a conceptual framework that captures the various stages a society may go through in its evolution to an information society: ICT readiness (focused on physical access), ICT intensity (reflecting usage levels) and ICT impact (reflecting effective usage) (ITU, 2009). The IDI proposes separate measures for ICT infrastructure and access, usage, and impact (the latter measured through 'ICT' skills), with indicators

formulated and revised regularly to reflect dynamic growth in the technological sector and market response (Ibid.; for alternative measurement tools see ITU, 2003; Orbicom and ITU, 2005).

One of the key questions of digital divide scholarship regards underlying causes and factors of impact and how these relate to its distribution across nations, social groups and individuals. In a recent-date literature review on the digital divide, Srinuan and Bohlin (2011) identify three approaches to the identification and measurement of causal factors for the digital divide: 1) focus on technology access, based on the premise that the technological infrastructure is an indicator or predictor for ICT adoption and use; 2) multi-dimensional approach setting in relation socio-economic and demographic factors such as income levels, education/literacy, occupation and age; and 3) multi-perspective approach considering the role of the institutional and cultural context, language, race and ethnicity, gender, psychological factors (e.g. attitudes towards ICTs), as well as the type of content delivered and the speed and quality of ICTs services.

The most important variables linked to inequalities in access to ICTs are considered to be income, education (OECD, 2001: 5) and race (NTIA, 1999: 2). Minorities can be singled out in inequality reports by their race or ethnicity. It is to be noted, moreover, that these groups are afflicted as well by other variables commonly linked with low access to ICTs, such as low literacy and poverty. The 2000/2001 World Development Report recognizes, for instance, that indigenous groups and other minorities have higher poverty levels, lower education, and lower levels of growth than majority populations taking the example of indigenous people in Latin America.

> "Disadvantaged in many developing and developed countries and transition economies, ethnic minorities and racial groups often face higher poverty. The indigenous populations have a much higher incidence of income poverty in a sample of Latin American countries for which data are available. Schooling attainments for these disadvantaged groups are also lower than for other groups. The indigenous groups in Guatemala have 1.8 years of schooling, and the nonindigenous 4.9 years. In Peru indigenous people were 40 percent more likely to be poor than nonindigenous groups in 1994 and 50 percent more likely in 1997. In rural Guatemala children of indigenous mothers are more likely than those of nonindigenous mothers to be stunted. In the inner cities of the United States white married couples have an incidence of poverty of 5.3 percent, while black or Hispanic single-mother households have an incidence of more than 45 percent."
>
> - World Bank, 2000: 28

The 'digital divide' concept had the advantage of attracting worldwide attention to disparities in access to ICTs at scholarly as well as political level (van Dijk, 2008). It motioned attention to inequalities triggered by advances in science and technology innovation through a unified

concept which despite conceptual ambiguities had the merit of indicating in a clear manner that disparities exist and need to be coped with. However, the concept has been subjected to highly critical scholarly attention. The critiques of the digital divide have been directed in turns at the paucity of the conceptual frameworks advanced, the way measurement indicators were related to the phenomena under study, at missing links, and even at the very core concept of 'digital divide'. The dichotomy captured in the concept has been criticized for being reductive, ambiguous, and suggestive of absolutist terms of comparison between the groups on each side of the gap (Van Dijk, 2002, 2008). Eubanks (2007) argues that the underlying idea of a bridge is inadequate as it brings little insight into potential solutions to inequality issues, suggesting that the best we can achieve fighting the digital divide is to link the agents of different groups, found on each side of the divide. The most poignant critique of the digital divide concept is that by focusing solely on lack of access to digital technology, it ignores the way it is related to the unequal distribution of other resources in society, and also the finer mechanisms by which these patterns are perpetuated (Eubanks, 2007; Fortunati, 2008). The concept is itself suggestive that the technological sphere can be separated from the social sphere, and that progress and development can be achieved by acting on the technological sphere alone (Warschauer, 2003: 202). Second, the literature fails to properly consider how proposed solutions on bridging the digital divide will grow into wider social benefits for those affected by the digital divide (Gurstein, 2003), or in other words how does bridging the digital divide lead to growth and development for the affected groups?

Voicelessness and e-exclusion

The critique of the digital divide notion drew attention towards aspects that had been obscured in the unilateral concern with physical access in coping with inequalities in ICT usage. Some scholars emphasized that it is important to take into account the quality of usage and digital literacy, two aspects that are central to the alternative concept of 'second-level digital divide' (Hargittai, 2002; Hargittai and Hinnant, 2008). The great step forward from the digital divide concept was made, however, by going from a univocal concern with access to ICTs to a broader vision of how inequalities in ICT access are related to other social manifestations of inequality. This vision is encapsulated in the concept of 'e-inclusion' (also 'e-Inclusion', 'eInclusion', 'digital inclusion') defined by the eEurope Advisory Group as:

> "(…) the effective participation of individuals and communities in all dimensions of the knowledge-based society and economy through their access to ICT, made possible by the removal of access and accessibility barriers, and effectively enabled by the willingness and ability to reap social benefits from such access.
>
> (…) the degree to which ICT contribute to equalizing and promoting participation in society at all levels (i.e. social relationships, work, culture, political participation, etc.)"
>
> - Kaplan, 2005: 7.

E-inclusion/exclusion and social inclusion/exclusion are mutually determining. Existing social inequalities result in unequal access to ICTs, and this in turn can fuel further inequality by affecting people's choices and chances to be active in the social and economic spheres (Warschauer, 2003: 7). As has been argued in Chapter 3 of this monograph, minorities, and in particular the Romani minority, are predisposed to social and economic exclusion, defined as the degree to which people participate "in the determination of both individual and collective life chances" (Stewart, 2000, cited in Warschauer, 2003: 8). While ethnic minorities are not the target of digital exclusion based on ethnicity, they are likely to face pronounced digital exclusion if they make the object of existing socio-economic exclusion. For instance, European Union e-inclusion policies focus on the socio-economically excluded under the reason that these are predisposed to also face digital exclusion (Kluzer and Rissola, 2009).

Fortunati (2008) argues that the discussion on e-inclusion should be fuelled by a sound sociological, political and anthropological vision, bound to offer sensitivity to the social condition of excluded groups as well as to the way cultural differences shape e-inclusion differently in different socio-political and cultural contexts. Several models have been advanced in the literature for understanding the breadth and depth of the e-exclusion/e-inclusion phenomena and how they may be related to further social exclusion/inclusion. For instance, Van Dijk and colleagues (van Dijk, 2008; van Dijk and Hacker, 2000) expand the model of access that in digital divide approaches was restricted to physical resources, and point that 'access' is a multidimensional concept, inclusive not only of physical access, but also of psychological factors such as motivation, sets of skills needed to handle ICTs appropriately, and the usage that is made of them. His model of access is based on four successive steps corresponding to stages in the process of technology appropriation:

1 Motivational access;
2 Material access (including physical access);
3 Skills access (including strategic, informational, and instrumental digital skills); *and*
4 Usage access.

For Warschauer (2002, 2003), the real measure of e-inclusion is the extent to which ICTs are integrated meaningfully into social practices. Four sets of resources are needed for the integration of ICTs in social practice: physical (technological infrastructure), digital (content and materials made available online), human (skills, especially literacy), and social (the social and institutional infrastructure that supports usage of ICTs). These four categories of resources are on the one hand conditions and enablers for effective ICT use, and on the other the outcomes of effective use, so that if handled well in the long run they contribute to development and social inclusion (2003: 46-8).

One important dichotomy in e-inclusion research is between lack of access to information on the one hand, and on the other lack of opportunities to engage meaningfully with ICTs for

producing and distributing information. *At a first level*, e-exclusion can be related to lack of access to information that can be afforded by ICTs, or 'information poverty'. The degree to which people have access to information categorizes them in 'information-rich' and 'information-poor', a binary opposition that recalls the dichotomy 'developed' and 'underdeveloped' (Wilson, 2003). Information poverty has been typically labelled upon certain categories of people, among which ethnic minorities figure alongside the elderly, people in underdeveloped countries, rural people, and the handicapped (Haider and Bawden, 2007). Yet, the concept of 'information poverty' itself poses several problems. First, it implies that there is a right type of information to be provided, as well as a right amount of it (Wilson, 2003; Haider and Bawden, 2007). Second, it suggests that information can be thought of as a commodity, an approach in which social and communicative aspects are obscured (Haider and Bawden, 2007). Furthermore, the Western worldview, from which the very concept of 'information poverty' stems, is also the principal provider of criteria for assessing what is knowledge and how it contributes to development (Holtendahl et al., 1999). Third, and particularly important for minority cultures, local forms of knowledge appear to play a marginal role when speaking of 'information poverty' (Wilson, 2003).

At a second level, exclusion can be seen in relation to the inability to produce and distribute information drawing on personal experience or local cultural practices and knowledge. Digital or media literacy are found in a relation of reciprocal influence with the practice of content production. Digital literacy is needed for people to produce their own messages, while at the same time creative engagement with ICTs is deemed to be an effective way to enhance digital literacy while being also a means for allowing people to make their voices heard in the public sphere (Tacchi, 2010). For minority groups, it can be an effective way to express within and outside their communities, while developing at the same time digital literacy skills that can be leveraged to other activities.

An important part in promoting e-inclusion is played by the policy and legislative infrastructure. In Europe, the e-inclusion of minorities is pursued jointly by national and transnational policies and programs at European level, and the efforts of the Third Sector (Kluzer and Rissola, 2009). Minorities are privileged targets for e-inclusion campaigns led by EU bodies, under the assumption that their socio-economic exclusion is a factor for further e-exclusion (Ibid.). Yet a surprising aspect revealed by a study (Kluzer et al., 2008) is that in many European countries, for instance in the United Kingdom, Germany, and Spain, minorities are on the contrary on the same level or even above the level of ICT adoption of the majority population. This can be explained by their need to be mobile, connected to family and friends living afar, or more competitive on the job market. While under these numbers disparities still appear in relation to gender, status, socio-economic level (Ibid.), this statistic motions attention to the fact that e-inclusion policies that employ a digital divide optic concerned exclusively with boosting levels of physical access to ICTs may be a hit and miss.

Van Dijk (2008) shows how the strategy for coping with the digital divide by the EU has gone through two broad phases that can be linked with particular perspectives on digital divide/e-inclusion discourses. In a first phase, running from the late 1990s to the early 2000s, the EU policies placed an accent on facilitating technology diffusion and ensuring physical access to computers and the Internet. Attention to underserved groups in this phase took the form of subsidies for infrastructure and Internet connections for schools and community centres, or training for the unemployed. In a second phase, the EU shifted the focus into a more inclusive approach to bridging the digital divide, taking into account apart from physical access also the quality of ICTs usage, enhancing digital literacy, and recognizing the links between ICTs usage and other dimensions of social and economic growth and development. The term 'e-Inclusion', encompassing this broadened focus, was used in the i2010 EC policy document (European Commission, 2005) in relation to the third strategic objective, for an inclusive society: "An Information Society that is inclusive, provides high quality public services and promotes quality of life". The Declaration for eInclusion of Riga of one year later (European Commission, 2006) defines the role of policy for e-inclusion in relation to achievement of wider socio-economic inclusion:

> "eInclusion policy, therefore, aims at reducing gaps in ICT usage and promoting the use of ICT to overcome exclusion, and improve economic performance, employment opportunities, quality of life, social participation and cohesion."
>
> - European Commission, 2006: 1

The declaration defines six policy areas for e-inclusion. The most relevant of these for the situation of minorities is the promotion of *cultural diversity* in relation to inclusion. The strategic priority includes a double focus on product and process in fostering cultural diversity:

> "Fostering pluralism, cultural identity and linguistic diversity in the digital space. Promoting digitisation, the creation of accessible digital content, and wide and cross-national access to digital information and cultural heritage in support of European integration. Fostering multilingual and local content throughout Europe, as well as European values of freedom, tolerance, equality, solidarity and democracy. ICT innovation and good practice exchanges at all levels are important means to achieve this.
>
> Improving the possibilities for economic and social participation and integration, creativity and entrepreneurship of immigrants and minorities by stimulating their participation in the information society. Particular efforts shall be made to improve the employability and productivity of minorities. Tailored ICT training and support actions can be important in this context."
>
> - European Commission, 2006: 4

Most programs encouraged by the EU funding schemes promote the acquisition of digital

literacy and ICT uptake to heighten employability and competitiveness on the labour market, yet there is also increasing interest in funding projects that promote cultural and creative expression, with a focus on community (Kluzer and Rissola, 2009). A study surveying e-inclusion initiatives by and for ethnic minorities in European Union countries (Kluzer et al., 2008) indicated that the goal with the highest incidence among surveyed initiatives was related to providing ICT access and building digital literacy skills. Another interesting finding of the study evidences the high number of initiatives initiated and co-initiated by minority members (more than half of 119 representative cases surveyed), many of which included the production and maintenance of blogs, community websites, and discussion forums used to promote dialogue or support the maintenance of minority groups memory and identity (p. 10-11).

The cultural agenda: ICTs for cultural affirmation

The cultural agenda for ICT uptake is about the role of ICTs in preserving and reinforcing a cultural ethos, supporting indigenous processes of knowledge production, and furthering local forms of knowing and being in the world. The literature offers a variety of cases illustrating the employ of ICTs to serve specific goals in relation to the cultural agenda. For example, ICTs can be instrumental for preservation and transmission of local knowledge and cultural practices among different generations of the same community (Bidwell et al., 2011; Christie, 2004, 2005; Jensen et al., 2012; Rankin et al., 2007; Rodil et al., 2012; Verran et al., 2006; Verran and Christie, 2007), recovery of memory by appropriation and digital representation of community artefacts (Christen, 2008; Denison et al., 2012), and recovery of common memory, dialogue, and networking among disenfranchised indigenous communities (Srinivasan, 2004, 2005, 2006a,b). These goals can be supported by the design and development of various information spaces, communication artefacts, and repositories, ranging from digital archives to community websites and wikis, as well as through production of local digital content. Yet the employ of ICTs in these cases is never as straightforward as simply matching a potential to local communication needs. It requires a deeper and more critical consideration of the role and place of ICTs in processes of knowledge production and communication, going beyond the access and literacy discourses prevalent in debates around the inclusion agenda, treated above.

In the first place, consideration should be given to whether ICTs are adequate tools for advancing goals related to local knowledge production and cultural preservation. It has been argued that local knowledge (also folk knowledge, indigenous knowledge, traditional knowledge, traditional ecological knowledge, local and indigenous knowledge, from now on IK) and traditional cultural expressions (TCEs) present features that are incommensurate with representation and distribution via ICTs, so that any attempts at knowledge production

and distribution with ICTs are unavoidably reductionist (Pumpa and Wyeld, 2006; Stevens, 2008). Incommensurability can be analysed at two levels: the first resides in ontological and epistemological difference, and the second evidences incompatibility between knowledge performativity and tacit dimensions on the one hand, and static representation in digital media on the other.

First, IK is thought to be embedded in an ontological and epistemological system radically different and even at odds with Eurocentric knowledge traditions (Aikenhead and Ogawa, 2007; Pumpa and Wyeld, 2006). To understand the premises for incommensurability at this level, it is useful to describe the concept of 'worldview' and the way it contains and conditions knowledge production and distribution. A worldview can be defined as "a coherent collection of concepts and theorems that must allow us to construct a global image of the world, and in this way to understand as many elements of our experience as possible" (Aerts et al., 2007: 8). It can also be thought of as a set of "implicit schemes of perception" (Vaisey and Lizardo, 2010), as well as the model of the world or the "total design for living" (Kraft, 1999: 387) they create. Important characteristics of the worldview are its being immersive, conditioning, and directive in an invisible way: the worldview acts underneath the surface and directs thinking and behaviour without the agent's conscious awareness (Aerts et al., 2007; Kraft, 1999). The concept of 'worldview' is deeply connected with that of 'culture'. Worldviews are products of a socio-cultural system, they are collective constructions advanced by a group and gradually building up in time through intergenerational transmission in a dynamic way, so that the knowledge produced in such a system will be framed by a particular ontological model (Aerts et al., 2007; Kraft, 1999). There is a dynamic and reciprocated relation of influence between knowledge and worldviews, so that on the one hand worldviews influence the production of knowledge and provide criteria for sense-making and legitimacy, and on the other worldviews are alimented and shaped in time by the production of new knowledge (Aerts et al., 2007). Localist and relativist conceptions of knowledge production emphasize how all knowledge systems are localized, driven by and situated in a set of inherent values (Longino, 1990) corresponding to cultural worldviews. Their locally-bounded, perspective-framed and contextual features (Boland and Tenkasi, 1995), are implicit in the use of the plural 'knowledges' (Turnbull, 1997; van der Velden, 2010).

Second, IK is thought to have dynamic, embedded, intangible, and tacit dimensions that cannot be captured in static and manipulable forms (Christie, 2004, 2005; van der Velden, 2010). For instance, a structured definition of IK includes the following dimensions:

- Locally-bound: IK is situated and embedded in the practices of a given community;
- Inclusive of tacit dimensions that cannot be easily codified;
- Transmission by orality or performance;

- Experiential, expanded and tested through trials for serving local goals;
- Learned and transmitted through repetition and imitation; *and*
- Subjected to constant change (Ellen and Harris, 1996, in Woytek and Gorjestani, 1998).

The performative, dynamic, embedded, and tacit side of knowledge cannot be adequately captured and codified in digital form (Christie, 2004, 2005; van der Velden, 2010). To clarify the terms of this incommensurability, scholars differentiate between the representational and the performative dimensions of knowledge. For instance, Turnbull (1997) proposes the concept of "knowledge spaces". In these spaces knowledge is assembled through the concurrence of various agents, drawing on their skills as well as forms and structures inherited from the past, and circulated through channels and by standards set in place by tradition. The performative dimension of knowledge is instantiated in these spaces, in which knowledge production activities are organised and regulated, rules for validity are outlined, and the roles of agents producing knowledge are defined. Representational knowledge is the product of such activities, and intimately related and dependent on the performative side. Other approaches differentiate between knowledge, inclusive of a performative side, and information, which is the codified and transferable outcome of knowledge production processes (Christie, 2004; 2005; Nonaka et al., 2000). Christie (2004, 2005) argues that what ICTs can handle is not knowledge, but information. Knowledge is contextualized, alive, embedded in social practices and interaction, connected to the social and natural world, produced in performative and collaborative settings. The data stored in digital media, and in particular databases are, on the other hand, just representations, abstractions of prior episodes or acts of knowledge production.

Despite the challenges to managing local knowledge with ICTs, increasing attention to the value of local indigenous knowledge (UNESCO, 1996, 2001, 2003, 2009; Woytek and Gorjestani, 1998) motioned the development of a plethora of approaches and methods for coping with these challenges and contributing to codifying, representing and preserving IK in digital media formats. Indigenous knowledge management involves processes by which IK is rendered explicit and codified, so that it can be manipulated, archived, and distributed (van der Velden, 2010: 6). An important concern in the IK management literature regards the explicitation of tacit or implicit knowledge (Ibid.). Polanyi (1962) defines tacit knowledge as "what we know but cannot tell" (p. 601). He differentiates between two types of knowledge and knowing:

- Focal knowing: "knowing a thing by attending to it, in the way we attend to an entity as a whole"; *and*
- Subsidiary or tacit knowing: "knowing a thing by relying on our awareness of it for the

purpose of attending to an entity to which it contributes." (Polanyi, 1962: 601)

Most often tacit knowledge is set in opposition to knowledge that can be articulated and shared, called interchangeably objective knowledge (Ambrosini and Bowman, 2001), explicit knowledge (Nonaka et al., 2000), or declarative knowledge (Kogut and Zander, 1993). The knowledge management literature has produced several models for describing how tacit knowledge can be turned into explicit knowledge. The most well-known is the SECI model for knowledge creation in organisations (Nonaka and Takeuchi, 1995; Nonaka et al., 2000). The model builds on the premise that there is a need to think of organisations as entities that create knowledge dynamically, through action and interaction with environment, and not merely producers of static information. The model includes:

- The SECI process (standing for Socialisation, Externalisation, Combination, and Internalisation). The process relies on the interaction between tacit and explicit knowledge, described as "knowledge conversion" going through socialisation, externalisation, combination, and internalisation processes in a cyclical manner (Nonaka et al., 2000: 9-10).
- 'Ba', the context for knowledge creation, sharing and internalization.
- Knowledge assets. There can be experiential and routine (both of tacit type), and conceptual and systemic knowledge assets (both of explicit type).

Ngulube (2003) suggests that the SECI model is appropriate for IK management due to its holistic approach and the accent it places on socialisation, which is a cherished practice in oral societies. Therefore, the SECI model can be used effectively to render explicit the tacit dimensions of indigenous knowledge by employing practices of knowledge explicitation that are aligned to local cultural practices.

Maja van der Velden (2010) identifies two approaches to knowledge management in the organisational studies literature that illustrate as well directions in managing indigenous knowledge: knowledge-centred and knower-centred. The first is concerned with collecting, codifying and archiving knowledge and favours the use of archives and databases. The second looks at knowledge as a human resource and attempts to create spaces and situations for knowledge-sharing, for instance through storytelling or online tagging. It uses instruments for co-creation, collaboration and sharing such as wikis, blogs and social networking services. Van der Velden identifies early IK management initiatives as knowledge-centred, for instance the UNESCO database of IK best practices (http://www.unesco.org/most/bpindi.htm). A knower-centred approach, van der Velden argues, is one which attempts to capture connections and the performativity side of IK and result in products usable and manageable by local people. They are bound to involve local communities in design or be designed at their very request (p. 6-9).

Knower-centred approaches may avoid some of the pitfalls associated with IK management. One pitfall is to contribute to the commodification and misuse of local knowledge (Hunter et al., 2003). As Verran and Christie (2007) suggest, there is apprehension that by introducing ICTs in indigenous practices and in relation to IK production and transmission, this will contribute to changing IK into a commodity, or drive resources away from their rightful indigenous owners. Another pitfall of IK management through databases is to take their representations for objective depictions of reality. Christie (2004, 2005) warns against this in his examination of conditions by which digital databases can contribute to the intergenerational transmission of knowledge amidst Australian aboriginal communities. Databases may give an illusion of objective representation of knowledge. Yet these representations are created based on processes of selection that reflect a certain way of seeing the world, they impose a structure upon reality based on which it is decided what is important to capture and what to leave out (Christie, 2004; Manovich, 2001). The meaning of IK knowledge is created in context drawing on connections established with other knowledge production episodes, collective life, traditional history, and the natural environment. What happens when IK is abstracted, structured and stored in a database? Its meaning is re-produced in context in relation with the other abstracted pieces of information (Christie, 2005). As Manovich (2001) suggests, all elements in a new media artefact, including new media objects, but also the interface, the access paths, the data organisation patterns, contribute jointly to creating meaning and putting through certain models of reality.

Moreover, Christie (2004, 2005) argues, it should be considered that the ontologies contained and perpetuated in databases further influence and structure our perception of the world. They give subtle hints suggesting how things are related, and what phenomena and processes are worth keeping or discarded. If taken to be objective representations of reality, interaction with the structured information in databases within may fall into a “reverse bootstrapping process” (see Bowker and Star, 1999), in which the inherent structure of the database is over-imposed upon the world giving false premises for assigning meaning to it. To align database representation to local epistemologies, all the elements of the database, including its architecture, search criteria and elements of the interface, should on the one hand represent well indigenous epistemologies and on the other support processes of knowledge production and transmission. The database should, in short, reflect the local and be fit to further support local processes of knowledge production (Christie, 2004, 2005; Stevens, 2008; Verran et al., 2006).

Alignment to local epistemologies can only be achieved by involving local people in the processes by which knowledge is codified and organized in digital media forms (Shilton and Srinivasan, 2007; Srinivasan, 2006a,b; Verran et al., 2006; Verran and Christie, 2007). Shilton and Srinivasan (2007) propose the concepts of “empowered preservation” and “empowered narratives” to indicate the quality of direct, unmediated representation of

community voices in digital repositories of traditional knowledge, achieved through people's direct participation in the archiving process. A community's authentic discourse is reflected in locally produced content, but also in the architecture built for organizing and providing access to this content. Ramesh Srinivasan (2005; 2006a,b) argues that it is possible to build information architectures that reflect the cultural discourse, views, and collective priorities of a community. "Cultural ontologies" (Srinivasan et al., 2009), or "fluid ontologies" (Srinivasan, 2006b; Srinivasan and Huang, 2005) are information architectures elicited from community members and reflecting indigenous thinking. The process of matching largely implicit values, hierarchies and connections of a cultural system on the one hand, and information architectures on the other, requires intensive and enduring participation of a community's members. Studies conducted around the participatory documentation of cultural expressions report the importance of ethnography (Srinivasan, 2006a, Tacchi et al., 2003), of respecting and taking into account local or tribal protocols for status-or gender-based access (Christen, 2008), and the rewards of integrating local models of knowledge transmission and decision-making in the design and production process (Verran et al., 2006; Winschiers-Teophilus et al., 2010).

