



COVER SHEET

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Researching creative applications of new information and communication technologies

The concept of the 'creative industries' is seen by Hartley and Cunningham (2001) as 'an idea whose time has come'. The way in which it combines and transforms the terms 'creative arts' and 'cultural industries' is seen as moving us beyond traditional distinctions such as elite/mass, art/entertainment, sponsored/commercial and high/trivial by contracting the conceptual space between arts and large-scale industries such as media entertainment. It provides us with a new and inclusive way of thinking about 'creativity'.

At the same time as notions of creativity are spread more widely, the nature of production and consumption is seen to be changing from mass to networked models. Network architectures and the network economy are seen by many to offer opportunities for innovation and creativity along with exponential growth, and new technologies are seen to offer unprecedented freedoms and levels of access. However, forecasts about the emancipatory and democratizing potential of the internet have followed the patterns of rhetoric surrounding other technologies when they were 'new'. Spinelli (2000) and Meikle (2002) illustrate this powerfully when they compare the rhetoric surrounding the 'new' technologies of radio and the internet from the early and the late 20th century. What is lacking is rich empirical research that actually gives us insights into the practices, processes and consequences – in addition to the possibilities – of the uses of new media technologies. According to Pfaffenberger (1988: 249), to use technology is to 'express a social vision' and 'engage ourselves in a form of life'; it is a technology's 'social and mythic dimensions' that make it what it is. In order to explore the uses of new technologies, we need to see how they relate to those 'social visions' and 'forms of life' and understand the technology's 'social and mythic dimensions'.

Interest within QUT Creative Industries Research and Applications Center (CIRAC) in the changing processes and applications of creativity, production and consumption and the desire to gain deeper understandings of what roles new technologies play in all of this have led to involvement in, and development of, a growing body of comparative ethnographic research into the production and consumption of new media technologies. This is combined with an interest in the notion of innovation and how, in particular, it takes place in marginal spaces or 'unconventional places' (Couldry, this issue). Marginal spaces, cracks (Roth and Valaskakis, 1989) or fissures in the mediascape (Rodriguez, 2001) are associated with increased and more democratic access, freedom of expression and operation as well as creativity and innovation. But how, in practice, is this played out?

This article briefly describes two research projects that form part of a wider body of ethnographic comparative work. These two research projects stand apart from more traditional ethnographies in the way in which they combine ethnography with action research; they are, in effect, *applied* ethnographic research. The first is a UNESCO initiative that uses information and communication technologies (ICTs) in creative and innovative ways to reduce poverty in nine locations across South Asia. The second is a project that enables groups of young people across Queensland to become part of a network of active content creators for a streaming audio website. First, I will look at the research approach before describing the two projects.

Ethnographic action research

There are a growing number of models in existence or development that seek to bridge the 'digital divide' and engage marginal or excluded communities in the 'knowledge economy' by using new technologies and specifically the internet. Motivations are often a mix of social and economic development for defined and often disadvantaged communities; the generation of new economic enterprise and innovation initiatives; and the desire to enhance and provide distribution networks. An overarching concern in developed countries is with the promotion of e-democracy, e-business, community engagement and the development of 'knowledge economies'.¹ In the developing world, international donor agencies and local, national and international non-governmental organizations (NGOs) are funding and developing a range of initiatives, many targeted at harnessing the potential of new technologies for the alleviation of poverty and the promotion of rights. To date, however, there has been little evaluation undertaken to uncover the impacts – planned and unplanned – of such initiatives.

In early 2002, the UK's Department for International Development funded research designed to develop a transferable methodology for the evaluation of community multimedia centres in development contexts (Slater et al., 2002). The research involved an ethnographic study of a UNESCO-supported community radio and internet project in rural Sri Lanka, Kothmale Community Radio and Internet Project (KCRIP). An ethnographic approach allowed us to develop rich understandings of the project, the communities it serves and the ways in which media technologies are used. As an approach to the evaluation of such projects, we found ethnography to be insightful and more appropriate than more quantitative methodologies; we were able to make various recommendations that would allow the project to more effectively meet its objectives. But it was beyond the scope of that study and the time available to apply the research findings in any way beyond providing KCRIP with an evaluation report.

There were two intrinsic problems with conducting ethnographic research in this situation. First, ethnography is an approach that takes time. As Beattie pointed out in the 1960s in his book on the aims, methods and achievements of social anthropology, only 'close and sustained observation' can lead to an understanding of a culture, how the 'social and cultural institutions of a community fit together in a working pattern' (1966: 83). Partly we overcame this limitation (we had just one month 'in the field') through using a team of researchers and local research assistants, but the limitation remained, as we felt that we had so many more lines of enquiry that we were unable to pursue to deepen our understanding of KCRIP and its context. Miller and Slater (2000) have carried out ethnographic research into the internet in Trinidad in just one month; however Miller has been conducting fieldwork in Trinidad for a number of years and, without that background of work, as the authors acknowledge, the insights developed through that one month's focus on the internet would have been significantly reduced. Miller and Slater's work, along with other recent publications on anthropological studies of the media, demonstrates the ways in which ethnographic approaches can provide us with rich understandings of media technologies and their roles in everyday life (Askew and Wilk, 2002; Ginsburg et al., 2002).

The second problem is that, in order to develop a transferable evaluation methodology that would enable projects to apply research findings, we would need to create a more applied method, one where rather than simply coming up with research findings and recommendations, the projects would be empowered to apply them. With additional funding from UNESCO, we developed a methodology that aimed to overcome both of these problems by integrating an ethnographic research approach into projects and their

development, training project workers to undertake long-term ethnographic work and drawing on the strengths of participatory action research (Tacchi et al., 2003). In some ways, this development shares some of the features of the development of visual anthropology: the subject moves from in front of the lens to behind it. The whole point of ethnographic action research is to enable project participants on the ground to take the qualities of an ethnographic approach and, combined with action research, help the project work effectively, based not on preconceived ideas of how to use ICTs to achieve their aims (for example, in the UNESCO programme, to reduce poverty), but to understand in what ways they might be able to use ICTs within the wider ‘communicative ecology’ of their location. That is to say, ethnography is used here to help projects gain a richer understanding of the potential impacts of ICTs in any given setting through understanding both how ICTs might work