The transformative agenda: ICTs for empowerment

It has been argued that by direct engagement with ICTs previously disempowered and marginalised people can take better control of their choices at social, economic and political level (Tacchi, 2008, 2010). In particular, the production of local content through the direct participation of a community's members as well as community-managed media production and distribution processes have been described as empowering processes (Tacchi, 2009), contributing to self-determination and emancipation (Tremetzberger, 2010: 54), and building social solidarity (Fairchild, 2010: 24). This section overviews the role of ICTs for advancing positive social change in minority contexts by focusing on *empowerment* as a concept that encompasses the key dimensions of these transformative practices.

Theories of empowerment

Empowerment is a crucial dimension of human development (Hamel, 2010), recognized by the World Bank in the 2000/2001 edition of the *World Development Report* as one of the three pillars in the reduction of poverty (World Bank, 2000). The bulk of the developmental literature on empowerment focuses on two vulnerable groups: the poor and women (Samman and Santos, 2009: 10). Ethnicity has been recognized as an important factor of inequality and disempowerment besides gender and economic level (Samman and Santos, 2009; World Bank, 2000). Minorities, in particular indigenous people, have a higher incidence of poverty, live in worse conditions, and have lower levels of school attainment

than majority populations, which justifies targeted developmental measures (Partridge et al., 1996; World Bank, 2000).

This section does not try to exhaust the substantial literature on empowerment, but to pinpoint the most relevant takes on this concept for the object of this study – the situation of minorities, on the one hand, and the possibility to conceive of empowerment in relation to communication technology, on the other. As such, the review below will insist on the relation between empowerment and agency, and on the conditions for making the shift from a disempowered to an empowered condition for vulnerable groups.

The work of Amartya Sen has been one of the most influential in shaping developmental perspectives on empowerment. For Sen, empowerment refers to the expansion of agency (Ibrahim and Alkire, 2007), the latter indicating the scope for action an agent has in pursuing goals s/he has designed herself and in accordance with her/his values (Sen 1985: 203). Development is the "process of expanding the real freedoms that people enjoy" (Sen, 1999), encompassing process freedom, or agency and opportunity freedoms, or capabilities (Sen, 1999). Empowerment as agency expansion is therefore one of the central concerns of development. For Sen, agency – and its expansion thereof – has a primarily intrinsic importance, it is a primary development goal (Sen, 1999; Alkire, 2008; Samman and Santos, 2009), in addition to its instrumental value and its role in the creation of values and norms (Sen, 1999: 157; Alkire, 2008).

Sen has outlined several dimensions or facets of the concept of agency that have been later used by other researchers, especially for developing measurement indicators. Alkire has used Sen's concept of agency for developing quantitative agency measures for individuals and households (Alkire, 2008). Alkire starts from the five core characteristics of agency as identified by Sen and works through the first four of them for developing measures of agency. The *first* characteristic Sen outlines is that agency is exercised in relation to multiple goals valued by the agent. *Second*, agency covers effective power (the power to attain the results), as well as direct control (the actual ability to make choices and exercise control over the procedures of an activity). It is important to note that effective power can at times be related to collectivities, and defined in terms of the interdependence of individuals (Sen, 1985; Alkire, 2008). *Third*, Sen clarifies the relation between agency and well-being. Not necessarily agency is exercised for one's well-being, but it may also go against, for instance when one considers the well-being of others above her/his own. *Fourth*, the study of agency demands an assessment of the person's values and their reasonableness. The *fifth* feature regards the agent's responsibility over bringing about a specific state of affairs (in Alkire, 2008).

Ibrahim and Alkire (2007) use Sen's definition of empowerment as expansion of agency and Rowland's taxonomy of four types of power to propose four categories for the exercise of agency whose expansion can be read as empowerment:

1 Empowerment as control (power over);
2 Empowerment as choice (power to);
3 Empowerment in community (power with);
4 Empowerment as change (power from within) (p. 19).

The approach of Amartya Sen is only one among numerous takes on empowerment, and differs significantly in some respects from some established conceptualizations. There are two aspects that make Sen's approach stand out from others: the first regards the dimension of effective power, and the second the relation between agency, empowerment, and the opportunity structure. 'Effective power' is one of the most elusive features of the ones identified by Sen. In most approaches, agency involves direct control, and does not cover the power to actually attain to the agent's goals (Alkire, 2008; Bandura, 2000), which are rather associated with empowerment. Take for instance an alternative definition of agency: "Agency is defined as an actor's or group's ability to make purposeful choices—that is, the actor is able to envisage and purposively choose options" (Alsop et al. 2006: 11). As Alkire (2008) notices, these approaches do not cover effective power, and hence the relation to the *achievement* of the agent's goals. This *effectiveness* dimension, incorporated by Sen in the concept of agency, is, within alternative frameworks, rather associated with empowerment. For instance, Drydyk (2008) takes a similar perspective on empowerment as expansion of agency, both a process of change and its result. However, as different from Sen, choice effectiveness is for Drydyk part of empowerment rather than agency. Agency refers to "autonomous personal involvement in activities" alone, and does not cover the effects or consequences on the agent (Drydyk, 2008).

In approaches alternative to Sen's, empowerment is not only the process and result of agency expansion, but is conditioned jointly by the interplay between agency and the opportunity structure (Sen's opportunity freedom). This relation between agency, capabilities, empowerment, and development makes the backbone of one of the best articulated frameworks for conceiving and measuring empowerment, outlined in the World Bank monograph *Empowerment and Poverty reduction. A sourcebook* (Narayan, 2002), which has gained recognition in the works of Alsop and Heinsohn (2005), Alsop, Bertelsen and Holland (2006), Petesch, Smulovitz and Walton (2005), Smulovitz and Walton (2003), and Walton (2003). Empowerment refers to "enhancing an individual's or group's capacity to make choices and transform those choices into desired actions and outcomes" (Alsop and Heinsohn, 2005: 5). In the interpretation of Alsop and Heinsohn (2005), empowerment stands in a relation of mutual determination with development outcomes: a heightened capacity to make effective choices results in increased development, and at the same time the degree of development is reflected in a high capacity to make effective choices. Empowerment builds on the interplay between agency and the opportunity structure. Agency is seen as people's ability to take decisions in accordance with the goals they designed, in

full acknowledgement of existing options (Idem: 6). The opportunity structure refers to the institutional climate and the social and the political structure (Narayan, 2002; Samman and Santos, 2009). Agency covers, therefore, the scope for action, or the freedom of choice, while empowerment indicates the process by which this freedom is actuated and expanded by meeting the right conditions in the external environment, at social, political, economic, and institutional level.

Samman and Santos (2009) identify from the literature a series of distinctive features that apply to empowerment as well as agency. The first is *multidimensionality*: agency and empowerment can be analysed at different spheres (societal structures, such as the market, or the state), domains or dimensions (a person's areas of life where she can have decisional power) and levels (from the micro - the household, to the meso - the community, and the macro - the state). Second, the concepts are *relational*, their definition implies setting a relation between the subjects and other human or non-human entities. Third, the concepts are *culturally bounded*, they need to be considered in the context of a specific society's cultural and value systems.

People's participation in developmental programs aimed at empowerment has been increasingly recognized as a key factor for the effectiveness of these programs (Narayan, 2002: 5). Yet the pursuit of empowerment as part of initiatives led by external agencies too often runs the risk of working from a dichotomy between 'self' and 'other' that can give rise to paternalistic attitudes (Bishop, 2005), even when people's participation is encouraged. This aspect can be particularly poignant in the case of marginalised, oppressed, and/or illiterate people, who may see schooled people in a position of superiority and authority and their own position as inferior (Fals-Borda, 1991; Freire, 2006: 63; Rahman, 1991). Bishop (2005) indicates how the rise of this paternalistic attitude can be avoided by giving the example of the approach employed in Kaupapa Maori, a specifically Maori philosophy and methodology of research. Herein, empowerment is not pursued in a dialectical relationship between 'self' and 'other'. A researcher is *not* empowering participants. Rather, researchers and participants enter a "participatory mode of consciousness" (Bishop, 2005: 120) in which the relationships among researchers and researched and the research activities are constructed collaboratively.

> "In this sense, researchers in Kaupapa Maori contexts are repositioned in such a way that they no longer need to seek to give voice to others, to empower others, or to refer to others as subjugated voices. Instead, they are able to listen to and participate with those traditionally 'othered' as constructors of meanings of their own experiences and agents of knowledge."
>
> - Bishop, 2005: 123

Bishop's position echoes similar notes by participatory research theorists on the relation

between researchers and research participants, in particular those based on social work with oppressed and marginalised communities in South-America (for instance Fals-Borda, 1988, 1991; Rahman, 1991). For Fals-Borda (1991, 1988), empowering the oppressed requires breaking the relations of submission characterizing the report between schooled researchers and common people, replacing the subject/object with a subject/subject report, (1991: 4-5), characterized by organic co-operation (1988). This process can be enhanced only through "authentic participation", a concept which indicates a continuity with and embeddedness of participatory activities in local cultural practices (1991: 5).

The writings of Brazilian educator Paulo Freire are among the most insightful in this respect and given their influence in shaping participatory methodologies it is worth exposing them in some detail. In *Pedagogy of the oppressed*, Freire (2006/1970) portrays the oppressed in dichotomy with the category of 'oppressor'. The oppressed are people caught in imbalanced power relationships who, after having internalized and adapted themselves to the dominating structure, are unable and even unwilling to change their condition. Freire insists that the first obstacle in the liberation of the oppressed is their own fear of freedom and tendency to perpetuate the dominating structure by playing one's role in it. The category of the oppressed is instantiated at its best in the marginalised and impoverished people in the rural areas of Brazil with whom Freire worked. Yet, to get full hold of Freire's argument and its relevance for contexts beyond the rural and poor, it is necessary to link it to another dichotomy introduced by him, that between 'teacher' and 'student', framed in the "banking concept of education" (2006: 72). The banking concept of education is based on information transfer between teachers, who invest the role of subjects as knowledge depositors, and students, who, as objects in this transfer process, sit in and internalize the knowledge thus partitioned and imparted (2006: 71-3). The teacher-student relation in the banking concept of education emulates the oppressor-oppressed relationship: by being denied active inquiry and creativity in the pursuit of knowledge, students adopt a fragmented description of reality received through partitioned knowledge, and adapt passively to the world presented to them (2006: 73). The missing element in this educational setting is, in Freire's view, self-expression, which in banking education is replaced with "a deposit which the student is expected to capitalize" (Freire, 1985, p. 21). This pattern is visible not only in education, but also in socio-economic processes, for instance in welfare programs delivered from a paternalistic attitude that contribute, in reality, to perpetuating the position of the oppressed (2006: 74). For Freire, the solution for bettering the condition of the marginalised does not reside in integration in an unchanged social order where the dominating structure is perpetuated, but in a transformation by which they would arrive to develop *conscientização*, or *critical consciousness*. Developing critical consciousness is the core purpose of Freire's liberating education, or problem-posing education. Liberating education consists in dialogue, inquiry, and co-investigation pursued by teacher-students and students-teachers on equal

positions, both immersed in, rather than separate from, the living world. This form of education transcends two dichotomies: that between teacher and student, and that between human being and the world.

These considerations frame Freire's vision of empowering the oppressed. His approach promotes the installation of equal relationships, avoidance of pre-packaged solutions and paternalistic attitudes, paying attention to contextual conditions, and designing programs and actions from the bottom up with people's participation.

> "We simply cannot go to the laborers – urban or peasant – in the banking style, to give them 'knowledge' or to impose upon them the model of the 'good man' contained in a program whose content we have ourselves organized. Many political and educational plans have failed because their authors designed them according to their own personal views of reality, never once taking into account (except as mere objects of their actions) the men-in-a-situation to whom their program was ostensibly directed."
>
> - Freire, 2006: 94.

The accent is placed on taking into account and integrating people's views in the design of educational or political programs from the very onset. The 'how' question in empowering the oppressed is not about devising decontextualized solutions, but identifying the means for involving the oppressed themselves in identifying the roots of their problems and consequently devising solutions.

> "How can the oppressed, as divided, unauthentic beings, participate in developing the pedagogy of their liberation?"
>
> - Freire, 2006/1970: 48

Role of ICTs

In most of the literature, the sphere of empowerment that can be linked to the potential of ICTs focuses on uplifting citizens' capacity to exercise their full citizenship rights by being connected with the socio-political sphere in the receipt as well as transmission of information (e.g. Narayan, 2002; UNDP, 2006). In this respect, two elements of empowerment can be singled out over particular conceptualisations: *access to information* and ability to *influence decisions* that may have an impact upon one's life (Khwaja, 2005, in Ibrahim and Alkire, 2007: 13). These dimensions can be linked to the power of individuals to influence and control the outer environment, or avoid being manipulated by it, a position identifiable in the way the World Bank publications approach empowerment (e.g. Narayan, 2002). The World Bank approach is consonant with a definition of empowerment that focuses on enhancing people's abilities and opportunities to communicate with and influence the institutional environment:

> "Empowerment is the expansion of assets and capabilities of poor people to participate in, negotiate with, influence, control, and hold accountable institutions that affect their lives."
>
> - Narayan, 2002: vi

Four key elements of empowerment are identified:

1. Access to information. By being informed on socio-economic policies, laws and opportunities citizens can expand their choice array and hold institutions accountable. The role of ICTs in information provision can prove fundamental.
2. Inclusion/participation. People's participation in decision-making over issues of public concern can ensure that public expenditure benefits them and reflects local priorities. Spaces for participation and negotiation should be created.
3. Accountability. State institutions, public bodies as well as private actors with influence in the social sphere must be held accountable for their actions, and therefore be equipped with transparent accountability mechanisms.
4. Local organizational capacity. High capacity for collective mobilization and the existence of local associations can enable people to mobilize, take action and voice their concerns collectively (Narayan, 2002: vi-vii).

The interplay between the citizen and the public and institutional sphere is identifiable also in UNDP approaches to communication for empowerment. UNDP (2006) identifies three strategic support areas for initiatives undertaking communication for empowerment:

1. Increase access to information for marginalised groups
2. Amplify marginalised voices
3. Create spaces for public discussion, debate, and action. (p. 23)

For pursuing each, it is necessary to map opportunities for information and communication already in place and people's needs in relation to two dimensions: information access and communication (voice). (p. 23-9).

The role of ICTs can be conceived more broadly in terms of impacts or potentials, or with a closer scrutiny of the processes in which they are embedded. For instance, Heeks (2010) identifies five types of development impacts that ICTs can bring about:

1. Connecting the excluded. ICTs can provide expression tools and communication and networking platforms that enable previously excluded people to be connected through information.
2. Disintermediating. By using ICTs, people can avoid passing through officials that in the past conditioned their access to public information and communication with institutions or other local services.
3. Digital production. ICTs expand labour market opportunities based on digital

production, many of these requiring skills easy to acquire even for people with low digital literacy levels.

4 Digital innovation. By appropriating technology, people devise new means to use it creatively and improve their lives. Heeks gives the example of using mobile phone airtime as a commodity exchanged for other goods and services.

5 Collective power. People's collective views, opinions and needs can be aggregated and voiced through ICTs, in a form of 'crowdvoicing'. One example is community radio connectivity to the people through the Internet or mobile devices, enabling messages to be solicited and aired on the spot.

Yet, it is argued, empowerment and development are less a matter of ICT impact (Mäkinen, 2004) and more a matter of the *processes* through which they are appropriated and used by local people (Gumucio-Dagron, 2003). Mäkinen (2004, 2006) proposes a constructivist model for “digital empowerment”, seen as the process by which people are enabled to use ICTs to serve their own goals. The model is made of five elements or steps: awareness, motivation, access, skills, and constructive participation. The fifth element refers to people’s proactive engagement with ICTs and is one of the main boosting factors for digital empowerment. Constructive participation can contribute to becoming more aware of technology potentials and increase skills and motivation, therefore the model captures a cyclic process of digital empowerment. Mäkinen (2004) identifies four dimensions of progress and change in this process:

1 Expanding social networks;
2 strengthening technical skills;
3 Boosting possibilities to access, produce and share information; *and*
4 Devising new actions paths enabled by ICTs.

Gumucio-Dagron identifies five sets of condition for ICTs to be instrumental to development. *First*, ownership and appropriation are essential not only in terms of technology, but with respect to the entire communication process. People need to acknowledge by themselves the importance of knowledge and communication processes and involve in their conduct. These are essential conditions for ensuring sustainability, and can only be attained by accommodating people's participation from the early stages of a program. *Second*, there is a need to develop and make available local content, information that is relevant for the people in their local milieu. *Third*, content should be in understandable languages and aligned to local cultural codes. This points to a matter of access, but also to the role of ICTs in reinforcing cultural identity and internal community bonds, so that communities are better able to mobilize against disruptive influence and become more confident in carrying out negotiation processes for their rights. *Fourth*, there is a need for convergence and networking. ICT projects introducing new technologies need to relate to the technologies and

communication services already in use, and rely on local networks for building capacity. They should also forge synergies with local institutions such as schools and libraries. *Fifth*, technology should be appropriate for the local context. Rather than aim for innovation, technology should fit local needs, which is also a condition for sustainability. Summing up, for ICTs to be instrumental to empowerment and development there is a need to change the focus from access to *process* and from technology to *content* (Gumucio-Dagron, 2003).

9.3 Empowering Minority Voices: Processes and Methods

The review of the inclusion, cultural, and transformative agendas has highlighted aspects to take into account for the appropriation of ICTs in minority contexts, going from physical constraints such as access to tools and platforms, to the importance of digital literacy and the interpretation of ICT usage in context. The concern of this study is, moreover, with practical approaches, forms, methods, and techniques that enable minority communities to advance self-designed goals for knowledge production and communication. The literature offers a variety of examples that go from self-initiated activities from within communities to developmental technology interventions subsidised by external agencies. This part focuses on methods by which communities can be involved by external parties (design, research or developmental teams) in the articulation of context-specific processes for appropriating ICTs for local content production or for designing communication artefacts and information systems.

The methods described are not hard-bound recipes, though some of them may offer linear implementation steps. Their employ is a matter of adaptation to context, or rather a matter of allowing the approach to emanate from the local context by providing a series of starters. A process of selection may apply, for instance an approach can offer a broad framework from which detailed techniques are developed based on contextual conditions; a toolbox of techniques; a particular method (the most illustrative example being the AR/PAR cyclic activity model); or a set of principles. They can guide activities, or they may contribute to shaping new methods by weaving into local practices. The bottom-line is to allow community views to emerge and guide processes for technology appropriation or design of local knowledge architectures.

The first part looks at the ingredients of participation in developmental initiatives, and links these to their potential to foster empowerment. The second part evidences selected participatory methodologies that are relevant for technology initiatives with marginalised or oppressed groups. The third part looks at community-centric technology design approaches,

highlighting a particular trend oriented towards transcending pre-defined methods and allowing processes to emanate in interaction with local communities.

Participation patterns in developmental initiatives

Participatory approaches to development started being used in the 1970s and gained widespread popularity in the 1990s, seen as viable ways to design developmental initiatives fit for the local needs and provide the poor with a voice and capacity for decision-making in matters that directly affected them (Kanji and Greenwood, 2001; Cornwall, 2006; Ramirez, 2008). There are a plethora of definitions for 'participation', yet all retain to some extent "the notions of contributing, influencing, sharing, or redistributing power and of control, resources, benefits, knowledge, and skills to be gained through beneficiary involvement in decision making" (Narayan, 1995: 7). For the case of developmental interventions in local communities, participatory approaches fall broadly in two categories: 1) the instrumental approach, where people's engagement is seen as a means for gaining local support for a program and increase its effectiveness; and 2) the transformative approach, whereby participation is expected to build capacity and foster empowerment and community mobilization (Cleaver, 1999; Mohan, 2001; Pretty, 1995). Each approach is associated with different takes on understanding participation: in the first, participation is understood as means for eliciting stakeholders' views on a program; the second sees participation as a fundamental right, and implies the involvement of stakeholders in planning and decision-making (Kanji and Greenwood, 2001: 7).

Several conceptualizations of participation forms have been advanced in the literature, the most common being the ladders of participation, which categorize the degree of power people have over an initiative. Arnstein's (1969) ladder of participation, one of the most well-known examples, takes participation to be a category for power, and conceptualizes participation ladders according to the degree of power people have over the end result of public programs. Citizen participation is categorized in eight levels or types of participation, grouped in three macro-types: non-participation, tokenism (or fake participation) and citizen power (Figure 9.1). It is only from the sixth level, 'Partnership', that we can speak of citizen participation, which implies a redistribution of power between citizens and the power holders (Idem: 221).

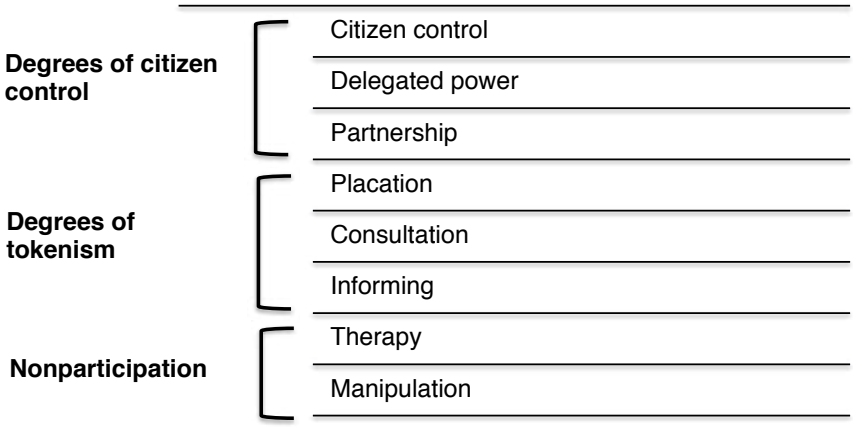

Figure 9.1. Ladder of citizen participation. Source: Arnstein (1969: 217).

A World Bank publication (Paul, 1987) categorizes participatory forms that go from information receipt to self-directed action:

1 Information sharing: Stakeholders are given information, their understanding of the project is considered critical;
2 Consultation: Beneficiaries are consulted with respect to critical issues and their feedback is sought;
3 Decision-making: Beneficiaries may decide on project matters, on their own or in collaboration with implementing agencies;
4 Initiating action: Beneficiaries take action in the frame of the project. At its highest peak, they may take initiative after identifying a new need and defining ways to meet it.

A different take on the ladder is proposed by Connor (1988) who identifies six levels of participation for involving citizens in public programs with the goal of solving or preventing controversy: education, information feedback, consultation, joint planning, mediation, litigation, and resolution/prevention. Rather than being a mere typology, Connor's ladder is devised as an advisory tool: each ladder is an approach to be employed for citizen engagement, and each is also a step to be taken when the situation asks for it.

Two ladders that are particularly useful for development projects were proposed by Pretty (1995) and Kanji and Greenwood (2001). Pretty's (1995) ladder includes seven types of participation: manipulative participation, passive participation, participation by consultation, participation for material incentives, functional participation, interactive participation, and self-mobilization. The first four are not considered to be forms of participation proper, and, Pretty argues, they are bound to be ineffective and fail to result in enduring impacts on people's lives (p. 1253). The sixth form, interactive participation, involves joint analysis, planning and

decision-making, and may include actions for building or consolidating local infrastructures and institutions. In form seven, self-mobilization, local people have the initiative over programs and though they may collaborate with external agencies, they maintain control over the use of local resources (p. 1252).

Kanji and Greenwood (2001) propose a ladder of participation in five levels:

1 Compliance: members may be assigned tasks and given incentives, but the agenda is settled by outside agencies;
2 Consultation: the views of the stakeholders are collected, yet the agenda and the course of action are defined by outsiders;
3 Cooperation: issues and priorities are settled together with local people, but the process is directed by outsiders;
4 Co-learning: members and outside agencies engage in a process of knowledge sharing and define action plans together;
5 Collective action: members define the agenda and direct the course of action with no outside support (p. 5).

In a program, each of these forms may be implemented differently depending on its stage: 1) Defining the agenda; 2) Development of a proposal; 3) Preparatory phase; 4) Implementation; 5) Analysis of results; and 6) Dissemination and Action.

The ladder models are useful tools for understanding the forms participation may take in a program and further link these to effectiveness in meeting program goals or in attaining to other outcomes such as empowerment and capacity building. The degree of influence people have over a program as participation forms move up the ladder have been found to impact on both program effectiveness and empowerment. For instance, a study of 49 rural water supply projects in underdeveloped countries demonstrated that participation impacted significantly on the effectiveness of the projects, and moreover contributed to community empowerment, building organisational skills in the communities, and consolidating local institutions (Narayan, 1995). The same publication indicates that participation did not have the same level of effectiveness when external agencies maintained control over the implementation details. It is argued that participation is likely to contribute to empowerment if people have a fair amount of influence and control, build skills and self-confidence, and are driven towards initiative and self-mobilization (Narayan, 1995). Lower steps in the ladders, in which involvement is passive, reduced to information provision or consultation, are considered unlikely to affect empowerment. For example, in Pretty's seven-stepped ladder, the first four forms are considered to be tokens of passive or even manipulative participation that are not likely to result in enduring effects on people's lives (Pretty, 1995).

Apart from the forms taken by participation, it is important to identify the right stakeholders (Ramirez, 2008) and avoid ambiguous formulations about who participates, such as 'the

poor' (Kanji and Greenwood, 2001). The stakeholders may be identified not necessarily by geographical location, ethnicity, or economic level, but by the common interest they have in a project (Narayan, 1995). Gaps in participation therefore need to be located in terms of whose interests are represented. Several groups may be systematically excluded from participation even if their interests are at stake, for instance women (Kanji and Greenwood, 2001). It is important as well who invests the roles of convener and facilitator, as well as the question of legitimacy for different stakeholders (Ramirez, 2008).

In other approaches, the effectiveness of participation does not depend only on the specific action implemented, but needs to be seen in the larger socio-cultural and political context. A World Bank report on bank projects that experimented with participatory approaches lists four factors likely to hinder participation: 1) the social tradition of the implementation context is not supportive of participatory approaches; 2) the delivery of program services is hindered by inadequate technology; 3) either the market or the government are perceived by the beneficiary parties as effective agents in implementing the project on their own; and 4) authorities are unwilling to include participation in project design (Paul, 1987). Hickey and Mohan (2005) argue that participatory approaches are prone to be effective when pursued as part of wider political initiatives that aim to ensure rights for socio-political participation of marginalised groups and imply a large-scale process of social change. They argue, moreover, that it is at the level of small-scale and isolated technological interventions that participatory approaches may have little practical effectiveness.

The link between participation and effectiveness may not be always drawn in straight lines. A study on development projects set in Pakistan demonstrated that community participation can increase project effectiveness if non-technical decisions are involved, yet the opposite happens when the community is involved in technical decisions, which can significantly worsen the outcomes (Khwaja, 2004). This draws attention to another significant factor in designing participation: people's preparation and knowledge base, which can enable them to informed decision-making. Participatory projects are prone to start off with an uneven distribution of knowledge, in particular with marked difference between knowledge possessed by researchers and local people (Fals-Borda, 1988; 1991; Hall, 2002; Tandon 2002a,b). Calming this gap is of utmost importance not only for the effectiveness of the project outcomes but also when people's empowerment is targeted, particularly in an optic that sees knowledge and power in an inextricable relation of mutual determination (Fals-Borda, 1988; 1991; Hall, 2002; Hearn et al., 2009: 37-9; Tandon 2002a,b). The next section describes established participatory approaches designed to overcome knowledge and power differences and for affording people's effective involvement in developmental initiatives.

Participatory methodologies

Participatory and action research methodologies have emerged from working with marginalised and disadvantaged groups and a concern with serving their interests, effectively involving them in research or development initiatives, and yielding outcomes that can mark a difference in their lives. The principles and methods they advocate are therefore prone to have particular relevance for the needs of marginalised, illiterate, or isolated people. A review of all participatory methodologies is beyond the goal of this section. Rather, this part looks at a series of selected methodologies that can prove particularly relevant for issues of voice, giving voice, and empowerment in conjunction with the use of communication technologies. In particular, the review below will cover:

- Methodologies that target specifically oppressed and marginalised communities; *and*
- Methodologies conceived to support communication and technology initiatives.

The reporting is focused on practical processes and methods for knowledge-building, empowerment, and effective involvement of local people in research.

Targeting the marginalised and powerless

Particularly relevant for the case of minorities is the liberationist form of PAR employed as well in shaping the design of the present study. Liberationist PAR is not a coherent methodology, but points rather to a family of PAR approaches and forms that share a concern with empowering the powerless. These approaches were developed based on practical fieldwork with marginalised groups, in particular in Latin America and India. Despite the fact that they are derived from work with heterogeneous groups in different cultural settings and having different needs and goals, there is a remarkable similarity between the principles embraced and the processes found effective in working with these groups. The most articulate outlines of liberationist PAR, inclusive of principles and practices, are given in the writings of Fals-Borda (1988, 1991, 2001), Hall (2002), Hall et al. (1982), Rahman (Rahman, 1991; Rahman and Fals-Borda, 1991), and Tandon (2002a,b). All of the cited works take off from a critique of the monopoly over knowledge in academia and research circles, and argue for the need to break this monopoly to empower the disadvantaged and excluded by making them part of knowledge production and distribution processes. The key principles (in particular experiential research, co-action and co-research) have been exposed at length in Chapter 3 of this monograph in relation to the design of this study and will not be insisted upon in here. Instead, it is relevant for the purpose of this section to highlight how practical approaches can be devised for inclining the balance of knowledge and power to favour powerless and disadvantaged groups.

The action-reflection cycle is recurrent in all cited works. Cycles of action and reflection are

considered to be constitutive of true *praxis*, and quintessential elements for enhancing knowledge acquisition, critical thinking, and allowing marginalised people to objectively understand their condition and take steps towards fostering change (Fals-Borda, 1991; Tandon, 2002a). A second aspect insisted upon in the liberationist PAR literature regards the valorisation of popular, traditional knowledge, the knowledge of the common people. The revalorisation of popular knowledge is considered a prime condition for empowerment as only by the generation of local knowledge and control over it the consciousness of the people can be raised (Rahman, 1991). The valorisation of local knowledge also has a bearing on people's capacity and willingness to integrate new knowledge: by becoming aware that they know and appreciate what they know, people's sense of inquiry and interest to further knowledge is raised (Tandon, 2002b). Two illustrative approaches for enhancing knowledge acquisition and critical thinking as ladder steps for empowerment are given below.

Fals-Borda (1991) recommends four techniques by which participatory processes can make knowledge acquisition instrumental to people empowerment:

1 Collective research: Systematic collection of data and its sharing and negotiation in group settings;
2 Critical recovery of history: Resurfacing of past collective events through oral histories and elderly members' testimonials;
3 The valorisation of folk culture: The employ of traditional folk art forms, such as storytelling, theatre, music, myths; *and*
4 Production and distribution of new knowledge: The emergence of new knowledge from participatory processes, in forms including but not limited to textual (p. 8-9).

Paulo Freire's methodology for education as a liberating practice, outlined principally in his *Pedagogy of the oppressed* (2006/1970) has been one of the most influential approaches for participatory research practices. For Freire, the practice of the liberating education starts from the exploration of the people's "thematic universe", the "generative themes" that characterize their perception and vision of the world (p. 96). Themes are, for Freire, sets of values, aspirations, ideas, and concepts that can go concentrically from general to specific, from broad themes (characterizing a historical era, for instance 'domination') to circumstantial themes (belonging to specific groups in specific times). These themes are not abstract, they mark people's relatedness to the world, in particular as perceived by themselves, though not always consciously acknowledged. Themes are associated with compelling behavioural and attitude patterns, for example domination as theme conditions the dependency attitude characteristic of oppressed people. The first step for the liberating education is a conscious acknowledgement of the themes that condition the perpetuation of oppressed people's condition of submergence and dependency. Freire proposes a process based on coding and decoding, moving dynamically between abstract encoding of a life

situation to its decoding through observation and critical reflection, which contributes to relating it back to the concrete. The goal is to enable people to engage with a direct yet distant and critical observation of their life contexts. Encoding can be done by using sketches, photographs, and representations with a high evocative power, which can at the same time conceal and reveal emotionally charged situations. In the process of decoding, an individual may come to consciously and critically assess her/his generative themes. This process is dialogic in nature, it involves the agency of a second party, an educator who acts as co-investigator, participating in the exploration of people's life context, drawing meaningful codifications of situations familiar to people, and engaging in decoding processes in which the generative themes are revealed and critically assessed. The practice of decoding coupled with reflection in dialogic settings favours the development of critical thinking and creates fertile ground for the acquisition of new knowledge (p. 96-117).

Action research and participatory methodologies for ICT initiatives

Initiatives targeting the introduction of new technology or the development of information systems in local communities pose different sets of constraints with respect to the design of participation (Merkel et al., 2004; Winschiers-Teophilus et al., 2010). As Hearn et al. (2009), argue, one important aspect is that the knowledge gap among local people and the interventionist team is considerably heightened when members have no or insufficient digital literacy. Eliciting the views of local people and reading through layers of implicit knowledge to be able to arrive at usable insights for design is an additional non-trivial challenge (Ibid.). Some participatory and action research variations have been designed to meet the challenges posed by ICT projects. This part describes two of them: one designed purposefully for new media interventions in the context of developmental initiatives, and the second targeting interventions in community settings.

Ethnographic Action Research - EAR (Tacchi et al., 2003) is a methodological framework that mixes ethnography, participatory, and action research principles and methods. It has been developed throughout and for development work in sensitive contexts, stricken by poverty and violation of social and human rights. EAR has at its base the experience of an anthropologist, Jo Tacchi, and embraces many of the principles of anthropology and the methodological approach of ethnography, including a holistic take on data generation and analysis, and a concern for capturing the perspective of the local people in interpreting field data. It is interesting to note the particular sequence of the ethnographic and participatory methods as mapped on a temporal dimension in EAR, favouring ethnography at a first stage and following with participatory and action research. Ethnographic techniques serve to gather data for properly mapping the locale, build relationships with local people and familiarize them with a project, while participatory techniques go further to build on these premises by involving people in the initiative. EAR processes are based on a four-stepped

project development cycle: Plan – Do – Observe – Reflect. As typical of AR approaches, EAR includes evaluation stages all throughout the research project, which allows the project design and organization to be adapted on the run. EAR has been used in a variety of projects involving marginalised, poor and underserved groups or local communities (e.g. Bidwell et al., 2011; Tacchi, 2005, 2008, 2010).

A second example of an AR variant for new media initiatives dwells on a perspective on communities as networks. Rather than approaching communities as homogeneous entities, network action research (Foth, 2006; Hearn et al., 2009: 103-118) acknowledges their dynamic and shifting nature, and looks at the social networks and communication flows already in place. An initiative built on Network Action Research (NAR) starts from the identification of the social networks existing in a community, and initiates small AR projects in each of them. Each of these sub-networks is run by an action researcher selected from the community members, and all of them are in contact with the lead action researcher, forming a meta-network of inquiry (Hearn et al., 2009: 110-114). The NAR approach manages to give viable responses to some of the issues that action researchers face: engaging (almost) the entire community rather than a handful of representatives; initiating more personal and direct communication actions, using existing channels and ensuring more community members are actually reached and that marginal voices are heard; ensuring that an AR project does not interfere with the daily life activities of the community members, by facilitating members' participation in their natural life and work environment (p. 107-108).

Community-centric technology design

Designing for minority communities involves working with and accounting for two different and at times incompatible ways of knowing (Rodil et al., 2012; van der Velden, 2010; Verran et al., 2006). At the same time, when the aim is to create culturally representative and locally useful artefacts, design relies on embracing a local viewpoint and allowing activities and design solutions to emerge from it (Rodil et al., 2012). It has been argued that in this process community participation is essential (Rodil et al., 2012; van der Velden, 2010; Verran et al., 2006; Winschiers-Teophilus et al., 2010), and that community-centric design is not so much a matter of applying the right method, but rather re-interpreting all articulations of the design process in the light of the specific situation, including a re-definition of what it means for the community to participate (Winschiers-Teophilus et al., 2010).

Maja van der Velden (2010) uses Pratt's (1991) concept of "contact zone" to describe the space of encounter between indigenous knowledge and scientific-technological knowledge for creating an IK management database. For Pratt (1991), contact zones are social spaces of encounter between different cultures, characterized by exchange but also clashes and conflict. They characterize in particular those contexts marked at present or historically by

colonialism or slavery and unequal power relations. Contact zones are a fertile ground for phenomena, practices, and representations arising out of these clashes. Van der Velden (2010) proposes that designing for the contact zone implies a redefinition of the entities and phenomena involved in the process, so that 'designer', 'user', 'design', and 'knowledge' are shaped in and through their interactions and relating (p. 12). These are processes in which the features and the boundaries of phenomena are defined dynamically in interaction with other phenomena, what can be described by the term 'intra-action', borrowed from physics. This (re)definition can be seen in terms of dynamic articulation of possibilities and exclusion of other possibilities. Design for the contact zone is a process of dynamic configuration of possibilities through intra-action between elements. Options and possibilities are not pre-defined nor by a particular software nor by features of local knowledge. These are dynamically configured and re-configured with each iteration of the design process.

Verran and Christie (2007) conceive the project of designing for IK representation and transmission by alluding to the original sense of 'project' as 'throwing forth', a verb rather than a noun (p. 226). Uses and meanings are re-configured in the design context, identifying and reaping potential uses of technology that would not have surfaced beyond the given design context. For instance, video, a representational technology, can be re-configured from a perspective on knowledge as performative act, enabling a storyteller to draw connections to history and the land. A video-recorded testimonial can be enacted as a traditional Aboriginal performance, and the way video footage is cut and assembled can give further flavour of connectedness to the land. This enables video as "technology of representation" to be appropriated and re-configured as "video as technologies of witness" (p. 221). This re-configuration is aligned to the epistemological tradition of the Yolngu aboriginal group, where knowledge is not a representation of the outside world, but rather a re-enactment, a performance in a specific place and time (p. 219).

On a similar note, Rodil et al. (2012) describe the process of designing a 3D visualization space for indigenous knowledge in Namibia as:

> "…it was all a big melting pot: Where designer, the artefact and the space melt together within the design process, where the object of design becomes the tool for participation and where the designer becomes a part of the community and the community becomes designers."
>
> - p. 89-90

Community-centric design appears therefore to be "emergent and situated" (Verran and Christie, 2007: 215), eluding pre-packaged recipes and steps. There are a series of features of the design process reported in the literature that can shed light on how these emergent and situated qualities are enacted. A first aspect coming across as characteristic of community-centric design is the re-configuration of the design space, tools, workflows, and

agents by taking the local as central point of reference. This can be thought of as the creation of a third space, of the type described by Turnbull (1997) for transcending the dichotomy between local and scientific knowledge. The third space, a kind of new canvas for design, appears necessary to avoid the limitations imposed by adopting either unilateral viewpoints (drawing upon the local and the technological as singularities pre-existing the design), or fragmented approaches (by blending and mixing pre-existing elements from each in the light of what appears as the right thing to do during the design process). It is a space of *presence* where on the one hand community needs, goals, views, and content, and on the other technological options are defined in their encounter, in a process similar to the one described by van der Velden (2010) in terms of intra-actions patterned in an iterative flow.

The second aspect regards community participation and the forms it may take. Participation needs to be itself localized, its patterns generated from interaction with local communities by emulating its regular practices (Winschiers-Teophilus et al., 2010). At times, precise rituals or cultural practices can be used as models for community interactions in the design process. For instance, Verran et al. (2006) describe their research with the Yolngu Aboriginals in Australia for building an IK system as "performative knowledge-making", including processes modelled on the local Garma ceremony.

The third aspect regards the iterative nature of the design process. At this point, community-centred design can draw on established design forms such as participatory design. Iteration is particularly meaningful in community settings unacquainted with technology as it allows local people to see the process unfold, see the results of their inputs, and go back on their steps (Hearn et al., 2009).

Community-centric design does not preclude the employ of established approaches, or insights from established approaches. It is more a matter of *how* these are employed, rather than an obstinacy for pure local emanations. Participatory design (PD) is particularly akin to these efforts (albeit not deprived of challenges), as reported by PD projects in community settings or with indigenous groups (e.g. Merkel et al., 2004; Rodil et al., 2012). Participatory design (PD) can be described as the sum of theories and practices brought together by a concern with accommodating the participation of the end-users during the development of software and hardware computer products and related activities (Muller, 2002). Several distinct approaches or methodologies have been developed as part of PD, for instance MUST (Kensing et al., 1996) and contextual design (Beyer and Holtzblatt, 1997). Just as the design for the contact zone (van der Velden, 2010), PD works in between two worlds and two ways of knowing – that of the designers and the users (Kensing and Munk-Madsen, 1993; Muller, 2002). Muller (2002) describes PD as the third space in HCI, a space in between the developers' and the users' worlds. He makes an overview of "hybrid practices" - PD techniques and methods that fall in between the users' and the developers' world.

Methods such as workshop, drama, storytelling, and design games contribute to challenging assumptions and driving novel ideas emerged through dialogue and negotiation among users and developers. Particularly relevant for the vision of PD as the space between worlds, and the implications this position has on knowledge building is Kensing and Munk-Madsen's (1993) model of user-developer communication in PD. The model depicts PD as a bridge across two different worlds: the users' (the workplace) and the developers' (the technological options). A third domain – the new system – is created throughout the project. The communicative actions and the type of knowledge advanced throughout the PD process can fall into six categories, derived from three domains of discourse (users' work, technological options, and new system) at two levels: abstract and concrete.

Yet in deciding if and which approaches, techniques, and practices from the large PD family may work in a given context, there is a need for sensitivity to cultural differences as well as to the constraints posed by working with communities. PD does not offer universally applicable methods, but is context-bound (Winschiers, 2006; Winschiers-Teophilus et al., 2010). As Winschiers (2006) argues, even widely accepted PD methods, such as Future Workshop, are unfit for certain socio-cultural groups. Also since PD has been typically used with structured work teams, in being employed in community settings it encounters new challenges posed by the heterogeneous nature of communities and their networks, ties, and interactional patterns that can be invisible to outside parties (Winschiers-Teophilus et al., 2010).

9.4 Conclusion

This chapter outlined the relevant literature for positioning the results of this study. The first part tackled the theoretical underpinnings of the relations between voice, technology, and development. A three-layered definition of voice was provided, highlighting conditions and resources for actuating each. ICTs were described as tools that can significantly boost voice at all three levels. Yet, they are not neutral tools that serve the purpose they have been designed for. Drawing jointly on sociocultural theory and social constructionism, it has been argued that ICTs are social creations, imbued with meanings and values during design. Second, in being used they affect the quality of the activity conducted and the agent's meaningful relating to it. Their employ in the exercise of voice needs to take into account how on the one hand they are infused with values and meanings, and on the other shaped in the encounter with agents in new contexts.

Further, it has been indicated that peculiar goals and agendas for ICT uptake in minority contexts come along with different discourses on the role and place of technology. Three

agendas were identified and outlined, targeting inclusion, cultural affirmation, and empowerment. Each agenda privileges particular aspects and highlights sets of factors deemed important for maximizing the potential of ICTs in relation to these three grand goals. For instance, digital literacy is considered one of the most important assets for ICT appropriation in inclusion agendas. Whereas in the cultural agenda, it has been argued that cultural expression of minorities is incommensurate with the use of ICTs.

The overview of the three agendas, along with the three-layered definition of voice and the social embeddedness of ICTs serve as the larger framework for understanding the implications of the contributions produced by this study. Further, the second part of this chapter overviewed processes and methods with which the methodological and design outcomes of this research can be compared. The forthcoming chapter further discusses how the outcomes of this study advance the state of the art research presented in this chapter.

10 Discussion

"Adair explained that he wanted to teach some Navajo to make movies. … When Adair finished, Sam thought for a while and then … asked a lengthy question which was interpreted as,

'Will making movies do sheep any harm?'

Worth was happy to explain that as far as he knew, there was no chance that making movies would harm the sheep. Sam thought this over and then asked,

'Will making movies do the sheep good?'

Worth was forced to reply that as far as he knew making movies wouldn't do the sheep any good. Sam thought this over, then, looking around at us he said,

'Then why make movies?'"

- Worth and Adair, 1972, cited in Ginsburg, 1991: 96

10.1 Synopsis

This chapter discusses how the contributions of this study advance state of the art research in the fields of ICT4D, community informatics, and community media studies. The first part discusses the conceptual contributions on empowering minority voices, focusing on the following aspects:

1 Defining local agendas for ICT uptake
2 Community participation: conditions, patterns, impacts
3 Cultural representation, knowledge production, and ICTs: product and process

In the second part, the CoRA methodological framework is positioned as a participatory methodology. Features of similarity and features of distinctiveness with respect to other participatory methodologies are discussed. Finally, the implications of the concept of 'context-responsiveness' are laid out. It is suggested, in particular, that context-responsiveness is to be understood as the capacity of a socio-technical environment to self-regulate its evolution and self-direct its activities in desired directions. CoRA proposes *learning, envisioning*, and *alignment* as three strategies able to direct this process. This vision is supported jointly by 1) a view of context as a dynamic construct defined by the interaction of agents in the present time; and 2) a definition of technology as inclusive of and shaped by each context of use.

10.2 Voice Empowerment in Minority Communities

'Voice empowerment' was construed in this study as a multidimensional concept with rich layers of significance derived from each of the concepts contained and their interplay. 'Voice' stands for capacity and exercise of expression and communication. Drawing on communication sciences scholarship, the concept can be broken in three layers: the agency, the discourse and the audience layer (Mitra and Watts, 2002). 'Empowerment' refers to the process by which these dimensions are boosted or impediments to their manifestation are removed. Drawing on Amartya Sen's approach, empowerment is the expansion of agency, while the latter implies the ability and power to act effectively to pursue self-designed goals (Sen, 1985). 'Voice empowerment' is therefore about contributing to the removal of barriers and creation of conditions that can enable an agent to access, create and distribute knowledge or express her/his own views and opinions to serve goals s/he has designed. Voice empowerment can be directed at each of the three levels of voice, from the agency to the discursive and audience layer. Different premises are created by the definition of *who* is involved in this process and *for what purposes*. This study considered a specific type of minority group, geographically bounded communities with unique socio-cultural systems. Further, it focused on voice empowerment in the scope of initiatives that involve an external party, for instance ICT interventions with developmental goals, or design teams. Finally, it gave accrued importance to the definition of goals and agendas for appropriation of technology *from within* a community. These foci frame the contributions of this study around the process of empowering minority voices. Salient aspects of these contributions are discussed below against relevant literature, formulated as responses to three questions:

1. How are local agendas for ICT appropriation defined and how do local benefits emerge?
2. What is the role of community involvement in the frame of communication interventions, on what premises does it build and how does it impact upon the process and its outcomes?
3. How can local people be involved in processes leading to the creation of community-representative artefacts?

Defining local agendas for ICT uptake

The citation that opens this chapter resonates well with some of the critical questions that emerged in the early stages of the fieldwork in both field studies, in the attempt to match what ICTs could offer in the frame of the project with what the communities needed. The suspended question *"Then why make movies?"* (Worth and Adair, 1972, cited in Ginsburg, 1991: 96) illustrates a clash between two logics and two worldviews and hints at the long

processes by which ICTs can relate with the goals and needs of communities that carried on their lives unaffected or little affected by ICTs before. It is worthwhile to use this question to open the discussion on voice empowerment starting with the premises: why do minority voices need to be empowered, and what for?

In answer to this question, three grand strands corresponding to local agendas for technology appropriation for voice have been identified from the literature: the inclusion agenda, the cultural agenda, and the transformative agenda. The inclusion agenda is about creating the conditions by which minorities can be included in socio-economic processes on equal position with majority populations. The role of ICTs in supporting inclusion is particularly important in 'information societies', marked by the ubiquity of ICTs and their integration in fundamental societal processes, from work to entertainment (Warschauer, 2003; Webster, 1996). The cultural agenda is about the appropriation of ICTs for serving local knowledge production and transmission, enriching socio-cultural practices, serving cultural revitalisation and preservation. The transformative agenda refers to using ICTs to foster social change, cope with and overcome disempowered positions, take control of one's life and expand one's choice array. These agendas have been singled out and treated separately to highlight how clearly articulated goals for voice empowerment come along with different conditions and motion different processes for being met. One important aspect which gets different treatment in the three agendas is the relation between ICTs appropriation, cultural specificity, and change. Inclusion agendas, even when framed by social constructionism perspectives, are bound to place a higher emphasis on mastery of ICTs, enhancing digital literacy, and integrating social actors in mainstream socio-cultural and economic practices. This agenda is less concerned with the impact these processes have on cultural aspects. The cultural agenda is, on the other hand, more concerned with preserving and boosting local cultural forms, or if change is envisaged, accommodate it and integrate it in accordance with local goals and needs. The transformative agenda, with its focus on change and empowerment, maintains a focus on the local, and approaches ICTs as tools to be appropriated, modelled, and integrated to serve locally-relevant goals for progress, affirmation, and self-determination.

These agendas are not mutually exclusive, nor are they as clearly articulated and bounded as it may seem from treating them as separate tracks. On the contrary, most processes for voice empowerment are likely to fall at their intersection, or pursue one as ladder step for another. Cultural determination can pave the road to inclusion by the affirmation of a strong cultural ethos. Inclusion and empowerment may even be one and the same thing for some communities, as they both define ways up and beyond situations of exclusion, marginalisation, and disempowerment.

The outcomes of this study suggest that these agendas are overlapping when being framed

from local perspectives, however a clear acknowledgement of how community goals are articulated in each is paramount to understanding the right course of action. Both communities included in the study had an inclusion agenda as primary, yet on very different grounds. The community of Podoleni was interested broadly in socio-economic inclusion, in local terminology 'reintegration', seen as an attempt to become part of a societal whole. Their agenda was about bridging differences, being treated the same as Romanians, doing away with discriminatory attitudes, with marginalisation in social, political, and work environments. This goal for unity with the whole did not imply giving up cultural specificity. In the case of the community of Podoleni, the discourse itself of 'cultural specificity' is an artificial construct. Local people saw no contradiction between continuing their lives as they had been, continuing to speak Romani as they did, keeping up the strong musical tradition, and being integrated at the same time in mainstream social, political, and economic processes. It should be underlined that this is the case of a minority that has already undergone a long process of assimilation, so that at present few Romani elements remained, language being the most important. It is a representative case of a community dwelling in a contact zone (Pratt, 1991) where the majority culture had the strongest bearing. Yet this is not a zone of clash and conflict, rather a zone of blending and mixing of socio-cultural practices that have grown and changed organically in centuries.

A different case is represented by the traditional Roma in Munteni. Their agenda was of economic inclusion, yet proposed in conditions which held high cultural preservation and continuity. Munteni is a community with a strong cultural ethos, keeping up with tradition despite very harsh assimilation policies. It is a rare case of a minority community that has managed for centuries to maintain endogenous lifestyles with respect to cultural practices, social organisation, and even economic modes of production. People have their own leader, and even if he holds no legal power, he is still regarded as an authoritarian figure and respected as the community head. Even the main revenue-making activity is traditional: most Roma in Munteni earn money from selling their metal products, crafted with fire and hammer like hundreds of years ago. As such, the community can be seen as a remarkable example of an enclave, a group functioning by ancestral rules, denying assimilation and integration in the mainstream, what Jean Baudrillard would call a 'singularity' (Casalegno, 2005: 108-109). The communication objective in the frame of the initiative was to give visibility to the community, its metal work tradition, and its difficult life conditions. These were all subsumed to an economic goal, that was not achievable as such in the project scope: attain economic well-being either by boosting sales of traditional products without having to travel, or by attracting other work opportunities in the community.

How are agendas defined in the frame of communication interventions and how are benefits associated with ICT acknowledged? The literature reports cases when local communities have been the initiators of technology programs and have contacted agencies or academic

laboratories with a well-defined agenda for using ICTs (e.g. The *Ara Irititja* project, www.irititja.com, designed for the Anangu Aboriginal people of Central Australia). Yet most reported are those cases when the initiative comes from outside the community, and the definition of goals and agendas relies on a process by which people get acquainted with the potential of technology and the possible synergies with local goals. The two field studies of this research are examples of this second kind. The process of negotiating benefits and defining the agendas was different in each community. In the Podoleni study, initial discussions were carried with an opinion leader and his immediate circle, and gradually came to include other members of the community. After presenting various possibilities of using ICTs and inquiries in several rounds, there was unanimous consensus that public communication was the most relevant solution for members. Yet, in the early stages people did not associate having a website with tangible benefits or advantages. The particularity of this case is that people's engagement was motioned principally by the process and its novelty, rather than by acknowledgement of gain. It was only after several cultural probes have been produced and discussed, and especially during content production and intensive visualisation sessions that people came closer to a vision of what we wanted to with cameras, storytelling, and the Internet. At that stage, a community leader was involved who saw the potential of having a website in relation to local plans for development and reintegration, and from him the importance of having a community website spread to other members. In the second study, local youth proposed to make videos and put them on YouTube during the first field visits, when the project was early in its exploratory phase. This enthusiasm, however, was not enough for a deep and wide acknowledgement of benefits. As it was evident later, youth had very little knowledge of technology and how Internet works, and to concretize their initial idea and make its implications visible, it was necessary to discuss at length what Internet publishing entailed. To facilitate understanding, apart from lectures on the Internet we started to publish a community blog, a temporary solution before the complete community website was ready.

The response in the two field studies and an investigation of its underlying drivers suggest that the acknowledgement of benefits and the definition of agendas depend to a great extent on two factors: *The first* is people's degree of exposure to technology options. The more people know of the broad array of possibilities opened up by ICTs, the greater the possibilities to come up with matches and insights into how their own needs and goals may be met. In case of low exposure, this needs to be compensated through activities that contribute to raising awareness and understanding of what ICTs can do and how they can relate to local interests. *The second* factor has to do with members' capacity to assess their own local reality from a distance, with an almost objective eye, so that those aspects that can be boosted and enhanced through technology can be acknowledged. When being immersed in the locale and its practices, these aspects are obscured. It is likely that people

who feel responsible for the community and determined to pursue its progress (even in informal rather than formal leadership roles) are the ones most prone to take this distance and assess conditions objectively. The CoRA methodological framework produced through this research pays particular attention to these two factors, emphasizing the importance of knowledge-building on two dimensions – technology potential and the local context, with the third one, applied solutions, emerging in the process. Similar insights are given in the participatory design literature, in particular Kensing and Munk-Madsen's (1993) model of user-developer communication.

Community participation: conditions, patterns, impacts

There was an underlying assumption driving this research that we cannot speak of 'empowering minority voices' without community participation and involvement in all or at least the most critical aspects by which expression and communication solutions are devised using ICTs. Consequently, a great deal of attention in conducting the field studies went into understanding the conditions for community participation, the forms it may take, and the impact they have on other dimensions of voice empowerment. The results of this investigation are presented in the first section of Chapter 8, as they have emerged from the grounded analysis. An overview of these results in relation to the literature on participation in development and ICT4D scholarship, as well as in the rich body of literature on participatory methodologies yields interesting parallels. Insights from this comparative review of grounded research results against the literature are presented below, separated in conditions, patterns, and impacts of community participation.

Conditions

To speak of *conditions* for community participation is to relate to an ideal of how participation should be, framed in a vision for the dynamics of the interaction between community members and an interventionist team. In this research, this vision is well represented by the notion of 'organic co-operators' (Fals-Borda, 1988), or 'subject-subject relationships' (Rahman, 1991): a premise that two agents are speaking and acting from the same level, each contributing her/his own expertise, knowledge, and values to the joint work conducted.

Organic co-operation captures the dynamics of interaction between two parties. This study suggests that in order to reach and work in this dynamics, there is a need to unify three aspects:

1. Goals: the program objectives need to be negotiated clearly in relation to benefits expected on both sides.
2. Intent: both parties need to develop the engagement to joint work, and acknowledge as well the other's intent to do so, developing therefore mutual commitment to the

program.

3 Thinking patterns and terminology: there is a need to reach conceptual unity by aligning the meanings attributed and the associated terminology for phenomena and processes that are dealt with in a specific program.

Based on the unification of these three, it is further possible to instate organic co-operation at the level of:

1 Interaction, instantiated as the development of relationships based on equalitarian exchange.
2 Roles in the program, that can be defined as complementary, with a mutual acknowledgement of one's own and the others' roles.

The considerations above are summed up in Fig. 10.1. in a sequential view of the conditions to be met for community full participation.

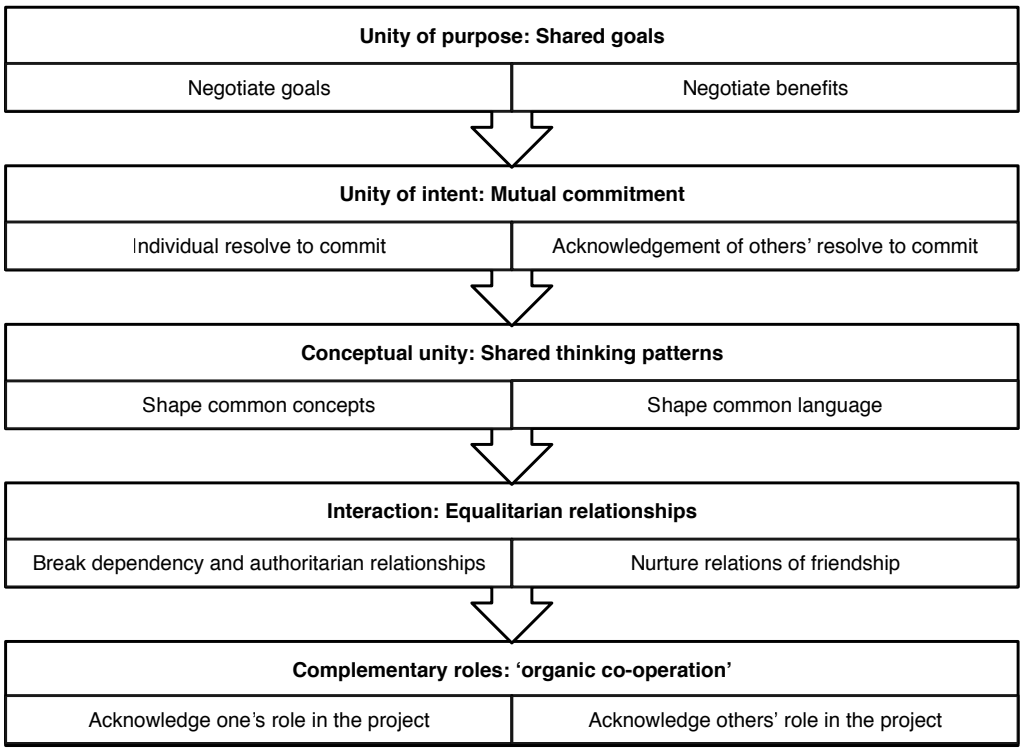

Figure 10.1. A model of sequential conditions to be met for community involvement in communication interventions. Drawing on an interpretation of this study results in the light of writings by Fals-Borda (1988, 1991, 2001). Source: author.

The model is based on the concepts of 'shared goals', 'mutual commitment', 'breaking relationships of submission', 'shared thinking patterns', 'subject-to-subject relationships', and 'organic co-operation' advanced by Fals-Borda (1988, 1991, 2001), and interpreted in the light of the two field studies by highlighting:

- The dynamics between the two agents (local people and an interventionist team) characterized either by unity or by complementarity, at the level of each principle;
- The sequence, interpreted as an incremental set of conditions met, or steps building on top of each other; and
- The dynamics between the individual and the collective, characterized by acknowledgement of her/his role in relation to the others' same or complementary roles.

To be able to work towards instating subject-subject relationships, a series of *impediments* need to be overcome, many of these embedded in people's deeply held beliefs and assumptions. The factors identified from the grounded analysis reverted in particular on people's perceived legitimacy to contribute, perception of researchers' authority, perceived self-efficacy, know-how, and time. These factors appeared to be closely related and reciprocally conditioning one another. For instance, reduced know-how impacted on people's acknowledged capacity to contribute effectively to the project, captured in Bandura's (1998) concept of 'perceived self-efficacy'.

Patterns and impacts

Despite the debates around the role of participation in development and the questioning of its benefits (see Cooke and Kothari, 2001), this study suggests that community participation is an important if not the most important element in community-based initiatives concerned with communication and knowledge production. Yet, to link participation to effectiveness of a developmental initiative, it is necessary to understand its patterns and fluctuations across an initiative. To enable an in-depth view of how community participation can be instantiated, an operationalization of the construct has been proposed, composed of five dimensions:

1. *Degree of control:* The degree to which members are able to take control over aspects of an initiative.
2. *Degree of autonomy:* The degree to which members handle activities autonomously with respect to the involvement of the interventionist team.
3. *Stakeholders involved:* The members involved, with respect to interest groups and role in the community.
4. *Program stage:* The stage in the initiative where involvement occurs.
5. *Decisional impact:* The breadth and depth of the impact incurred by members' decisions on program activities.

Depending on the values taken by each attribute, participation patterns emerge, that can fluctuate significantly across the timeline of an initiative. An analysis of these patterns can facilitate understanding of the relations between community participation and other aspects of an initiative (e.g. reaching empowerment, or ensuring sustainability). Understandings of

these relations can be useful in an intervention in its planning stages (for clarifying which aspects of participation should be insisted upon for enhancing desired goals), or in its assessment stages (for shedding light on the causes for its success and failure, as much as these can be linked with the role of participation).

Developmental studies have suggested as well that the impacts of participation depend on the forms that participation takes (e.g. Narayan, 1995; Pretty, 1995). The most well-known model for conceptualising participation forms is the participation ladder. To date, several models of participation ladders have been proposed and used in developmental programs (see, for instance, Kanji and Greenwood, 2001; Paul, 1987; Pretty, 1995). Most of them are based on operationalizations of the degree of power held by participants in a program, manifested through decision-making and taking initiative. Kanji and Greenwood (2001) propose, moreover, that it is important as well to take into account how each form of participation in the ladder is instantiated at different stages of an initiative.

The observations brought by this study are that:

- By looking at finer-grain aspects of participation, it is possible to get closer to the intricacies of relations established between participation and the success of an intervention.
- Each intervention is characterized by unique patterns and fluctuations that can only be put together on a case by case basis, by opportunely connecting the attributes of participation verified in the activities conducted.

Most participation ladders are conceptualised by blending two different attributes of participation: degree of power or control and degree of autonomy. Ladder steps are conceived by interpretations of how these two can be mixed. For instance, in Kanji and Greenwood's (2001) ladder, it can be noticed how a rise in the ladder from *consultation* to *collective action* involves a gradual increase of control over the activities of an intervention coupled with a gradually higher degree of autonomy. The steps in the ladder are, moreover, designed in relation to the *areas* of control and autonomy. For instance, step three (*cooperation*), involves high control and moderate autonomy over the definition of priorities, and low control over the course of action. While this conceptualisation can be useful for assessing the form participation takes in an intervention, it is likely that the match with step in the ladder will always be approximate, as participation in an intervention may be characterized by different combinations of participation attributes at different points in time.

It is being suggested, therefore, that for analysing opportunely participation impacts, it is important to have a clear view of the attributes of participation, the values they may take, and how these are hypothetically related with the goals a program pursues. In early stages, this can be useful to understand what dimensions of participation to boost, and in assessment stages, to shed light on underlying causes for the outcomes achieved. For instance, in

projects targeting sustainable communication solutions, the attributes *degree of control* and *degree of autonomy* should be linked to the involvement of the right *stakeholders* in the *program stages* that maximize members' familiarization with processes necessary for facilitating autonomous management beyond project completion. In pre-design stages, these aspects should be given priority, and in assessment stages the relations among these aspects can be used to share light on reasons for failure or success.

Cultural representation, knowledge production, and ICTs: product and process

The employ of ICTs for serving cultural representation and knowledge production practices aligned to local ways of thinking has been one of the central concerns in this study. The literature suggests that there are significant barriers for aligning the usage of ICTs to local epistemologies and serving genuinely local goals. Two of these stand out. *First*, it is suggested that ICTs are products of a worldview and epistemology fundamentally different and at odds with systems of thinking and being in minority communities (Christie, 2004, 2005; van der Velden, 2010). ICTs have been produced in cultures that value the representational side of knowledge, and they are tools fit for creating, circulating, and relating knowledge codified as information. As such, they are unfit for capturing the performative side of knowledge (Verran and Christie, 2007), which is one of the most valuable and determining features of local and indigenous knowledge. What ICTs can capture and work with is not knowledge proper, but information (Christie, 2004, 2005). *Second,* there are challenges associated with the process of generating codified knowledge (or information) from the richly performative, socially embedded, and dynamic local knowledge (Christie, 2004, 2005; Stevens, 2008; Verran et al., 2006). In particular, there is the challenge of rendering explicit the tacit side of knowledge (Ngulube, 2003; van der Velden, 2010).

Two questions arise from these issues:

1 Is it possible to create community-representative artefacts with ICTs?
2 And if so, what processes can be employed to this purpose?

First, it is important to clarify what is meant by 'community-representative artefacts'. Drawing on Manovich (2001), 'representative' refers to the capacity of a new media object to properly construct in the mind of the onlooker the image of a referent existing in reality, a historical process, or categories created by individuals and cultures. Digital representations can be seen as aggregates of elements carrying a charge of significance, and fostering meaning through the way they are related. When the referents of these representations are made of a community's cultural traditions, lifestyle, or present-day priorities, representativeness implies the capacity to properly evoke the former in the way the digital media objects are shaped and related. Under the assumption that meanings of digital representations are created in

the context of the medium used, through the interplay of its elements (Bowker and Star, 1999; Christie, 2004, 2005; Manovich, 2001), it appears that representativeness needs to be judged at the level of the whole of the artefact being created. It is about creating a reflection, a mirror, with the understanding that constituting elements gain new valences with their transfer in a new representational medium. There is agreement in the literature that the representativeness of artefacts is to be judged with respect to the way community members understand and interpret their culture (Christie, 2004, 2005; Srinivasan, 2005). The *process* by which members are involved in the creation of community artefacts is the real measure of their adequacy and relevance (Srinivasan 2006a,b; Verran et al., 2006). Through the involvement of members it is possible, for instance, to ensure that the taxonomies used for content classification are designed as reflections of community understandings. Ramesh Srinivasan calls community-driven architectures 'cultural ontologies' (Srinivasan et al., 2009), to evidence the relations with the local culture, or 'fluid ontologies' (Srinivasan, 2006b; Srinivasan and Huang, 2005) to suggest that they are emerging and never fixed, evolving alongside the dynamic evolution of the priorities of a community and its understandings.

One aspect that stood out from the present study was that for people to be able to participate in designing community-representative artefacts, they need to gain versatility in handling interpretation at the experiential and the representational level, and opportunely relate the two. For this, people need to familiarize themselves with the language of ICTs while at the same time taking distance from their own reality and being able to create representations that can be treated like manipulable objects. The conditions for ICT appropriation posed jointly by these aspects go beyond common discourses on the acquisition of digital literacy. Conditions can be related to the process by which lived experience and embedded knowledge are codified and transferred into another level of interpretation, where meaning is created by the snapshots of representational items, and the patterns by which they are related. *First*, there is a need to externalize knowledge and experience in a way that invests them with an object-like quality, that people can engage with as external to themselves. *Second*, in order to manipulate these objects, people need to become versatile at linking these representations back to their knowledge and experience, so that the process of selection and manipulation reflects the importance and the meanings invested in knowledge episodes in their real-life. *Third*, in order to meaningfully relate these objects as digital media representations, there is a need to gain awareness of how relations established between knowledge episodes in real-life are reflected in relations established among their representations. In short, local people need to become aware of the existence of two levels of interpretation, and the correspondence between these.

A few elements can be singled out in the processes by which people can engage meaningfully with local content creation. In particular, cyclic processes involving sessions of externalisation, creation, and group sharing and discussion over resulting creations are

effective for enhancing awareness of the relations between knowledge and experience on the one hand, and digital representations on the other. The Inquiry Cycle (Bruce, 2002; Bruce and Bishop, 2008) used as root model in the two participatory content production initiatives was an effective means to foster externalisation of knowledge and creation of digital representations. It contributed as well to enhancing members' awareness of how the two were related. Another example is the SECI model (Nonaka and Takeuchi, 1995; Nonaka et al., 2000), originally advanced in the organisational studies literature, has been employed in indigenous knowledge management for enabling conversion of tacit to explicit knowledge (see Ngulube, 2003). The SECI model relies on cyclical process of socialisation, externalisation, combination, and internalisation.

These processes can be combined and their sequencing adapted to serve specific goals for local content production and knowledge management. In the two field studies, the root content creation model initially tested has been gradually shaped to meet the goals we had set for content creation as well as contextual and time constraints. Adaptations can also be triggered by the need to focus on specific activities, for instance on sharing, or on the explicitation of tacit knowledge.

10.3 Context-responsiveness in Community-based Communication Interventions

10.3.1 Positioning CoRA

CoRA is a product of the participatory worldview, and as such it shares key principles with several methodological variations from the PR and AR family at ontological, epistemological, methodological, and axiological level. Moreover, it has closer affinities with a series of methodological packages that have been reviewed throughout and at the completion of the fieldwork, and in particular:

- The liberationist form of PAR emerging from work with marginalised and oppressed groups;
- New media participatory and action research approaches, such as Ethnographic Action Research; *and*
- Action research evaluation approaches such as Action Evaluation and the Snyder evaluation process.

While it does not target exclusively technology design, CoRA also relates to participatory design forms. Importantly, *all* these methodologies share basic participatory principles at ontological, epistemological, methodological and axiological levels (e.g. research as co-

research involving local participants as partners, and the value of actionable knowledge). Below, similarities going beyond these shared principles are exposed for each of the participatory and action research methodologies listed, coupled by an outline of distinctive features with respect to each.

Affinities with participatory action research

The most evident overlap is with forms of participatory and action research, and of these with the participatory action research of Fals-Borda (Fals-Borda 1988, 2001; Fals-Borda and Rahman, 1991; Hall et al., 1982; Tandon, 2002a,b), rooted in liberationist movements in underdeveloped regions, such as Latin America. Common features encompass:

- The targeting of disempowered, poor, oppressed, or isolated groups, of whom some minority groups are representative.
- The focus on adult education and knowledge production as a pre-requisite for personal and collective development. The goal is to endow oppressed groups with creative and interpretive abilities so that they can take full agency over their lives, initiatives, and projects in which they may be involved.
- The focus on the dialectical tension with creative potential established between experiential knowledge, based on experience/*vivencia* and academic, Cartesian knowledge, as a means for demolishing power inequalities and asymmetries. Just as PAR, CoRA derives its force from the appropriate integration of the knowledge of researchers and interventionist teams with local forms of knowledge.
- The importance given to creating connections and networks between the local, the regional, national and international, through the intervention of agents external to targeted communities. While PAR can also be exclusively community-led, Fals-Borda indicates the value of external agents in linking the local to the outside world, fostering connections and networking (Fals-Borda, 1991: 7)
- The focus on the affirmation and integration in research of local forms of knowledge and culture, present-day and historical (Fals-Borda, 1991). In PAR, the recovery of indigenous knowledge and culture forms is a means for developing what Paulo Freire calls *conscientização*, or *critical consciousness* (Freire, 2006).

As different from PAR, CoRA has a more reduced scope and is fit for framing precise initiatives or programs centred on the use of technology. It therefore subsumes all the above principles to the use of technology as a *fil rouge* in a program, instrumental to reaching precise developmental goals. Also, it does not have a univocal social transformation and political empowerment agenda, but leaves space to each program for understanding how developmental goals can be pursued and connected with creative use of technology.

Affinities with ethnographic action research

The *main feature of commonality* between CoRA and Ethnographic Action Research (Tacchi et al., 2003) is at methodological level: both approaches blend intensive, systematic data generation approaches (in the case of EAR, ethnography) with participatory/action research principles and techniques. While not relying exclusively on ethnography, CoRA advocates the same blend between extensive and systematic data generation (through ethnographic and other methods) and participatory and action research principles. Other features of commonality include:

- The target group, made of people in under-developed contexts, or in disempowered positions.
- The use of evaluation as a tool for shaping a program development during its course.
- The special place given to reflection and reflective activities. In EAR, reflection is one of the four steps in the research cycle.
- The central role of technology. EAR is described as a new media action research variation. It is best fit for initiatives involving the use of technology.
- The pivotal role given to the facilitator, a multifaceted figure that EAR describes as 'social-cultural animator' (Tacchi et al., 2003). Just as in CoRA, EAR recognizes that a great deal of the success of an initiative relies on the skills of the lead facilitators, who may have to play in turn the roles of researchers, friends, partners and animators in community events.

As *different* from EAR, CoRA is concerned exclusively with communication interventions. It seeks to facilitate communication processes and build communication products through the participation of local people. It blends the design of communication activities with technology design, leaving at the latitude of each program to decide which of the two should take precedence in context.

Affinities with action research evaluation approaches

The evaluation model in CoRA shares a series of principles and practical techniques with action research variations of evaluation, in particular with action evaluation and the Snyder process. The most important feature CoRA shares with Action Evaluation resides on the attempt to capture the evolution of program goals in relation with changes in the motivations and assumptions that drive them (Rothman and Dosik, 2011; Rothman and Friedman, 1999). Through inquiry, the tacit knowledge and assumptions held by various program stakeholders are rendered explicit and shared among stakeholders, facilitating shared understanding and ultimately consensus with respect to the pursued program goals (Rothman and Friedman, 1999). The manner of putting this in practice is different for AE and CoRA. In AE, the action evaluator collects goals and underlying reasons why from all program stakeholders, highlighting unique, shared and contrasting goals. These are then checked against implementation actions, while feedback on congruence or antagonism is constantly reported

back to stakeholders. All throughout the process, discussion and critical reflection are encouraged as a means for achieving harmony between underlying assumptions and goals, between multiple stakeholder goals, and between goals and program activities (Rothman and Dosik, 2011). In CoRA, the program vision acts as aggregator for people's goals, and collective consensus is sought from the stage of its definition. The collective vision is declined in measures (indicators) for performance only once consensus is achieved. Multiple perspectives and voices are accommodated again at the level of the protocols for evaluation, in which individual and group observation and critical reflection are alternated. It is at this point that members' individual assumptions and understandings are made explicit and shared, an aspect captured in the dialogicity feature of the CoRA evaluation model. The vision and the goals may change based on the evolution of members' knowledge, understandings, and through a heightened awareness of people's own assumptions. Change of vision, and consequently change of evaluation measures, is accommodated only on consensus reached. In CoRA, therefore, the progression of goals in accordance with people's changed understandings is always mediated by a *collective* condition, and captured in a dynamically evolving vision.

Evaluation in CoRA shares some features with the Snyder process described by Dick (1998), in particular:

- The project vision is used as source for creating indicators and as reference point against which the adequacy of activities is set;
- The indicators and the entire evaluation apparatus are revised and improved during the course of application.

Another feature of difference from the Snyder process is that evaluation in CoRA addresses uniquely program monitoring. Second, the take on defining and operationalizing the vision is different. In the Snyder process the vision is an ideal, an unreachable target, it signals a direction for people's activities. In CoRA the vision reflects a reachable outcome, inclusive of objectives and standards for success that local people can understand, refer to and embrace. This aspect is of foremost importance, as it allows people to relate their concerted efforts to the end goals that they want to achieve and in the long run develop an understanding of how actions are connected with effects.

Affinities with participatory design forms

At conceptual level, CoRA has in common with participator design the approach to theorizing knowledge and learning in relation to the two categories of stakeholders involved in a project: researchers/developers and local people/users. The most evident synergy is with the perspective on learning as a process of knowledge exchange between users and developers, instrumental to finding a communication solution relevant for the users/research participants (Kensing et al., 1996). The conceptualization of 'learning' in CoRA has affinities with Kensing

and Munk-Madsen's (1993) model of user-developer communication in PD. CoRA shares with this model the categorization in the three knowledge domains and the importance assigned to taking into account each party's background knowledge as a pre-requisite to the learning process. As different from the user-developer communication model, CoRA conceptualizes knowledge forms (abstract and concrete in Kensing and Munk-Madsen's model) according to a participatory paradigm, listing experiential, presentational, propositional, and practical forms of knowing (Heron, 1996; Heron and Reason, 1997; Reason, 1994).

Apart from these shared features, CoRA is distinguished from PD variations in that it does not exclusively target technology design. CoRA can be adapted for technology design, but has been primarily conceived for supporting the design of technology-based communication programs and products in community settings.

Summary of distinctive features

The main original contribution of CoRA stands in its action principles, as well as the approach taken to emulating them on the design of a technology intervention. At the same time, CoRA resonates with other participatory methodologies in its principles and some of the tools and techniques it advocates. The following features, taken in their togetherness, serve to distinguish CoRA amidst other participatory methodologies.

Balanced focus between communication program and product design. CoRA stands midway between technology design methodologies such as PD, and process-oriented approaches such as PAR. It is focused on the design and development of communication solutions that can take the form of communication programs or artefacts. CoRA models a set of activities that involve the members of an interventionist team as well as the members of a community throughout a process of acknowledging a need, identifying a technological solution, and designing a practical course of action for developing concrete outcomes. All throughout, the concern in CoRA is not merely with producing the outcomes – whether communication strategies, digital artefacts, devices, or content. The focus is rather on *how* these are created. The techniques guide the process of engaging local people with digital technology, while the product is a derivative of this effort, with qualities dependent on the adequacy of the procedures, but also on the knowledge that designers and local people alike have been able to develop throughout. In match with this approach, performance is defined not only by capacity to produce desirable artefacts, but also by the process leading to its production. Learning, engagement, and accrued self-efficacy are considered as important performance measures as the quality and effectiveness of the final communication product.

Community focus. CoRA targets communities with a common heritage, goals, and/or values. The strength of the methodology is that it focuses on the collectivity, and in this process it

draws upon and reinforces existing connections.

Focus on isolated, marginalised, oppressed, or poor groups. The methodology was designed for minority groups. By extension, it can be used in any communities characterized by low life standards and poverty, marginalization, oppression or geographical and social isolation.

Dual actors. CoRA draws on the agency of two collective actors: a developmental team and a local community. It has been conceived to allow communities cut off from communication opportunities to express, reconnect with the world, or share their knowledge with the outside. This necessarily calls for the agency of parties that possess the adequate knowledge, skills and resources for enabling adequate employ of ICTs. CoRA processes are located at the junction between these two knowledge systems and sets of expertise.

The learning-envisioning-alignment frame. CoRA aims to help local communities to derive benefit from the opportunities of digital technology without denying their socio-cultural specificity and tradition. To this purpose it employs three strategies (learning, envisioning, and alignment) that are prone to ensure a proper balance between integration of technological novelty and respect of tradition. In their togetherness these strategies enable a community to appropriate new technology in ways that are respectful for local forms of knowing and cultural practices.

Evaluation and context-responsiveness. CoRA employs an evaluation model that is at the same time a process tracking and a reflective tool. First, it is used as a device for checking the adequacy of the course of action to the vision of success that people have formulated, and take eventual corrective measures. Second, assessment instruments and protocols are designed as means for individual and collective observation, sharing, and reflection, facilitating distance-taking and the development of critical thinking and reflexive qualities in participants.

10.3.2 Implications

There is agreement in the literature that the design of ICT products and associated processes in minority and in particular indigenous contexts requires a re-articulation of all design steps as constructs emerging in interaction between a design team and the local community (Rodil et al., 2011; van der Velden, 2010; Verran et al., 2006). CoRA is aligned to this vision. It builds on the premise that the conditions for the community-beneficial appropriation of ICTs or the design of ICT products with and for minority communities cannot be pre-defined. Conditions are configured dynamically as local people get accustomed with the potential of ICTs in relation to their needs for knowledge production and communication. *The original contribution* brought by CoRA stands in the identification of the landmark processes by which new technology can be appropriated for local creation of knowledge. In

a sociocultural theory stance, 'appropriation' means making something one's own (Wertsch, 1998), yet in a process that implies a qualitative transformation. As Barbara Rogoff (2003) argues, appropriation is a transformative practice, as by integrating a new tool in activities, the agent develops new understandings and new ways of interaction. Locally-relevant appropriation of ICTs resides, therefore, in consciously guiding the process of change and transformation triggered by the introduction of new technology. CoRA suggests two strategies for guiding community-relevant appropriation of ICTs:

- *Learning* works in the direction of the wave motioned by the introduction of ICTs. Through learning, people develop new understandings and new patterns of engagement.
- *Envisioning* compels a re-consideration of local needs and goals in the light of the new knowledge and understandings acquired.

By engaging with processes of learning, people's understandings, knowledge and skills are likely to evolve and build up. Their vision of goals and needs is prone to evolve as well. CoRA proposes therefore a third strategy, *alignment*, meant to constantly track the adequacy of activities against a defined vision, as well as the possible evolution of the vision itself.

The concept of *context-responsiveness* instantiated through these three strategies can have broader implications. The notion of 'context' is pervasive in technology studies (see, for instance, Feenberg, 1999; Bijker et al., 2012). It has been argued that technologies are the devices *plus* their contexts of use (Lievrouw and Livingstone, 2006; Suchman, 2007). In this research, context is seen as a dynamic construct, a reality emerging from and evolving with the interaction of agents in the present time (see Dourish, 2004; Nonaka and Takeuchi, 1995). Also, as Nonaka and Takeuchi argue, there can be countless contexts (*ba*), as many as are defined by the interaction of agents in given time-space instantiations. Context-responsiveness captures just this dynamism and multiplicity. It is suggested that technology cannot be aligned to a local context existing as a reality *per se* and outside technology and the agent using it. Rather, people's interaction with ICTs defines every time a new context. So that context-responsiveness is the quality of a socio-technical environment to self-direct its evolution drawing on internal and mutually determining processes. Learning, envisioning, and alignment are three such processes or strategies by which the change triggered by the integration of new technology can be directed in desired directions.

10.4 Conclusion

This chapter discussed the contributions of this study at the light of state of the art scholarship. The first part outlined significant aspects around the conditions for empowering minority voices through developmental initiatives. Particular attention has been given to the conditions, forms, and impacts of community participation. It has been argued that in order to work towards full community participation, there is a need to reach unity of goals, intent, thinking patterns, and associated terminology. On this basis, interaction patterns based on knowledge exchange from equal positions can be advanced, and complementary roles can be defined. The operational definition of 'community participation' derived from the grounded analysis has been compared with the most typical models of participation – the participation ladders. This operational definition is particularly adapt for assessing the role and impacts of community participation, by linking the attributes of participation to other dimensions of an initiative or its goals (e.g. sustainability and empowerment). This part discussed as well the processes by which local people can be involved in content creation and design of community-representative artefacts, highlighting the value of cyclic models for interaction with ICTs alternating processes of externalisation, creation, and sharing.

The second part of the chapter discussed advancement brought by the main methodological contribution of the study – CoRA. In particular, the concept of 'context-responsiveness' challenges common assumptions that technology can be aligned to an external context of use. Rather, under the assumption that the agent defines the context in her/his interaction with technology, context-responsiveness refers to the quality of consciously guiding the process of technology appropriation and usage to fit self-designed needs and goals.

PART V. CRITICAL OVERVIEW AND FUTURE WORK

11 Critical Overview

This chapter synthesizes the contributions to knowledge as well as the limitations of this study, from a critical perspective.

11.1 Study Contributions

The study produced methodological, design, conceptual, and empirical outcomes. These research outcomes are elaborate answers to the main question posed by the study as well as the objectives that have given direction and focus to the inquiry. In particular, *a methodological framework* is proposed for empowering minority voices in the frame of developmental interventions, with a concern for harnessing the potential of ICTs in response to local goals and aligned to local epistemologies. Further, *a design format* for minority web-based communication is advanced, as an example of how local communication goals can be met and given shape in an ICT-based communication solution. *Conceptual propositions* look into aspects to take into account in the appropriation of technology for local expression and communication, with a focus on community involvement in communication initiatives and effective means for members' engagement with ICTs for local content creation. *Empirical results* from the two field studies serve to place these contributions in context and enable critical links between these and the local realities that served to forge and bring them to completion.

The first research outcome is CoRA, a methodological framework for supporting communication interventions in minority communities or in communities characterized by social or informational isolation, marginalised, and/or with low levels of literacy and media literacy. CoRA is informed by a participatory inquiry paradigm, and embraces its key principles at epistemological, methodological, and axiological level. The main advancement from state of the art research resides in the concept of 'context-responsiveness' as well as an in-depth look at patterns of activities that can instantiate it. Context-responsiveness captures the capacity of a socio-technical system to be constantly aligned to emerging conditions, in meeting the goals it has designed for itself. Three strategies for instantiating context-responsiveness in technology projects are proposed: *learning, envisioning*, and *alignment*. *Learning* supports active knowledge-building encompassing ICTs as well as the local context. By *envisioning* people constantly configure and re-configure their interests and needs to match advances in learning. *Alignment* tracks the correspondence of activities to the vision, and proposes corrective measures to ensure that the course of action works towards the fulfilment of the vision. In short, CoRA proposes a strategy for locally-relevant

appropriation of technology through a lucrative tension between learning and envisioning instantiated in production of local content or creation of local communication artefacts. It also puts forward a flexible timeline for developing and running communication interventions across four phases - *Exploration, Design, Implementation*, and *Evaluation* - with suggested processes and tools for each.

The distinguishing feature of CoRA and the main original contribution is represented by the concentration on the three action principles outlined (learning, envisioning, and alignment), which can be declined on the articulations of a voice empowerment design and implementation timeline. Moreover, the scope and conditions of application for CoRA are defined by a series of features:

- It is designed purposefully for communication interventions in marginalised communities with unique cultural systems, with the involvement of an external party, which can be a developmental agency or a design team. The entire process advocated by CoRA draws on producing synergies between the knowledge possessed by the dual actors involved – the local community and the interventionist team.
- It places an accent on community learning for appropriation of technology in conjunction with exploration of local knowledge and alignment of technology usage to serve local needs.

The second contribution is a design format for minority-web-based communication that provides a balanced take between cultural representation and usability constraints. The format reflects the needs of communities that aim to be known and understood by outsiders. The design features meet this goal by giving emphasis to community views and voices through storytelling and multimedia content (in particular video-based), and by devising the information architecture as a reflection of the most important community needs, goals, values, and features. At the same time, to meet user needs the format advocates a traditional information structure (based on categories and tags), the employ of interpretive content that allows a fast browser to understand a community's most important themes and concerns, and the definition of content units on semantic grounds, focused on a key message and embedded in rich media. The format is exemplified by the production of two community websites (www.romanivoices.com).

Thirdly, the study produced conceptual contributions around the introduction and usage of ICTs for supporting grassroots communication in rural minority contexts. A first set of conceptual propositions emphasizes *the role of community involvement* in technology initiatives for voice recovery. Impediments/conditions to full participation are outlined, in particular degree of know-how, perceived self-efficacy, perception of researcher's authority, perceived legitimacy, and time. An operational definition of the construct 'community

participation' is provided, that accounts for participation patterns depending on the attributes: degree of control, degree of autonomy, stakeholders, program stage, and decisional impact. It is suggested that by operationalizing the construct 'community participation' in this way, it is possible to have a clearer view of how participation in an initiative determines or related with other factors or goals pursued (e.g. sustainability, empowerment).

A second set of propositions focuses on the process of appropriation of ICTs for creative activities drawing on local knowledge, through *participatory content creation*. At this level, the propositions insist on the importance of effective explicitation and externalisation of knowledge for forging understandings of the relations established between lived knowledge and experience *and* representations in digital media. Based on the experience of the two field studies, collective creation processes drawing on the cycle inquiry-creation-observation-discussion-reflection are proposed as effective means for knowledge explicitation, externalisation, embedding in digital media, and appropriate structuring and organisation. Finally, the focus falls on the special case of public communication over the web highlighting the tension between cultural representation and the need to be understood by a wide audience, and how this has a bearing on the content and structure of an artefact.

Fourth, the study produced empirical outcomes. Empirical outcomes have not been the direct focus of this research. Yet they have been singled out as essential elements for contextualizing better the results of this study, in particular the process that led to the production of the CoRA methodology and the web design format. Empirical results are compacted in the description of the two field studies (Chapter 4 and 5), purposefully outlined in great level of detail. The two chapters describe the results at each stage of the communication project, and emphasize how these have been used to sketch the design of subsequent stages and gradually give shape to the communication solutions. The empirical results include descriptions of the local contexts with a focus on the role of traditional and digital communication technology (answering the first research objective), a description of the processes entailed by the introduction of creative technologies (second research objective), and how all these insights have been worked out and elaborated with the participation of local people to forge an appropriate design of the site interventions and the communication artefacts envisaged (third research objective).

11.2 Study Limitations

First, limitations are posed by the approach employed, which favoured the development of methodological and design, rather than conceptual and empirical contributions. This study has been motivated by a practical problem, and was meant to come up with practical

solutions for meeting this problem. All the research rotated around answering a 'How?' question from different angles. This has been a voluntary choice that finds its rationale by being embedded in a developmental research outlook. Yet this approach also poses a series of limits, the most important of these being the fact that the analytical has been held in lower profile, used as step and foundation for ensuring the soundness of methodological and design contributions. This choice did not have a bearing on the validity of the research design. On the contrary, a great deal of dedicated attention was given to ensuring that the data generation and analysis tools were the right ones for yielding appropriate reflections of the phenomena and processes studied. Yet, in the approach taken conceptualisation and description of phenomena have been used as ladder steps for producing design and methodological outcomes, giving the latter priority in drafting the research outcomes. Therefore, many significant insights this study produced – some dwelling at empirical level, and some conceptualized with wider applicability – have not been further worked in the outcomes published in this monograph. This is remedied to some extent by presenting in detail the process of conducting the field studies in Chapters 4 and 5, and by the outline of conceptual contributions in Chapter 8. Yet, the two field studies yielded a data set that could have been used to produce more extensive empirical and conceptual contributions of relevance to the question posed by this research. In particular, the data could have been used to generate a theory of technology appropriation for collective expression and communication in rural minority communities. Grounded theory methodology was an adequate tool for generating the theory, while the two field sites presented ideal settings for constructing and refining it, as they had clear features of commonality and difference in contextual conditions that could have provided strong cases for outlining conditions for transferability in other contexts.

A second set of limitations has been posed by the choice of the sample population. From one perspective, it is believed that the two communities involved made for ideal cases to answer the objectives of this study. They stand for representative instances of the population studied – minority communities with specific cultural systems. Also, despite being part of the same minority culture, the two communities have very clearly outlined features of difference with respect to degree of assimilation and attitude towards cultural continuity, which were important markers in refining the outcomes of this study and defining conditions for wider transferability. Yet there are other features of the communities that limit and question the transferability of the outcomes. In particular, it should be emphasized that the two communities are part of a minority culture that represents a singularity. The Roma people are difficult to categorize and there is not even a definite agreement in Romani studies scholarship that they should be regarded as a minority culture. For many scholars, their definition as *one* ethnic group is rather a political construct hiding the reality of complex and heterogeneous sub-groups. Doing research with a singularity has important bearing on the

conditions for transferability of study results. To cope with these issues, attention has been given to generating conditions for transferability in a grounded manner from field work, using GTM, rather than pre-defining contextual conditions. Yet this same process indicated some limits in relating with other contexts that are representative cases for the scope of this research, in particular indigenous groups. Despite attention to properly outlining conditions for variation in conceptual contributions and limits of transferability of methodological contributions some of the outcomes of this research may need grounded investigation in different contexts for a sound outline of their bearing in context.

Third, limits have been posed by the approach and capacity in conducting the field research. One aspect is that in being presented to local people as a doctoral research rather than a financed developmental program, a certain set of attitudes have been created. The involvement of a team under the aegis of a developmental project could have triggered a very different reaction from local people. It is difficult to envisage the way these attitudes and the entire project would have been different in different circumstances, however this should be acknowledged as a significant factor and limit of this research. A second aspect is related to the human, logistical, and financial capacities in conducting the field projects. In an ideal setting, conducting these projects would have required a team of members covering a wide range of expertise, from designing participatory research to conducting data generation, facilitation of activities, discussions and negotiations, video production and editing, web design, graphics, and technical implementation. Where possible, as it was the case for web graphic design and technical implementation, people with area expertise have been involved. Fieldwork activities, on the other hand, were led by myself in all intricacies. Working with a team could have had a different impact on local people and might have triggered different patterns of engagement and relating with an external party. A third aspect of importance is that local people were not involved in the data generation and analysis process, as is deemed ideal by participatory research tenets. The forms of community involvement in the research were oftentimes closer to community consultation, rather than full participation. The limits of participation were defined by several impediments: low resources and capacity for providing adequate training, and people's little or no interest to become familiar with these processes are among the most important. Therefore, despite the strong participatory approach that was originally envisaged, research activities and in particular data analysis and interpretation were designed and conducted principally by myself, so that results are bound to carry the imprints of my subjective interpretation.

Fourth, there are aspects of relevance for the question posed by this study that have not been given sufficient attention. In particular, no formal assessment has been conducted after the production of the communication artefacts in the two field studies. While in both settings the relations with local people continue to be nurtured at present through visits, the formal investigation has not been pursued to study the impact of the project and the way people

relate with the websites produced. Also, no study has been conducted to test how the community websites are perceived by outsiders, and how these patterns may differ from the way the communities wanted to present themselves. To compensate for this, a web traffic analysis was performed and is included in this monograph (see Annex 10).

12 Conclusions

"'If community media is the answer, what is the question?' The response may be: 'the answer is the question.' … The questions and the answers on the communication initiatives have to be worked out with the community. What kind of communication does the community need, if any? Which is the communication system traditionally used in the community? What kind of communication tools can the community afford, not only in terms of funding but also in terms of skills and social appropriation of the new media? Participatory research would help to develop these questions and help the community to find the answers. … Ready made recipes don't work, and technical assistance is only valid through permanent dialogue and communication."

- Gumucio-Dagron, 2001: 24

12.1 In a Nutshell

This study examined the conditions for empowering minority voices through ICTs from a developmental perspective that puts the people at the centre of the inquiry and considers how voice empowerment can be instrumental to paving the road to broader community development. It has worked with a layered construct for 'voice' that highlights the resources needed for cultivating it, in turns, for enhancing capacity for knowledge production and communication, the exercise and discursive function, as well as the potential to be heard, listened to, and have an impact. The study has focused on a particular setting, geographically bounded minority communities with specific socio-cultural systems, abiding by local ways of thinking and being. It has also taken a primary concern with a specific aspect in voice empowerment, seeking continuity and alignment to local worldviews and epistemologies. These foci of the investigation are captured in the driving research question: *How can ICTs be instrumental to cultivating these dimensions of voice so that they enable minority communities to carry out their knowledge production and communication processes in ways aligned to their worldview and culture, and for serving self-designed needs and goals?*

This question compelled a deep consideration of what are ICTs and if and how, in being employed, they affect the expression and communication activities they enable. The conceptualisation of ICTs that surfaced from the field investigation is consonant with the social embeddedness discourse in technology study, in particular as advanced by social constructionism (Bijker et al., 2012) and sociocultural theory (Cole, 1995; Rogoff, 1990,

2003; Wertsch 1994, 1998, 2002). The latter presents meaningful insights for the case of ICTs appropriation in minority contexts, as it highlights their social shaping as well as the impact they are bound to have on the activities they afford. From one perspective, ICTs are tools that mediate human activity, and in so doing they shape and direct it. They are mediational means found in an 'irreducible tension' with the agent and the activity carried out (Wertsch et al., 1993; Wertsch, 1998: 26-7). In acting with the mediation of a tool, the agent, the tool and the activity become a whole where even the most circumspect analytical eye would find it difficult to separate between the cumulus of effect each imprints on the direction of the activity carried out or on its results. From a different angle, ICTs are also socio-cultural products, they have been created amidst a culture driven by the needs of its members, and shaped by their thinking. As such they are infused with meanings and suggested patterns of usage, behaviour, and meaning attribution. Suggested usage patterns are not hard-bound. Usage presupposes in its turn interpretation and creative adaptation. If we put together these two perspectives, ICTs appear to be tools created by human beings to serve purposes defined in specific socio-cultural settings, but also factors of qualitative transformation for the activities enabled. This impact is not pre-determined, it occurs in a process of negotiation carried out by the user in which her/his own personal valences and socio-cultural luggage have a determining impact. What does this imply for the question posed by this study? This equates with asking:

1. What happens when communication tools produced within a socio-cultural context and imbued with its meanings and implicit behavioural patterns are introduced in a new context?
2. How can the conditions for the introduction and appropriation of ICTs be created so that the usage that is made of them serves authentic community goals and is aligned to local worldviews, epistemologies, and practices?

There is a quasi contradiction in the assumptions read underneath these questions such formulated. If we resolved that ICTs are both socio-cultural creations and determinants of human activity, can there be any usage made of them in a novel context where the luggage of the producer culture is wiped out so that their employ is completely aligned to local ways of thinking and being? The outcomes of this research indicate in their togetherness that the introduction of new ICTs in a socio-cultural context is bound to produce *change*, affect the local ecology and the activities they will support. There is no question of ICTs serving *authentic* local voice if we relate authenticity to some form of past, to the reality pre-existing the introduction of ICTs. Yet a new form of genuine and authentic arises if the change triggered by the introduction of ICTs is acknowledged and guided consciously based on realistic considerations of how people's thinking, needs and goals have evolved and are evolving in this process of change. The preoccupation of this study lied with understanding the dimensions of the change incurred by introduction of ICTs in a local community as a step

to towards the formulation of solutions and paths to mould and shape change to the benefit of the community. The main research contributions converge in answering how the change incurred by the introduction of ICTs in a minority context for the specific purpose of voice recovery can be acknowledged and directed so that the process in its entirety arrives to serve local people's communication goals as formulated by themselves. This conceptualisation is captured by the notion of 'context-responsiveness', referring to the capacity of a communication intervention to provide relevant solutions by an acknowledgement of people's related needs and goals and of how they may evolve as they get better acquainted with the potential of the technology introduced. At the centre lies a vision of 'context' as a dynamic and constantly evolving reality created and enacted by people through their interaction, activities, perceptions, and the meanings they attribute to these (as described by Dourish, 2004; Nonaka and Takeuchi, 1995; Nonaka et al., 2000).

The concept of context-responsiveness served as an underlying vision for sketching a methodological framework for communication interventions in local communities. The Context-Responsive Action (CoRA) methodology provides insights and guidance for the thoughtful introduction of ICTs in community settings with the involvement of an implementing agency. Acknowledging that the introduction of new ICTs is a factor of change, CoRA proposes three complementary strategies for directing this change for communal benefit: *learning, envisioning,* and *alignment*. Learning refers to a process of knowledge exchange among local people and the external agency, in which each gets gradually more aware on the one hand of the particularities of the local context and on the other of the potential of technology, and finally how they can be met. Envisioning moulds the understandings provided by learning for clarifying how the goals of the project can best be formulated to harness the potential of ICTs in response to local conditions. Alignment is the process that helps to keep track of change and adapt the course of action of an intervention to emerging conditions. The project vision is used as point of reference for alignment, so that the adequacy of activities carried out is assessed on virtue of their capacity to mark progress towards the fulfilment of the vision. These three strategies can be timelined in a variety of ways. CoRA proposes one such linear instantiation in four phases: Exploration, Design, Implementation, and Evaluation. Learning, envisioning, and alignment permeate all phases. Yet each phase is also centred in particular on one of them: 'Exploration' provides tools and insights for enhancing understanding and learning, which can go from making the implicit explicit in understanding the local context, to critically assessing the potential of technology and how it can fulfil local goals. The design phase integrates, structures and clarifies these understandings for drafting a project vision and a course of action. The vision is operationalized into assessment indicators that will be then used during evaluation, which shadows all implementation activities and serves to ensure that they are aligned to the vision formulated.

CoRA resides on a bird's eye view of very complex processes occurring with the introduction of ICTs in local communities. To make sense of them and employ them for drafting methodological guidance, it is unavoidably reductionist. It is to be understood that myriad forms, responses, and understandings can be triggered by using ICTs in local communities. CoRA chooses to focus on *change* as the common denominator of these processes, and further takes a position, asking how can this change be modelled, shaped and directed to serve particular goals. The three complementary strategies of learning, envisioning and alignment stand for one possible instantiation of ways to make this happen. Given their high level of abstraction, they need to be interpreted and operationalized in meeting specific contexts of application.

This study produced as well outcomes that hover closely on particular aspects in processes of ICTs appropriation through communication interventions in minority communities. In particular, it has given a great deal of attention to *the role of community involvement* in communication initiatives, the forms it may take, and how these impact upon voice empowerment at different levels. In the two field studies, community involvement took different forms at different stages of the initiative: people participated in the definition of communication priorities, engaged with ICTs for the gathering of cultural probes and further during the production of local content, and were involved in the design of their community website. Different people participated in these activities, and while some activities accommodated large community participation (for instance in content production), some were done with the involvement of a handful of key members (for instance the website design sessions). Participation patterns were therefore found to fluctuate according to different variables. Particular attention went into understanding how these fluctuations could be related to other dimensions of voice empowerment. For this, the first step was to operationalize the concept of 'community participation' into a set of attributes and values that could account for these fluctuations and provide a grid for interpretation when trying to understand them. The attributes identified from the grounded investigation – degree of control, degree of autonomy, stakeholders involved, program stage, and decisional impact – are useful for gaining a clearer vision of how different patterns of community participation can influence either the process or the product of communication interventions. To illustrate how the construct 'community participation' can be related to other dimensions of voice empowerment, some conceptual propositions have been formulated, highlighting the relation between participation and developing a sense of project ownership. It has been noticed that community involvement is likely to boost the community sense of ownership of a program proposed by an external agency, in particular when members exercise a high degree of control over parts of the initiative, have an enduring involvement across its stages, and when their decisional impact in the scope of the intervention is high and acknowledged by themselves.

Second, conceptual propositions treated the special case of technology appropriation for voice through participatory content creation. Direct engagement with ICTS appears to be an essential factor if not a condition for the representativeness of communication artefacts drawing on a community's collective knowledge. This relation can be strengthened by paying attention to fine-grain aspects in people's creative engagement with ICTs. In particular, the study highlighted the importance of externalizing communal knowledge, beliefs, and problems in ways that imprint them with an almost tangible quality, allowing members to assess them from a critical distance and further to manipulate and combine their representations in digital media productions. These processes are rendered effective by employing cycles where inquiry is combined with creation, observation and reflection, for instance The Inquiry Cycle model for community-based learning and creation (Bruce, 2002; Bruce and Bishop, 2008).

The relation between participation and the representativeness of collectively produced artefacts gains new valences when a public audience is targeted. Reminding the three-layered voice construct, attention is driven in here at the third layer, of the audience. For minorities, this third layer is of fundamental importance when their goal is to be listened to or contribute to changing conditions in the socio-political sphere. For voice to take effect for an audience, conditions need to be met on the agent's as well as the audience's side. Of acute importance is to work in semiotic codes accessible to both and to use the right communication channels. It is at this level that empowering minority voices may require external mediation from parties knowledgeable of the language of the audience and the right channels to reach them, in particular when communities have low levels of literacy and digital literacy and are therefore unable to autonomously control these processes if proper training is not provided.

The websites produced for the two Romani communities (www.romanivoices.com) are illustrative examples of how cultural representation goals can be met in conjunction with the aim to reach a wide audience in an effective way. The websites are concretizations of a vision for communication solutions that can best be described as a bridge linking rural, isolated places of invisibility to the outside world. In building this bridge, staying close to community views, representing adequately the local is as important as presenting content in engaging and understandable ways. Several design features have been devised to meet this purpose. To stay close to local views of people as expressed by themselves, most content in the two websites is video-based, with stories and testimonials told by local people, and accompanied by pictures. The information architecture is as well an articulation of these views based on people's decisions in web design sessions. To facilitate reception on the other side of the bridge, the website elements have been shaped for being easy to browse and understand. Videos were edited to be short, with a clear message, fit for online consumption. A light graphic design line was chosen. And a layer of textual interpretive

content was added for the website categories, to facilitate understanding of the meaning that these themes have for the communities.

The design contribution that this study brings based on the common template for the two community websites is a web design format that concretizes the metaphor of the bridge. It was conceived to host content produced by minority communities that want to address a general public or selected audiences. It can be used to serve cultural representation goals, but also as a platform for expression in the present time, for overcoming the invisibility and voicelessness of groups marginalised or isolated. While it can be an adequate design solution for other minority contexts, it should be emphasized nonetheless that the format is a reflection of communication needs and goals specific to given contexts. The strength of this solution as well as its adequacy relies on the process by which it has been created. In being used as ready-made template for hosting content produced by a native community, the links between the local and the design solution may be lost. Therefore, it may be sensible to propose this design format not as a ready-made template to implement, but rather as a source of inspiration. Accompanied by empirical insights from the two field studies as detailed in Chapters 4 and 5, it can inspire the conception of processes that can lead to the formulation of context-specific design solutions for minority communities.

12.2 The Road Ahead

Attention to ethnic minorities' lack of voice is of relatively recent concern, and the study of how ICTs can respond to this issue is even more recent. Despite a growing literature on indigenous media and ethnic minority media studies – the core disciplines studying the interplay between minorities and ICTs – there is still a richness of research questions to be covered and aspects to understand. An overview of these literatures in relation to the subject of this research and against its contributions has identified a series of trends to be followed, synergies to be explored, and aspects worthy of further investigation.

The approach

A few points can be raised around the design of research on voice and ICTs in minority contexts. First among this regards *interdisciplinarity*. This research owes a great deal of its advancement to its constantly being at disciplinary crossroads. In so doing it has found that many questions have been answered and aspects clarified in studies of other disciplines, yet relevant for the subjects treated in their approach, features of the target population, and empirical context. One first recommendation for future research builds on these observations and emphasizes the rewards of working in between disciplines. In particular, scholarship in

community media, community informatics, and ICT4D have offered great insight for the question of minorities and can continue to. While they may not target minorities explicitly, some studies focus on groups that present features of similarity, for instance characterized by poverty, marginalisation, and social and informational isolation. The interplay between minorities and ICTs can also provide fertile ground for research done from ICT4D and community informatics perspectives. The tension between the local and the global in the design of ICTs and the localization of information systems design are subjects of interest in these disciplines for which research with minorities can prove particularly insightful, due to the socio-cultural peculiarity these groups present.

Second, there are several aspects to be considered regarding the choice of the *research methodology.* There is a not negligible literature on the importance of research methodology when working with indigenous people. This literature has been of tremendous help during the design of this research. Indigenous research methodologies such as Kaupapa Māori (for example, Bishop, 1996, 1999, 2005; Smith, 1999; Smith, 2004) have been forged from community-centric perspectives, and designed to advance knowledge building hand in hand with an observation of the interests, protocols, and views of the indigenous people involved. As such, Kaupapa Māori and other community-centric research methodologies are not replicable in other minority contexts, but may be used, rather, as a source of insights into the perspectives and approaches that can be employed for conducting respectful research and meeting academic standards and local requirements in a balanced way. In this study, these writings have functioned as an eye-opener, directing attention to issues to take into account in matching method to context, and especially how the context, if observed with this intent, asked for the right method. They also emphasized humanistic aspects of conducting respectful research without affecting viability of outcomes in academic standards. These insights provided a rationale for the methodological choices made in this study that could properly counter-act the tenets of traditional social science research valuing distance-taking and stark separations between academic pursuit and local people's interests.

With these observations as premise, there are two aspects that should be underlined with respect to the choice of research methodology, regarding a validity and an ethical concern. With respect to validity, there is a high possibility that conducting research with minorities based on deductive approaches and/or one-shot data generation using pre-packaged instruments and protocols runs a risk of bias. Minorities have a history of marginalisation hidden under their skin. In cases of persistent historical marginalisation, the group is likely to develop mistrust for the outside and the tendency to close from outside interference. While some minorities may have overcome the effects of exclusion, in the case of the Roma included in this research the effects of marginalisation and discrimination were very high and appeared often in research data. For instance, in numerous cases when asked about what characterizes them people felt compelled to say they were *not* stealers and dishonest people,

labels that have been attached to them by the majority population. It is also sensible to take into account the gap that is likely to exist between researchers and research participants with respect to the way they attribute meaning and value to things, the terms they use, and the perspectives from which their opinions and views (or questions) are expressed. Without clarifying visions and terms, and without aligning systems of meaning attribution, there is a high probability to enact situations in which questions posed from a perspective get answers rooted in a completely different perspective, and the terms used have a different bearing on the two sides of the dialogue.

To this adds an ethical concern. This research has paid particular importance to ethical aspects, and in the course of defining a context-specific ethical approach, it has come across numerous contradictions amongst the various approaches on ethics in research, and yet other contradictions in mirroring those against the response of participants on the field. The section on 'Ethical issues' in Chapter 3 details some of these puzzlements, and how they have been overcome in defining an ethical approach for the communities I was working with. Drawing on these reflections, what should be emphasized in here is that in conducting research with minority communities it is important to take a community-centric approach, yet sensitive enough to advances in research on ethics and their bearing in context. This means that before engaging with pre-packaged plans and ready-to-sign release forms, a step back should be taken to understand what is ethical and non-ethical to do in a specific community. Yet, it may be the case that a community did not develop strong views on ethics, since it did not have to deal with researchers or any type of interventions before. In this case, existing literatures on ethics can provide good starters for dialogues in which salient ethical aspects are discussed with community members, and they are made aware of the rights they have, potential risks, etc.

There is another aspect of ethics that is worthwhile tackling, or rather a move from ethics as understood in typical social science research (or deontological ethics) to a broader axiological concern. When research with communities, and minority communities in particular, involves building a long-term relationship with members, research is likely to shift from a univocal concern with data generation to a broader vision of an exchange and the development of a relationship. Conducting research on the premises of the traditional dichotomy subject-object and researcher-researched is at odds with this vision. The notion of 'data-providers' is one advanced from academic circles, in reality it is likely that no person being questioned or observed or 'researched' for a long time in community settings would think of herself as being a provider of data, and even less so when friendly relationships with researchers are nurtured. Therefore, it may be argued that even when standard approaches to ethics are duly completed, this type of misalignment between what a researcher is doing and what community members are perceiving can be taken as an ethical deviation. Ways to respond to this misalignment have been put forward by participatory research methodologies,

in particular community-based participatory research methodological approaches (see Edwards et al., 2008; Flicker et al, 2007; Lincoln, 2001).

Summing up, for coping with both validity and ethical concerns, inductive approaches and participatory methodologies are particularly appropriate for advancing research in minority contexts, in particular when involving communities in long-term research. Inductive methodologies such as GTM are useful for minimizing the bias carried by researchers and yielding viable insights aligned to people's views. Collecting data in conjunction with its analysis in cycles is an effective way of ensuring truthful data generation and interpretation by gradually minimizing dissonance between researchers' and local people's systems of thinking and meaning-making and aligning terminology to meanings attributed by each party. Participatory methodologies are as well indicated for overcoming barriers to entry and eliciting the externalisation of genuine views. This study has found that lowering the distance researcher-researched, fostering equal relationships, and giving a central place to community views and interests has influenced positively the viability of research outcomes. The participatory research approach employed in conjunction with the inductive take advocated by GTM provided insights into effectively removing barriers and creating an atmosphere of trust and openness where people's views could be externalized. Apart from advancing knowledge for academic and schooled circles, participatory research methodologies also contribute to producing and distributing knowledge with and for the people involved in research. Due to the people-centred approaches they advocate and their action-taking component, they resonate well with minority issues, such as lack of voice. Therefore, asides from the mere study of factors and conditions for voice empowerment, participatory approaches can also contribute to forging and implementing practical solutions for lack of voice.

The agenda

To map gaps and opportunities for future research, it is useful to refer again to the three-layered construct of 'voice' used in this study in relation to the three agendas for ICT appropriation in minority contexts reviewed. Fig. 12.1 depicts the concept of 'voice' in relation to resources needed for voice to take effect at each layer, evidencing the role of technology.

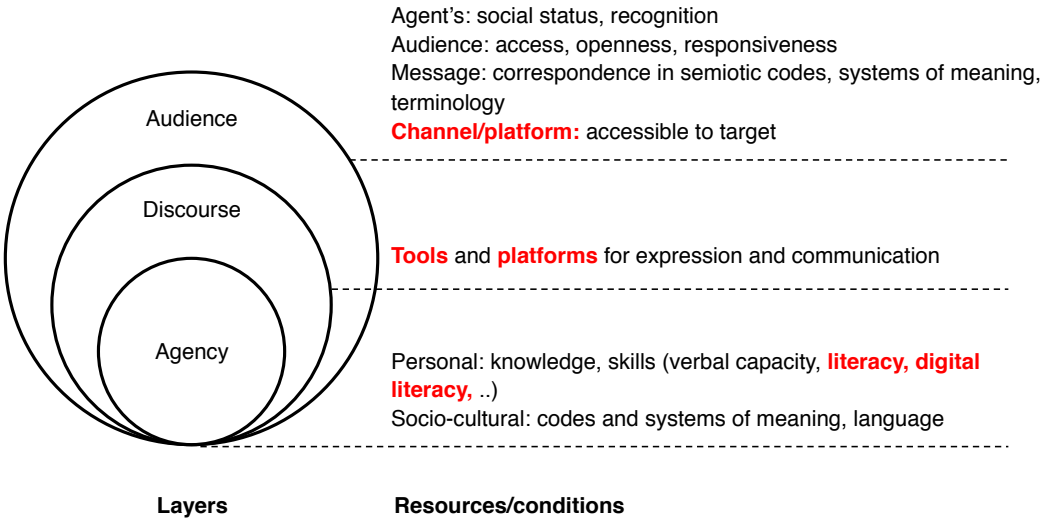

Figure 12.1. The three-layered concept of 'voice' used in this study, highlighting the role of communication technology. Source: author.

Using this construct as reference, this study has looked into the empowerment of collective minority voices in community settings, paying attention to alignment to community worldviews and epistemologies. While it has not embraced a definite position from the onset, retrospectively it can be aligned to the literature stream staying at the crossroads of the cultural and the transformative agendas. This is reflected in the accrued importance given to properly accounting for the determination of ICTs on issues of representation, and to ensuring people's agency in engaging with ICTs and related processes. A few aspects are deemed worthy of further and deeper investigation keeping to the coordinates of collectivity and alignment to locale, and with a critical eye on the determination that the choice of agenda plays.

At the agency level of voice, a first suggested avenue regards the study of inherent tensions that may appear when being involved as individual or as group in using ICTs for conflicting purposes. For instance, what processes emerge when new skills acquired by members come in conflict with the socio-cultural conditions for the exercise of voice such as the language spoken and local codes of meaning? How does ICT appropriation and usage evolve when members of minority cultures are in between worlds, playing a role in the information society and at the same time continuing to exist as part of their group-specific culture?

A promising research stream looks at how ICTs can be appropriated for local cultural expression through creative activities (e.g. Tacchi 2005, 2010). This stream can be advanced by drawing on community education studies. For instance, this study used the

Inquiry Cycle (Bruce and Bishop, 2008) as base model for content production and by studying its use gradually allowed it do be moulded and adapted to context. The core steps of the study, in particular inquiry, creation, observation, and reflection have been found effective ways for allowing members to externalize knowledge, assess it from a critical distance, and draw meaningful relations among their lived experience, the embodied and enacted knowledge, and digital media representations. Similarities between these steps and those of the SECI model for knowledge creation (Nonaka et al., 2000) have been noticed. Further research could delineate better the role of such processes for externalisation of knowledge, conversion from tacit to explicit knowledge, and the acquisition of abilities for manipulating effectively digital representations or navigating at ease between lived experience and media representations. In addition, these processes can be further linked to the study of empowerment from within of the kind Freire (2006/1970) advocated. One hypothesis that can be tested by further research is that it is this process of externalisation, distance-taking, and manipulation of self-created knowledge artefacts that fosters some of the empowering effects associated with digital media at individual level, in the Freirean sense. This research direction would find a good foundation in Freire's work with coding and decoding as means for empowerment, work that has been somehow neglected in favour of his most influential conceptual postulations on education and participation.

At the discourse level, existing research has given a great deal of attention to the design of communication artefacts, information systems, digital archives, visualisation systems and interaction spaces aligned to local protocols (see for instance Denison et al., 2012; Rodil et al., 2012; Srinivasan, 2006a,b; Verran et al., 2006). Sufficient attention within has been directed at understanding and conceptualizing processes by which design can be localized and local content produced. One question that deserves further attention is what happens to all of these when a project run by an outside agency is over? The issue of sustainability appears to be one of crucial importance. Indigenous media initiatives present examples of sustainable solutions, though their economic sustenance is usually precarious (Ginsburg, 1991). This research proposes that the sense of community ownership of a program, doubled by high levels of perceived self-efficacy and know-how can be important conditions for sustainability. Yet this hypothesis needs to be tested further, in particular to see in what relations it finds itself with community contextual characteristics and whether it continues to play out when economic and infrastructural factors pose impediments to sustainability.

Several issues can be further studied at the audience level of voice. As Ginsburg (1991) argues, ethnic minority media and indigenous media initiatives are usually small in scale, their coverage being limited to local and regional levels. A first question is how to give visibility to minority voices beyond the local. There is no scarcity of research on visibility and invisibility of minority and community media, yet studies tend to be focused on expression and transmission and take little concern with reception. There is a need to study visibility and

invisibility not only with respect to ability to encode and transmit messages, but also with effectiveness in reaching an audience. In other words, a community may have a culturally representative website standing by all rules of usability, yet in not being accessed and in particular in not being accessed by the targeted audience, it is invisible. Similar considerations can be formulated for the case of community-restricted knowledge transmission. For instance, there may be programs in place for codifying and preserving indigenous knowledge through digital archives, yet their outcomes may fail to reach the younger generations, either because their interests take new directions or because the entire process of accessing knowledge stored as data is too cumbersome to carry out and ineffective at supporting learning practices.

A second aspect of importance at the audience layer of voice regards the tension between cultural representation and requirements set by reception and responsiveness. As outlined in Fig. 12.1, one of the conditions for reaching an audience and being listened to is to work in systems of meaning and terminology consonant for both the agent and the recipient. What does this imply for minority cultures with highly unique cultural systems, different from the mainstream, who would like to say who they are in their own terms, and be understood at the same time? This research looked into these aspects, yet the answers it provides are bound to be conditioned by the empirical contexts where fieldwork has been conducted. It is likely that other contexts will shape the processes differently, and lead to different communication and design solutions.

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Annexes

Annex 1. Field notes template

Date: _

Place: _

Visit number: _

Participants: _

Main session objectives: _

Activities (type, participants): _

Data generation (tools, sampling): _

Media recording/visualisation:

	Recording/visualisation	Session leaders	Themes	Participants (nr./age/gender)
Audio				
Video				
Photographs				

Reflections/Reflective notes: _

Design notes: _

Next immediate actions: _

Subjects/themes to tackle next: _

Detailed field notes: _

Annex 2. Interview guide (local expert for the Roma)

A. Socio-demographic and economic data

Demographics

How many people are living in the community (Men/women ratio. Above 18).

How many houses are there?

How many people live usually in a house?

Work and employment

How do people here earn their living?

What are the main jobs and qualifications?

What is the unemployment rate?

How many people are registered for social assistance?

Literacy and education

Are there statistics for literacy rates by age/gender?

(If not) What is the level of education typically completed by the Roma? What about girls?

Where do children go to school? Is there a dedicated school for the Roma or kids study together with the Romanian ones?

How many Roma children are in school? (Statistics on attendance and drop-out rates)

Until what grade can children study in the vicinity? How many children continue their education to high school or university?

Are there literacy programs for illiterate adults? How many Roma people attended them in the past 5 years?

Cultural activities

Is there a cultural centre in the village? A computer centre or a library?

(if yes data on: founding year, financial support, attendance, activities)

Are there any festivals or events dedicated to Romani culture?

Religion

What is the main religion of the Roma living here? What other religions are present?

How many churches are there in the village for each religion? Do Roma and Romanians go to the same Church?

What are the relations between Roma of different religions?

B. History, ethnicity, and traditions

Ethnicity and history

In what occasions do people speak Romani?

In your quality, you speak Romani or Romanian with local people?

To which group do the Roma in Podoleni belong?

When did the Roma come here, why and from where? What is the story of their settlement?

How many were they? How were they dressed at that time? How were they living?

What were their traditional professions?

Current traditions

Today, what is specifically Romani in the traditions of the people living here?

What traditional professions are still being practiced?

What are the most important festivities and celebrations?

The Romani family

How are marriages arranged?

At what age do young girls get married? How is the marriage? Are the youngsters held to get married inside their ethnic group/their village?

Where do young couples live after marriage?

Gender roles: what roles do women have in the household. Do they work? How much access to education to they have?

C. Roma integration and development

How are the relations of the Roma and the Romanians? What about relations with other Romani people?

Have there been any significant negative/positive interactions in the past between the two groups?

Are there significant issues concerning the Roma in the village? What are the most stringent?

Do you think there is discrimination at school or at work between Roma and Romanian people? What do you think can be done to remediate this situation?

What programs or action lines are in plan for Roma integration? Do you think this issue gets the deserved attention?

What do you think are the most stringent needs of the Roma community? If you had the power to decide, what would be the most stringent priority to invest in? (e.g. education, health, infrastructure, integration)

Have there been any projects for the Romani community completed until now/planned? Describe.

D. Access to information and communication with the Roma

Is the community provided with written press and magazines/ Roma have subscriptions?

How many Roma have TV/radio/Internet?

How do local authorities communicate with the Roma?

What role does the local expert/councillor for the Roma play? If there are issues, what is the action line for solving them?

How do authorities listen in to people's problems? How do they communicate decisions, new programs and laws, or achievements?

Do you have any ideas you would like to implement for bettering communication with people and enhance their participation?

E. The local representative/local expert role

Describe the main activities you are involved in.

How do you communicate with the people? How do you find out about their needs? And how and in what occasions do you take this further to the local authorities?

If issues appear, what is your role? Describe significant events or issues that you mediated.

Annex 3. Interview guide (local authorities)

A. General data

Demographics

How many people are living in the village?

How many households?

How many people are living on average in a household?

What is the ratio men/women. Over 18?

Economics - work and employment

What are the main income sources for people in the village?

What are the main qualified jobs?

What is the unemployment rate?

How many persons are registered for social assistance?

What are the main priorities in the economic development strategy? What steps are being taken in this direction?

Development – actions and priorities

What projects have been run in the past 10 years? (literacy, health, local infrastructure)

- Who led these projects and who sponsored them?
- What achievements have there been?

What priorities are there for new projects? (health, literacy, Roma integration)

Are there other organizations and NGOs active in the commune serving rural development?

- What are their motivations and objectives?

Transport and infrastructure

How do people go from the town to nearby locations?

How do people travel inside the town?

How do children go to school? (local school transport?)

How many people have cars?

Does the town provide running water? Electricity?

Leisure time, socio-cultural activities and centres

Which of the following and how many are available in the community. What activities are proposed by each? How much do people participate in events proposed for each?

- Library
- Youth centres
- Bars and pubs, restaurants
- Community/cultural centre
- Sports centre
- Cinema/theatre
- Computer centre

What type of centre is missing and should be founded?

What are the main local festivities and how are they celebrated?

Literacy and education

What are the general literacy levels: how many people (percentage) know how to read and write?

What is the average level of education achieved?

What are the main languages used?

How many schools are there in the commune/village? Up until what education level?

(for commune and village, separately)

If available, data on:

- School attendance numbers
- School facilities: sports, computers

Are there literacy programs for adults? If available data on: when they started, attendance numbers. How are they financially sustained?

Any other school or literacy projects accomplished or ongoing?

Access to information

If available, data on how many households have:

- Radio
- TV

- Press subscriptions

Does the town provide free access to news and information, for example in the local library?

Communication, citizenship and participation

Are there any community organizations? Organizations for youths?

How do local authorities communicate with people? How do authorities listen in on their problems? How do they communicate decisions or achievements?

Are there any needs, issues or problems for bettering communication with people and enhancing their participation?

Religion

What are the main faiths?

How many churches are there for each faith?

What are the relations between members of different faiths?

B. The Roma

How are the relations between Roma and Romanians?

Have there been any significant negative/positive interactions in the past between the two groups?

Are there significant issues concerning the Roma in the village?

Is there a specific program or action line for Roma integration? What are the priorities?

What programs have been achieved (past 10 years)? Which ones are in plan? Describe.

Are there organizations especially dedicated to Roma issues?

Describe their activities.

How do local authorities communicate with the Roma?

What role does the local Roma expert or the local council representative play?

If there are issues, what is the action line for solving them?

How do authorities listen in on Roma's problems? How do they communicate decisions or achievements that regard them directly?

Are there any needs, issues or problems for bettering communication with people and enhancing their participation?

Annex 4. Interview guide (local people)

A. Personal data and education

Gender: ❒ Female ❒ Male

Age: _

Profession: _

Civil status: ❒ Married; ❒ Unmarried; ❒ Divorced; ❒ Widow.

Your father is of Romani ethnic origin: ❒ Yes; ❒ No.

Your mother is of Romani ethnic origin: ❒ Yes; ❒ No.

(Only for family persons with children)

How many children do you have?

Females _____ Males _____

How many of your children are working? What professions do they have?

How many of your children are in school?

How many classes did you graduate?

Did you take any other professional courses (e.g. canto, constructions)? Which ones?

Who held the most important role in your education? (for instance, the family, the school, the elderly)

B. Media usage

1. What recording, communication and information devices do you own?

❒ Wire telephone, ❒ Mobile phone, ❒ TV, ❒ Radio, ❒ Computer, ❒ Photo camera, ❒ Video camera, ❒ Music player; ❒ DVD player, ❒ VCR player, ❒ Others _____.

2. How often you use each of the devices below:

Wire telephone: ❒ daily, ❒ several times per week, ❒ once per week, ❒ monthly, ❒ once every few months, ❒ very rarely, ❒ never.

Mobile phone: ❒ daily, ❒ several times per week, ❒ once per week, ❒ monthly, ❒ once every few months, ❒ very rarely, ❒ never.

Computer: ❒ daily, ❒ several times per week, ❒ once per week, ❒ monthly, ❒ once every few months, ❒ very rarely, ❒ never.

Photo camera: ❒ daily, ❒ several times per week, ❒ once per week, ❒ monthly, ❒ once every few months, ❒ very rarely, ❒ never.

Video camera: ❒ daily, ❒ several times per week, ❒ once per week, ❒ monthly, ❒ once every few months, ❒ very rarely, ❒ never.

Music player: ❒ daily, ❒ several times per week, ❒ once per week, ❒ monthly, ❒ once every few months, ❒ very rarely, ❒ never.

DVD player: ❒ daily, ❒ several times per week, ❒ once per week, ❒ monthly, ❒ once every few months, ❒ very rarely, ❒ never.

VCR player: ❒ daily, ❒ several times per week, ❒ once per week, ❒ monthly, ❒ once every few months, ❒ very rarely, ❒ never.

3. What functions of the mobile phone do you use:

❒ Calls, ❒ SMS, ❒ MMS, ❒ Radio, ❒ Bluetooth, ❒ Photo camera, ❒ Video camera, ❒ Others _____.

4. What is your favourite means of information ? (for instance television, radio, newspapers) Why? Describe your experience of using it.
5. What type of articles or programs are you usually interested in? (for instance, news, politics, movies)
6. How often do you watch programs on the life and culture of the Roma on TV?
7. How often do you :

Read newspapers: ❒ daily, ❒ several times per week, ❒ once per week, ❒ monthly, ❒ once every few months, ❒ very rarely, ❒ never.

Read magazines: ❒ daily, ❒ several times per week, ❒ once per week, ❒ monthly, ❒ once every few months, ❒ very rarely, ❒ never.

Watch TV: ❒ daily, ❒ several times per week, ❒ once per week, ❒ monthly, ❒ once every few months, ❒ very rarely, ❒ never.

Listen to the radio: ❒ daily, ❒ several times per week, ❒ once per week, ❒ monthly, ❒ once every few months, ❒ very rarely, ❒ never.

8. How often did you use Internet ? For which activities ? If you had Internet connection, what functions and programs would you be interested in ?

C. Cultural identity and traditions

1. What does it mean for you to be a Roma?
2. From whom did you learn what you know about Romani culture and traditions?
3. How important is it to transmit this knowledge to your children and nephews?
4. Do you speak Romani? In what occasions?
5. How important is it that your children and nephews continue to speak Romani?
6. What do you know about the history and culture of the Romani community in Podoleni?
7. From whom did you learn about the history and culture of the Roma in Podoleni?
8. How important is it that you learn more about it?
9. How important is that your children and nephews learn more about your community's history?
10. Who should offer this information? (for example the school, the family)
11. How much do you know about the history and culture of the Roma in the world, for instance where they come from, their traditions?
12. Where did you learn about it?
13. How important is it that you learn more about it?
14. How important is that your children and nephews learn more about it?
15. Who should offer this information?
16. Do you practice a traditional Romani profession? Which one? From whom did you learn it?
17. How important is it to transmit it to your children and nephews?
18. How often you take part in events dedicated to Romani culture and traditions? (for instance festivals, shows, gatherings)

D. Social interaction

Besides your family, with whom do you use to spend your time with? In what activities?

What are your favourite spots for hanging out?

How are your relations with the Romanian living in the village? On what occasions do you meet them?

Do you have Romani friends and family living elsewhere? How often do you meet them? In what occasions?

When you have to communicate an important event in your life, what are the first persons that come to your mind to share the news? Would you visit or make a phone call?

When you/your family celebrate(s) important events, what people do you call in? Describe an anniversary/baptism/marriage in which you took part recently. Who came, how were people related with you/among themselves?

Annex 5. Focus group guide (exploratory)

Framing question

What is the role of communication technology (traditional and digital) in the local community's collective expression, knowledge production, and communication practices?

Questioning route

Opening

[To adapt in relation to FG number and familiarity with participants.]

For whom does not know me, I am Amalia Sabiescu and am working on a study on the communication of Romani cultural traditions. Thank you all for agreeing to participate in this discussion. We are here to talk about your community's culture and traditions and understand together if we can develop a project to improve communication using digital technology. For this, it is important for me to understand better your way of life and traditions, and how you use technologies such as television and the mobile phone. I am going to ask some questions, and all of you are invited to share with us your opinions.

I will take notes during the discussion. If I have the agreement of all of you, we can also audio record the conversation. It is important to know that your names will never be published in any writings in relation with what you have told us in here.

To start with, I'd like to go around and present each other. Please share with us also what you do for a living.

Introductory question

What does it mean for you to be a Roma?

Key questions

1. What is typically Romani about your lifestyle, your traditions and customs?
2. What do you know about how your community lived in the past? From whom?
3. Take some time to think about how you came about to know what you know about the traditions you keep to. Share it with us.
4. I'd like all of us to reflect on the technologies that we use in our daily life. By technology I mean any type of device that we have now for getting informed, such as radio and television; or for communicating, such as mobile phones, or for producing things such as

movies using video-cameras, but also Walkman, DVD players, or VCR players. Firstly, I'd like to discuss about how you keep yourself informed on what's happening elsewhere in the world. What is your preferred means for getting informed?

5. What types of content do you usually access?
6. In a typical day, in what moments you need a device for communicating with others?
7. Take some time to think how technologies *[use examples]* have changed the way you get informed and communicate with people. How was life before you came to use them, and what has changed now?

Probing questions (selective employ)

1. I have noticed that none of you spoke very much about life before your grand-grand parents. How much do you know about your community's whereabouts 100 years ago? Do you know where and how your ancestors were living before they came here to stay?
2. I have noticed that many of you speak of traditions related to baptism, marriage and funerals. Tell me more about how these traditions are celebrated in your community *differently* from the way Romanians celebrate these.
3. Can you imagine your life without speaking Romani? What would be lost?
4. I have noticed none of you mentioned newspapers or books. Can you tell me more on how you feel about reading newspapers and books?
5. Some of you mentioned *[examples]* for getting informed. Which of these is the one you prefer most?
6. It would be interesting to know how much you look for information on the Roma in the media. For instance, how often do you watch informative shows on the Roma on TV?

Ending question

Is there anything you would like to add to what has been discussed?

Annex 6. Focus group guide (activity design)

Questioning route

[Note: Questions presented henceforth are aggregated from focus groups with evolving questioning routes, leading to the gradual shaping of a vision for the communication solution.]

Opening

[To adapt in relation to FG number and familiarity with participants.]

For whom does not know me, I am Amalia Sabiescu and am working on a study on the communication of Romani cultural traditions. Thank you all for agreeing to participate in this discussion. *[Sum-up progress on what has been discussed and is relevant for the FG.]* On this basis, we are now going to discuss about *[sum-up the most important topics that will be discussed.]*

I will take notes during the discussion. If I have the agreement of all of you, we can also audio record the conversation. It is important to know that your names will never be published in any writings in relation with what you have told us in here.

To start with, I'd like to go around and present each other. Please share with us what you do for a living.

Preliminary questions (subject matter)

[Purpose: focus the discussion on community memory and present-day issues. Selective employ.]

What Romani cultural traditions are perpetuated in the community?

[Probe also with oral *traditions - stories, legends, fables, wisdom quotes; customs, celebrations.]*

What cultural traditions were lost or are no longer practiced. Why?

What cultural practices are practiced now, but are in danger of disappearing?

What customs or traditions you would like to see recorded for safekeeping?

What essential historical events have your ancestors or the elderly been through?

What biographic events can be linked with the larger stories of the community?

Who are the people who have been through these events? Are they still alive?

What significant issues and problems is your community facing at present?

Envisioning questions

[Purpose: envision the communication solution.]

[Application: in conjunction with, or after having provided examples of technological solutions implemented in other contexts, communication platforms that can be used, and demonstrations.]

Let us imagine that some of the issues you have, or values you hold, could be communicated to someone that can be part of your community, or Romani people elsewhere in Romania and the world, or the majority population. It can be safe kept for your own community's future generations, or it can make it to the world out there. *[Expand. Give examples.]*

What would you like to communicate from the subjects and themes we have discussed beforehand?

To whom would you like to transmit any of the subjects and themes we have discussed beforehand?

Probing/detail questions

> How beneficial would it be to have an archive of your community's traditions, events and practices, for safekeeping and use by future members of the community?
>
> How beneficial would it be to talk about your community to the wide public?
>
> Are there any specific people you would like to address? Local, regional authorities?

Focused questions

[Purpose: give breadth and detail to communication solution and elicit data for workflow organisation.]

[Application: to be discussed after a communication solution is agreed upon. To be discussed in conjunction with rich examples based on content already produced through cultural probes gathering.]

<u>Subject matter (focused on specific audience):</u>

What are the subjects you deem most important for transmitting to *[selected audience]*?

Probing/detail questions

Which of these you deem more important and why:

Cultural traditions *[use examples].*

Present-day concerns, issues and problems *[use examples].*

Messages from your community's members *[use examples].*

Roles

Which people could talk about these subjects? Would they be eager to talk to *[selected audience]*?

Expectations and return

What we have discussed until now implies *[envisage solution]*. Imagine this were achieved. What would you expect to get in return? Do you imagine there will be anything changed for the better after we accomplish it? How? What about *[examples]*? Would this be something good for you/your community?

Are there any risks possibly associated with *[envisioned solution]*? What about *[examples]*?

Privacy and data protection

How would you feel if *[selected audience]* could see openly and with no turning back yours or your community members' messages?

Are there any subjects you would rather not discuss?

Are there issues that should not reach *[selected audience]*?

Are there people who should not appear? What about *[examples, e.g. children]*?

Annex 7. Data corpus

Podoleni field study

Data generation instrument	Number
Emergent group interviews	7
Semi-structured interviews (authorities):	4 (with three respondents)
Semi-structured interviews (local people)	30
Focus groups (exploratory)	4
Focus groups (activity design)	4
Cultural probes discussions	5
Field notes	33 (24’083 words)

Munteni field study

Data generation instrument	Number
Emergent group interviews	3
Semi-structured interviews (authorities)	5
Focus groups (exploratory)	3
Focus groups (design)	5
Cultural probes discussions	2
Field notes	25 (28’655 words)
Tools for process monitoring	
Individual short interviews (On community-led production process and products)	23
Group discussions (On community-led production)	10
Group discussions (On content editing, organisation and usage)	12

Annex 8. Collective research agreement

Research Agreement between

Amalia Georgiana Sabiescu, PhD student at the Università della Svizzera italiana (hereby USI) Lugano, Switzerland,

The Technology-Enhanced Communication Laboratory (hereby TEC-Lab), USI, represented by prof. Paolo Paolini, TEC-Lab scientific director,

(hereby The Researchers)

and

The Romani community of the village Podoleni, commune Barcea, Galati region, Romania (hereby The Community),

Project: ***Glasul rromilor – Romani Voices***

The research project ***Glasul rromilor (Romani Voices)*** is part of the doctoral research of Amalia Georgiana Sabiescu, PhD student at the Università della Svizzera italiana, under the supervision of Prof. Dr. Paolo Paolini. The main goal of the project is to contribute to the valorisation and promotion of the Romani traditional cultural heritage, based on the use of digital and networked media for collecting, archiving and/or publishing recordings of authentic testimonials, events and Romani cultural traditions.

The parties agree to conduct the above-named research project with the following understanding:

1. The purpose of this research project, as discussed with and understood by The Community, is:

To foster the expression and representation in multimedia format (audio, visual and textual) of the Community's cultural traditions, as well as present-day concerns, hopes and aspirations.

To support the production and publication of multimedia artefacts for the benefit of the people involved, in the form and to the public identified jointly by the Community and the Researchers.

This project is based on a continuous dialogue between the Researchers and the Community and aims to take into account and integrate at every stage the needs and the vision of the community members, as well as to bring benefits to the Community.

2. This project includes the following activities:

Group discussions, with the objective of: 1) identifying the main themes that the Community wants to approach and document through testimonials and stories; 2) identifying the optimal usage of the recorded artefacts, for eventual archiving and/or publishing to a wide audience.

Individual interviews, with the objective of a better understanding of Romani traditions, Romani identity as well as the role that mass-media and digital devices play in the life of the Community. These interviews can be recorded in audio and/or video format with the agreement of the person being interviewed.

Oral histories, photo- and video-shootings, which can cover testimonials, stories, musical performances, or other events that reflect the life of the Community and issues corresponding to the themes identified in group discussions.

3. The community members' participation in the project is done through:

Participation in group discussions, interviews, photo- and video-shootings, and oral histories recordings. The community members can participate as:

- storytellers,
- interact with other members as part of *group discussions* dedicated to the identification of themes and subjects to document,
- but also as *producers*, using the recording kit left with the community for the entire length of the project (audio recorder, photo cameras, video cameras) for recording traditions, customs, representative daily life snapshots, testimonials or stories which adequately reflect the project thematic range.

Participation in collective visualisation sessions. Participants can take part in collective viewing sessions for recorded materials, and within they can actively comment, ask changes, or suggest meaningful ways of relating and organizing the materials recorded for inclusion in a digital archive or a public website.

Collective decision over materials usage. Participants decide whether the multimedia artefacts will be archived for community usage and/or will be made public.

Acknowledgement of project results. At the end of the project, the results – a narrative account of the process, as well as digital multimedia artefacts – will be presented to and discussed with the Community.

4. This project will have the following outcomes:

Production and publication of multimedia artefacts:

- An archive of audio-visual materials produced and distributed for community use, in a form to be agreed upon.
- A dedicated public website containing the multimedia materials or a selection of the

materials realized throughout. Multimedia materials will also be published, given people's agreement, on video and photo sharing websites, as well as being linked from the TEC-Lab website.

Upon agreement between the Researcher and the Community, further events and materials can be planned and produced based on existing recordings, such as possibly an exhibition in the village, or printed booklets representing selected representative stories and testimonials.

Scientific publications:

- The publication of a doctoral thesis.
- The publication of articles in academic journals, as well as presentations at academic conferences.

5. The implementation of the project, as well as the usage of the materials produced are subsumed to the following principles:

This project aims to establish a relation of trust and mutual benefit based on the concept of full prior informed consent, and active communication regarding the goals, results and implications of the project.

Community members are informed at each step of the process of the implications, participation solicited, benefits but also possible risks associated with project participation. Community agreement is essential at each and every step of the process. Community members can contact the Researchers (through Amalia Georgiana Sabiescu) at any time for asking questions or transmitting any considerations in relation to the project or the usage of the materials resulting therein.

6. The use of the personal image and name in the materials produced responds to the following principles:

For articles in academic journals, presentations in academic conferences, as well as the doctoral thesis:

The research results used for scientific publications and events (academic journals and conferences, the doctoral thesis) will maintain a clause of confidentiality. Participants' names will not be mentioned. Participants may also decide if in these publications they would like the name of the village to be mentioned, or they would prefer to maintain also the location in anonymity (in this latter case a code will be used for identifying it).

For multimedia artefacts – text, audio, video and photos:

These multimedia artefacts will be archived for community safekeeping and distributed in several copies on a digital support to be defined. A selection of these materials will be published on the Internet, mentioning names and personal data, only given the written consent of the members whose image, voice, or name are represented (see *Annex.*

Individual Consent Form)

7. Commitments

The PhD researcher's (Amalia Georgiana Sabiescu) main commitment to the community is to:

Act as a responsible representative of the Community's image, as this will be reflected in the multimedia materials produced and especially those materials published on the blog, website and dedicated photo and video sharing sites, and invest all the effort so that the project outcomes will be beneficial to the Community.

Keep the community informed on project progress all along its length.

Invest all the efforts to bring to completion this project until the results are achieved, as listed on pages 2 and 3 of this agreement, as long as people themselves are engaged to act to its completion.

Make sure that any publication in which the names and the image of the people appear, meets their full prior informed consent.

Inform the community on any feedback, comments or responses to the multimedia products published.

The doctoral thesis advisor and TEC-Lab scientific director, Prof. Paolo Paolini:

engages, with no obligations, to foresee the accomplishment of this doctoral research project.

The Community's commitment to the Researchers is to:

Recommend capable and reliable community members to collaborate in this project.

Keep informed on the project progress, and help in leading the project toward meaningful results.

8. Termination and duration

The Researchers and the Community agree that the project can be stopped before completion, if the community members decide collectively to withdraw their participation. If Community members renew their engagement to participate in every stage of the process, this project will continue until reaching the outcomes listed on page 2 of this Agreement. This agreement is signed in two versions, in Romanian, and in English, by the Researchers and the representatives of the Community.

The Researchers:

Amalia Georgiana Sabiescu, PhD Student

Signature: _____ Date: _____

Prof. Paolo Paolini, PhD student supervisor, for acknowledgement with no obligations

Signature: _____ Date: _____

The Community Representatives:

Name: _____Signature: _____

Annex 9. Individual consent form

The research project *Glasul rromilor (Romani Voices)* is part of a doctoral research project conducted by Amalia Georgiana Sabiescu, PhD student at the Università della Svizzera italiana USI), in Lugano, Switzerland, and member of the laboratory TEC-Lab (Technology-Enhanced Communication Laboratory) at USI. The main goal of the this doctoral research project is to contribute to the valorisation and promotion of the Romani cultural heritage, by making use of digital technologies for recording, archiving and transmitting authentic testimonials, oral histories, and other representative accounts of Romani culture. The community members can participate in this project as respondents to interviews, participants in group discussions, storytellers, but also as producers, making use of a recording toolkit made available to them throughout the project development.

The interviews, group discussions, photographs, audio and video recordings as well as written transcripts, and other artefacts produced during the project development and involving people either as narrators or as producers can be used, with participants' agreement, for:

> **A. research and educational purposes.** In this case data provided by participants will be treated confidentially, access to these data will be limited to a community of researchers and academics, while the names and personal images of participants will be kept anonymous.

and/or

> **B. publishing, especially but not only, on the Internet.**

The people who participate in interviews and group discussions, provide oral history accounts, assist in the production or produce themselves audio-video or photographic materials (hereby **The Participants**) can give their agreement for one or both of the options below:

A. The permission to offer the data exclusively for research and educational purposes (for instance, publishing scientific articles, presentations to academic conferences, and the doctoral thesis). <u>In this case the image, voice and names of the persons interviewed are maintained anonymous.</u> The agreement for this type of usage is given by signing **part (A) of this consent form.**

and/or

B. The permission to publish the photographs, audio and video recordings, entirely or

partially, especially but not only on the Internet. In this case the name, the image and voice of participants are exposed to publicity, using as main publishing platform the Internet. The producers of multimedia artefacts will be given due credit for multimedia artefacts produced by themselves, having their names mentioned in writing as part of the credits section of each multimedia artifact published. The agreement for this type of usage is given by signing **part (B) of this consent form.**

A. Consent form for data usage in exclusive research and educational pursuits

1. I, the undersigned, voluntarily transfer to Amalia Georgiana Sabiescu and the academic institution in which she is active, TEC-Lab, USI, in the frame of the research conducted by her under the name *Glasul rromilor (Romani Voices)*, the full and irrevocable right to use for research and educational purposes the photographs, audio and video recordings in which my voice or my image appear, as well as associated transcripts or other documents that I provided of my own accord. I also irrevocably transfer to Amalia Georgiana Sabiescu all the rights, titles, and interests on the interviews and recordings in which my voice or my image appear, as well as those recorded or offered by me during the project development.

2. I hereby consign the oral memoirs, data provided in individual and group interviews, as well as the recordings in audio or video format, photographs and associated transcripts as a donation for research and didactic pursuits. I understand that Amalia Georgiana Sabiescu may offer these data for consultation, for research and didactic pursuits, to a community of researchers and academics (conferences, scientific and academic events), or in educational environments (schools, universities).

3. I understand that the data provided by me will be used for research and academic pursuits and may stand at the basis of writing and publishing scientific articles, as well as for writing a doctoral thesis. I agree that these publications may mention the village name and location, and eventually use extracts and quotations from the interviews. I understand that within these publications my identity (name, personal data) will be maintained anonymous.

4. I hereby grant my full agreement for the use of these recordings and, consequently, release Amalia Georgiana Sabiescu and any of her collaborators, legal representatives and associates from any claim and liability relating to the data provided in recordings and materials, for the purposes above mentioned.

5. I fully acknowledge that by signing this consent form I will not be able to withdraw my permission and the rights granted, and I will not be able to interfere with the materials usage for the research and academic pursuits as described.

6. I have read and understood the significance of this permission. I have voluntarily agreed to be interviewed and I irrevocably grant the rights associated with the usage of these recordings and associated data and materials. This consent form includes the entire and

complete agreement concerning the use of the data and materials produced or provided by me as part of the project, or in which my image, voice and name may appear.

7*. In my quality of parent and legal tutor of my children, named

_____, _____

I hereby grant the permission for educational usage of the materials and recordings in which their names, voices, or image may appear, according to the same principles detailed in part *A. Consent form for data usage in exclusive research and educational pursuits* of this consent form.

* To be completed only by parents whose children participate in the project.

Contact: Amalia Georgiana Sabiescu

[Address. Tel. number]

Project participant:

Signature:_____

Name:_____

Date: _____ Telephone number: _____

B. Consent form for publishing recorded materials

1. I understand that the doctoral research project *Glasul rromilor (Romani Voices)* pursues the promotion of Romani traditional culture and positive image, by publishing testimonials, stories and recordings of Romani cultural events. I am fully aware that the permission for publishing materials in which my image appears (part B. of this document) can be given separately from the permission of using these materials for educational purposes (part A. of this document). By my own accord I grant Amalia Georgiana Sabiescu and the institution in which she is pursuing her doctoral research, TEC-Lab, USI, full rights for using and publishing my oral testimonials, audio and video recordings, associated transcripts and photographs in which my name, image or voice appears, or that are produced or provided by me in the frame of the above mentioned project.

2. I hereby grant full publishing rights for these recordings under any form thought adequate by Amalia Georgiana Sabiescu or by TEC-Lab, USI, including, without being limited to exclusive reproduction and distribution rights, the preparation of derived materials, public representations, adding titles and translations, and publishing in written and electronic media, or other formats, including free and open access to the Internet. I also grant Amalia Georgiana Sabiescu the right to use all materials in which my voice, name and image appear,

in any media format and in any promotional message which may be used to promote this project.

3. By my own will, I grant full rights for publishing the recordings and I consequently release Amalia Georgiana Sabiescu, as well as her collaborators, legal representatives and associates, including photographers and cameramen who may participate in the project, from any claim and liability relating to the data provided in recordings and materials, for the publishing purposes mentioned in part B. of this consent form.

4. In the exceptional case that I may want to cancel from publishing the materials recorded by myself or in which my image, name and voice appear, I can solicit the cancelling of these materials, through a request to Amalia Georgiana Sabiescu. I fully understand that this possibility is granted as part of the principles under which the project *Glasul rromilor (Romani Voices)* is conducted, which concern the pursuit of beneficial outcomes for the Romani community of which I am part and the promotion of Romani culture and heritage. In the exceptional case that I may want to withdraw my contribution, the cancellation of the materials will be done amiably, and only insofar as it will be possible for Amalia Georgiana Sabiescu to act in this sense. My request, made despite the written agreement I sign, will not involve charging Amalia Georgiana Sabiescu or any of her associates with any legal claims and liability for the use of the materials published according to the principles exposed above.

5*. In my quality of parent and legal tutor of my children, named

_____, _____

I hereby grant the permission for publishing the materials and recordings produced as part of the project *(Glasul rromilor) Romani Voices* in which their names, voices, or image appear, according to the same principles detailed in part *B. Consent form for publishing recorded materials* of this consent form.

* To be completed only by parents whose children participate in the project.

Contact: Amalia Georgiana Sabiescu

[Address. Tel. number]

Project participant:

Signature:_____

Name:_____

Date: _____ Telephone number: _____

Annex 10. Romani Voices web traffic analysis

1 Introduction

This report presents the results of a study that tracked the performance of the Romani Voices websites and their affiliated social media channels on YouTube:

- The Romani voices websites: www.romanivoices.com
- The Romani Voices in Podoleni YouTube channel: http://www.youtube.com/user/RomaniVoices
- The YouTube channel of the Kalderash Gypsy community of Munteni: http://www.youtube.com/user/romanivoicesmunteni

The websites were tracked in the period 1 April 2012 – 31 May 2013. The track period start date corresponds approximately to the launch of the first website, "Romani Voices in Podoleni" (April 2012), while the second website, "The Kalderash Gypsies in Munteni", has a shorter tracking time, since its launch in October 2012. The YouTube statistics are presented for the following time frames:

- Podoleni: 1 February 2012 – 31 May 2013
- Munteni: 18 October 2012 – 31 May 2013

The analysis was done using two separate tools:

- The websites performance was tracked with Google Analytics (www.google.com/analytics/)
- The performance of the YouTube channels was tracked using YouTube embedded usage statistics.

The report presents the website usage statistics in aggregated manner for both websites, and specifies differences in usage patterns for each - "Romani voices in Podoleni" and "The Kalderash Gypsies of Munteni". The YouTube usage statistics are presented separately for each community channel.

2 Romani Voices Website Traffic Analysis

2.1 Performance at a glance

Total number of visits:	1’029
Total number of page views:	5’508
Number of unique visitors:	410
Average visit duration:	03:56 minutes
Average number of pages per visit:	5.35
Top 5 countries:	Switzerland, Romania, Italy, United States, Moldova
Top 5 internal pages (homepages excluded):	1 Romani identity, POD, En (139 hits) 2 Traditional metal work, MUN, En (125) 3 Cultural traditions, POD, En (112) 4 Life on the road, MUN, En (101) 5 The masters, MUN, En (99)
Top 4 traffic sources:	1 Direct traffic (543 hits) 2 Google search (207) 3 Twitter referral (206) 4 YouTube referral (52)

2.2 Audience: visits, engagement, demographics and technology

In the period from 1 April 2012 to 31 May 2013 the website Romani Voices received 1’029 visits from 410 unique visitors, out of which 60.5% are returning, and 39.5% are new visitors, for a total number of 5’508 page views.

Figure 13.1. Overview of traffic on the Romani Voices website. Period: 01.04.2012 – 31.05.2013. Source: Google Analytics report.

Behaviour

The average number of pages seen in a single visit is 5.35, while the average visit duration is little less than 4 minutes (03:56). The bounce rate is quite high (60.64%), indicating that many visitors might have dropped in accidentally, or only wanted to look over quickly some information.

Differences can be noticed in behaviour of new vs. returning visitors (Fig. 13.2): the number of pages browsed in a visit is higher for new visitors (5.95, vs. 4.96 of returning visitors), yet the average time spent on site per visit is higher for returning visitors (04:34 vs. 02:58 for new visitors). An interesting aspect is that the bounce rate is higher for returning rather than new visitors (65.49 % vs. 53.2%), which suggests that the high bounce rate may be due more to quick look up of information rather than accidental landing on website pages.

Visitor Type	Visits	Pages / Visit	Avg. Visit Duration	Bounce Rate
	1,029 % of Total: 100.00% (1,029)	5.35 Site Avg: 5.35 (0.00%)	00:03:56 Site Avg: 00:03:56 (0.00%)	60.64% Site Avg: 60.64% (0.00%)
1. Returning Visitor	623	4.96	00:04:34	65.49%
2. New Visitor	406	5.95	00:02:58	53.20%

Figure 13.2. Behaviour of new vs. returning visitors on the Romani Voices website. Period: 01.04.2012 – 31.05.2013. Source: Google Analytics report.

The breakdown of the visit duration presents some interesting aspects. While the average duration is quite high, close to 4 minutes, it can be noticed that a large percentage of the visits (658) lasted less than 10 seconds. On the other hand, this is compensated by very long time spent on-site by a low number of visitors: 38 visitors spent more than 30 minutes

online per visit, and 65 spent between 10 to 30 minutes (Fig. 13.3). This indicates that the bulk of the time spent online is shared by few engaged visitors, rather than spread over the audience of 410 total visitors and 1'029 total visits.

Visit Duration	Visits	Pageviews
0-10 seconds	658	699
11-30 seconds	59	181
31-60 seconds	41	209
61-180 seconds	76	600
181-600 seconds	92	1,270
601-1800 seconds	65	1,149
1801+ seconds	38	1,400

Figure 13.3. Visit duration breakdown on the Romani Voices website. Period: 01.04.2012 – 31.05.2013. Source: Google Analytics report.

Demographics

The highest traffic comes from Switzerland (499 visits), Romania (355 visits), and Italy (71 visits). The high traffic in Switzerland is partially due to visits for uploading content. Yet, since content upload visits tend to be more lengthy, the high bounce rate (68.94%) indicates as well that there is quite a high percentage of visitors from Switzerland that accessed the site by accident or for quick information check.

From the top 10 countries, Ireland displays the highest number of pages per visit (17) and the highest average visit duration (almost 10 minutes), for a total number of 6 visits, with a bounce rate lower than 17%, which overall indicates the access by few engaged visitors.

Country / Territory	Visits	Pages / Visit	Avg. Visit Duration	% New Visits	Bounce Rate
	1,029 % of Total: 100.00%	5.35 Site Avg: 5.35	00:03:56 Site Avg: 00:03:56	39.46% Site Avg: 39.36%	60.64% Site Avg: 60.64%
1. Switzerland	499	4.41	00:04:12	11.62%	68.94%
2. Romania	355	6.45	00:03:28	64.79%	58.03%
3. Italy	71	6.93	00:05:54	46.48%	40.85%
4. United States	23	3.57	00:02:19	78.26%	60.87%
5. Moldova	10	1.40	00:00:09	100.00%	70.00%
6. Spain	9	9.11	00:04:54	100.00%	33.33%
7. United Kingdom	9	7.33	00:03:35	77.78%	11.11%
8. Germany	8	5.88	00:02:19	100.00%	25.00%
9. South Africa	8	5.88	00:02:47	50.00%	12.50%
10. Ireland	6	17.00	00:09:57	66.67%	16.67%

Figure 13.4. Visits by geographic provenance on the Romani Voices website. Period: 01.04.2012 – 31.05.2013. Source: Google Analytics report.

Mobile access

From the total of 1'029 visits, 33 (4.21%) were done using a mobile device (smart phone or tablet). Visits from mobile devices tend to have a lower average duration compared to visits from other devices (circa 3 minutes vs. almost 4 minutes), as well as a lower average number of pages per visit (4.21 vs. 5.39). Yet they also have a lower bounce rate (45.45% vs. 61.14%), which suggests that access by mobile device is purposeful and oriented towards browsing rather than accidental or for quick information check.

2.3 Content

The most visited pages are the Romani Voices main homepage, followed by the English-language homepages of the two community websites and the Romanian-language version of the Podoleni website. The top internal content pages (homepages excluded) are all category pages in English, ranking:

1 Romani identity (Podoleni)
2 Traditional metal work (Munteni)
3 Cultural traditions (Podoleni)
4 Life on the road (Munteni)
5 The masters (Munteni)

Page Title	Pageviews	Unique Pageviews	Avg. Time on Page	Entrances	Bounce Rate	% Exit
	5,508 % of Total: 100.00% (5,508)	3,614 % of Total: 100.00% (3,614)	00:00:54 Site Avg: 00:00:54 (0.00%)	1,029 % of Total: 100.00% (1,029)	60.64% Site Avg: 60.64% (0.00%)	18.68% Site Avg: 18.68% (0.00%)
1. Romani Voices	519	353	00:01:36	322	73.91%	50.29%
2. Romani Voices in Podoleni | Romani Voices Podoleni	449	328	00:01:28	251	70.92%	47.22%
3. The Kalderash Gypsies in Munteni | Romani Voices Munteni	279	188	00:01:05	92	60.43%	38.71%
4. Glasul romilor din Podoleni | Romani Voices Podoleni	147	89	00:01:08	54	18.52%	16.33%
5. Romani identity | Romani Voices Podoleni	139	84	00:01:12	13	38.46%	13.67%
6. Traditional metal work | Romani Voices Munteni	125	54	00:00:41	5	20.00%	8.00%
7. Cultural traditions | Romani Voices Podoleni	112	83	00:00:49	28	85.71%	26.79%
8. Life on the road | Romani Voices Munteni	101	45	00:00:45	1	0.00%	6.93%
9. The masters | Romani Voices Munteni	99	50	00:01:11	9	11.11%	14.14%
10. Dialogue | Romani Voices Podoleni	84	37	00:00:18	3	0.00%	2.38%

Figure 13.5. Usage statistics for the top 10 pages on the Romani Voices website. Period: 01.04.2012 – 31.05.2013. Source: Google Analytics report.

The top landing pages reflect the general ranking of top content pages, with the main homepage as first ranking landing page followed by the English versions of the Podoleni and Munteni homepages. At the same time, the top exit pages are ranked exactly the same, which is attuned to the data showing the high bounce rate.

Comparatively, the website in Podoleni has a much higher number of page views (3'480) than Munteni (with 1'507 page views). Yet, since the websites were launched at different times with around 6 months difference, it is difficult to compare their performance. Some aspects can be highlighted comparatively for the two websites that are unaffected by the different launch times:

- The number of clicks on the website main homepage providing access to the two websites is higher for Munteni: overall, 90 clicks (35%) were on the link to the Munteni website, vs. 65 clicks (25%) on the Podoleni website link. (Note: the main homepage was launched at the same time with the Munteni website launch, in autumn 2013, 6 months after the launch of the Podoleni website).
- The time spent on page is higher for the website of Munteni, averaging 64 seconds vs. 46 seconds the average for Podoleni.
- The bounce rate is slightly higher for Podoleni (55.17%) than for Munteni (52.46%).

2.4 Traffic sources

Most of the website traffic is direct (52.8%), followed by referral traffic (26.4%) and search traffic (20.8%).

Figure 13.6. Traffic sources breakdown on the Romani Voices website. Period: 01.04.2012 – 31.05.2013. Source: Google Analytics report.

Overall, the top 4 traffic sources are: direct, Google search, Twitter referral, and YouTube referral.

From these, overall Google search and YouTube referral have the lowest bounce rates, which indicates that users driven by these sources demonstrated interest and engagement with website browsing.

Direct traffic, responsible overall for 543 visits (52.77%) has the 3 homepages (Romani Voices, Podoleni, and Munteni) as the top 3 landing pages. The number of pages per visit is slightly lower than the grand average (4.98 vs. 5.35), while the visit duration is higher (04:47 minutes vs. 03:56 website average). This suggests that direct traffic includes users that are interested in browsing and engage meaningfully with the content.

Referral traffic, responsible overall for 272 visits (26.43%), has Twitter, YouTube, and Google as top 3 referral sites. While Twitter ranks first, it is noted that it displays the highest bounce rate (83.01%), while YouTube (with 52 visits referred) has a much lower bounce rate, of 23.08%. This aspect seems to confirm that YouTube was a good strategy for generating referral traffic, yet as different from the expected, it does not excel in numbers, but rather in the depth of the visits it drives.

Search drove 214 visits (20.8%) to the website, with an average of 9.14 pages per visit (much higher than the 5.35 grand average) and a visit duration of 4:02 minutes (very little higher than the average of 03:56). The top keywords used include project-specific terms that indicate a purposeful search (e.g. 'romani voices Podoleni', 'romanivoicespodoleni'), search for information on the village (e.g. "Podoleni", 'tigani din Munteni / Munteni Gypsies'), as well as more generic search for information either on the Roma (e.g. 'Kalderash') or on traditions and music (e.g. 'muzica lautareasca acordeon' – Tr.: 'traditional accordion music'). Some high peaks can be noticed for search traffic with respect to visit duration. For instance, searches on 'romani voices' resulted in visits with an average duration of 06:21 minutes, and searches on 'Kalderash' resulted in visits with an average duration of 11:14 minutes.

3 YouTube usage statistics. Romani Voices in Podoleni

The usage was analysed for the period 1 February 2012 – 31 May 2013. At the moment of conducting the study, there were 31 videos uploaded on the Podoleni YouTube channel.

3.1 At a glance

Analysis time length:	16 months
Views:	47'194
Average view duration:	53 seconds
Peaks:	December 2012, May 2013

Top 5 geographical locations:	Romania, Italy, Spain, Moldova, United Kingdom
Top 5 videos:	Music performances (1-4), testimonial on working abroad (#5)
Top 3 traffic sources:	1 YouTube search 2 YouTube suggested video 3 Google search

3.2 Views and audience

From 1 February 2012 to 31 May 2013, the YouTube channel of the Romani community in Podoleni had 47'194 views with an average view duration of 53 seconds. Data for the time watched overall is only available from September 2012, counting 35'403 minutes. The evolution in time (Fig. 13.9) shows an increasing tendency from 2012 to 2013, with peaks in December 2012 and May 2013.

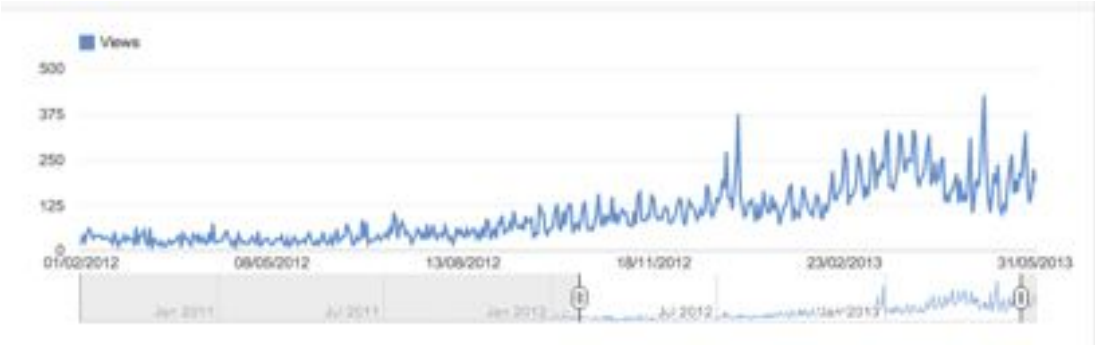

Figure 13.7. YouTube views, Podoleni channel. Period: 01.02.2012 – 31.05.2013. Source: YouTube Analytics.

Demographics

The top 5 geographies are Romania, Italy, Spain, Moldova, and United Kingdom. Most users (69.3%) are male, while the best represented age segments are 13-17 (24.7%) and 35-44 (22.2%).

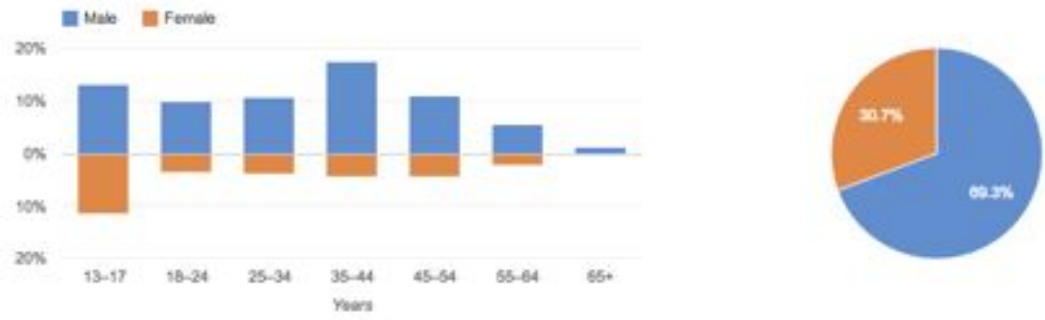

Figure 13.8. YouTube users breakdown by age and gender, Podoleni channel. Period: 01.02.2012 – 31.05.2013. Source: YouTube Analytics.

Content

The top 4 most viewed videos are of music performances, next ranks a testimonial by a native woman working abroad and a reportage about the hardships of elderly people. Interest in the music videos generates the bulk of the views, with 41'907 views for the top 4 music videos out of 47'194 total views.

Playback location

Most videos (41'421, about 87.8%) were seen on the YouTube watch page, second ranks access with mobile devices (5'169 views for 11%), and third views on embedded players on external websites (588 views for 1.2%). Of the external websites, the top 3 are the Romani voices website (97 views), Facebook (51 views) and bing.com (44 views).

It is interesting to note, in these data, that there is an overwhelming preference for watching the content on the YouTube homepage, while the numbers of views on the Romani Voices website is very low.

Traffic sources

Most traffic is generated by YouTube search (34.3%), followed by YouTube suggested videos (27.3%) and Google search (16.5%). In *YouTube search*, the top 10 search terms are all related to music performances and in Romanian. Only #11 ranks search for 'Barcea Galati' (the commune and district where the community is located), while the following terms continue to revert on various music genres or instruments, especially accordion. Traffic generated by search for the term 'Podoleni' ranks #25, with 45 views. In *Google search*, the first 25 search terms are all related to music searches, some for traditional music and some for specific instruments such as accordion, all in Romanian language.

The Romani Voices website is not indicated as one source of traffic, suggesting that Romani voices website users prefer to use the embedded videos and do not go to YouTube for watching them.

3.3. Engagement

Engagement is measured by user interaction and appreciation of the videos, and displays the following measures:

- Subscribers: 9 new, 1 lost
- Likes: 31
- Dislikes: 9
- Favourites: 8 (out of which 6 are for music videos and 1 for a testimonial about the relations between Roma and Romanians).
- Comments: 23 (out of which 15 on music videos)
- Shares: 8 (all on Facebook)

Most of the comments put forward positive and in fewer cases negative appreciations of music performances. Some of the other comments are deeply offensive ones, even racist, about the Roma minority, and quite few are appreciative of the value of the Roma. For instance, “Bravo asa e bine, ar fi nevoie de mai multi ca voi si mai putini ca ceilalti.” (Tr.: “Bravo, this is good, there is a need for more like you and less like the others.”), posted on the video “Our youth”.

4 YouTube usage statistics. Romani Voices in Munteni

The usage was analysed for the period: 18 October 2012 – 31 May 2013, corresponding to the channel lifetime when the study was conducted. The channel had 15 video uploads at the time of the study.

4.1 At a glance

Analysis time length:	7 months and 2 weeks
Views:	2’608
Average view duration:	1:14 minutes
Estimated time watched:	3’242 minutes
Peaks:	March, April 2013
Top 5 access locations:	Romania, Italy, Spain, Germany, United States
Top 5 videos:	1 Alcohol distillation 2 Poverty and life on the roads 3 How we make metal cauldrons

	4	Metal worker Dragos Stanescu
	5	Metal worker Dragan Stanescu
Top 3 traffic sources:	1	YouTube suggested video
	2	YouTube search
	3	Mobile apps and direct traffic

4.2 Views and audience

From 18 October 2012 to 31 May 2013, the YouTube channel of the Kalderash Gypsies in Munteni had 2'608 views with an average view duration of 74 seconds. The time watched overall is 3'242 minutes. The evolution in time displays peaks in November 2012, and March and April 2013.

Demographics

The top 5 geographic locations are Romania, Italy, Spain, Germany and United States. For each, the average view duration is quite high, more than a minute (Fig. 13.9). Given that videos are quite short, of a few minutes, this indicates a good level of engagement with content.

GEOGRAPHY	VIEWS ↓	ESTIMATED MINUTES WATCHED	AVERAGE VIEW DURATION
Romania	1,498	1,774	1:11
Italy	210	295	1:24
Spain	161	231	1:26
Germany	125	179	1:26
United States	106	160	1:31
Moldova	104	109	1:03
United Kingdom	81	110	1:21
Switzerland	69	79	1:08
France	34	29	0:51
Belgium	31	42	1:22

Figure 13.9. Views by the 10 geographic locations of YouTube users, Munteni channel. Period: 18.10.2012 – 31.05.2013. Source: YouTube Analytics.

Other demographic data were not available for this time frame.

Content

The top 5 most viewed videos indicate an interest for content about the traditional metal work and, less conspicuous, on poverty conditions. Videos that show "how things are done" in metal work tend to have the highest average view duration (e.g. how to make cauldrons or

dustpans).

Playback location

Most videos were seen on the YouTube watch page (2'170 views for 83.2%), second ranks use of mobile devices (337 views for 12.9%), and third views on other websites (98 views for 3.8%). Like in the case of Podoleni, views on the Romani Voices website are quite low (66 views) compared to the total number of YouTube views.

Traffic sources

Most traffic is generated by YouTube suggested videos (41.8%), followed by YouTube search (21.5%) and mobile apps and direct traffic (16%). Google search traffic ranks #4 with 7.2% of the overall traffic. Looking at engagement it is noted that the average view duration tends to be higher for embedded players on other websites, traffic driven by mobile apps, and direct traffic.

An interesting aspect is that the Romani voices website does not appear to have generated traffic, therefore users of the website do not go on YouTube to see the channel or directly the videos.

The top 15 *YouTube search terms* are all in Romanian and can be categorized in four types:

- Search for the locality (e.g. "Munteni Galati") or specifically for the group (e.g. Kalderash Gypsies Munteni Galati)
- Search for Roma (in general) and associated traditions (e.g. "Kalderash Gypsies", life in the tent)
- Search for metal work details and products (e.g. alcohol distillation, spirits cauldron)
- Search for names, for instance names of the metal work masters.

The *Google search terms* reflect the same categories, with a pronounced interest in details, masters, and products related to the metal work tradition (e.g. spirits cauldrons, how to make a dustpan, how to make a cauldron).

4.3 Engagement

Engagement, measured by user interaction and appreciation of the videos, displays the following numbers:

- Subscribers: 3 gained, 1 lost
- Likes: 2
- Dislikes: 0
- Favourites: 1 (Video: Alcohol distillation in cauldrons)
- Comments: 3
- Shares: 1 (on Facebook).

Two comments are on the testimonial by one of the metal workers, and are appreciative of his work and ask for his contact details. Another content on a video about poverty and nomadism compares Gypsies to American black people (named in jargon).

5 Conclusions

5.1 Website performance

The website performance numbers are not high, for a period of 16 months for one of the websites, and almost 8 months for the second. The quite low number of visits is partially explained by the fact that there was no integrated campaign in place for maximizing traffic. YouTube, Twitter and word of mouth were used for promotion, yet there was a low effort for a targeted campaign that could generate meaningful engagement with content by interested audiences. It is interesting also to note the high bounce rate, which suggests high numbers of accidental visitors or visitors interested to pick up quick information.

With respect to engagement with website content, the average visit duration is reasonably high (almost 4 minutes). Yet a deeper look at the data suggests that this is due rather to a smaller number of engaged visits (103 visits of more than 10 minutes), while a gross number of visitors stay for less than 10 seconds (658 visitors). The website of the Kalderash in Munteni appears to generate more interest than the one in Podoleni, judging from the number of clicks on the main homepage. The average visit duration is also higher for Munteni. Yet overall the Podoleni website had more visits and more page views, explained as well by the fact that the time period included in the analysis started with the launch of the Podoleni website, while the Munteni website was launched 6 months after.

With respect to the traffic sources, more than half of the traffic is direct. From referral traffic, YouTube generated a quite low number of visits (52 out of 1’029), yet these present a low bounce rate and meaningful engagement with content.

5.2 Website and YouTube comparison

Comparatively, YouTube generates significantly more traffic. Overall, the Romani Voices website had 1’029 visits and 5’508 views, while the cumulated number of views on the two YouTube channels is 49’802 (considering, nonetheless that the study period for the YouTube channel of the Podoleni community stretched two months longer). Another aspect is that YouTube offers a more engaged user experience, enabling users to access directly the content, in the voices of the community members. Comparatively, the most viewed pages on the website are either the homepages or category pages, indicating that many users did not go deep enough to listen to and watch the multimedia content. For example, the total number of *video views* seen on the Podoleni website is 97, whereas there are 47’194 video views on

the Podoleni YouTube channel.

The YouTube channels and the Romani voices website do not act as strong reciprocal referral sources. The website does not appear to have driven traffic on YouTube. On the other hand YouTube did generate traffic on the website, yet the numbers are quite low. A positive aspect is that despite their low number (52), the visits driven by YouTube on the Romani Voices website appear to be meaningful ones. For instance, YouTube-driven visits have a much lower bounce rate and a higher number of pages per visit than the site average.

With respect to content, the high number of views on YouTube for the Podoleni website relies greatly on interest in music performances. First, it is noted that the top 4 most viewed videos are music performances (amounting to 41'907 views out of 47'194 total). Second, there is an overwhelming majority of music-related terms in searches that drove traffic to the YouTube channel both on YouTube internal search and search on other engines. For Munteni, looking at the top videos and the search terms that drove most traffic, visits were driven more by interest in cauldron making and traditional artefacts rather than interest in the Roma or the specific community.

5.3 General conclusions

The most important observation is that while the YouTube channels appear to have found an audience, this cannot be said about the website. A strategy for promoting the website is needed for generating more, and especially more meaningful traffic. The formulation of the strategy depends on what goals are prefigured. Especially, it is important to understand if the aim is to generate interest and understanding in people *not* interested or negatively-oriented towards the Roma, or, alternatively, to target a segment of users that already have an interest in the Roma or groups and subjects drawing on characteristics of their livelihood and conditions (e.g. marginalisation, poverty). The analysis of YouTube usage can provide good leads in formulating a strategy for website promotion, as it highlights the interest patterns associated to video views trends. For instance, the interest in music could be used as a leverage for promoting the image of the Romani community in Podoleni. On the same note, the interest in traditional artefacts and cauldron making can generate interest in the Kalderash Gypsy community in Munteni.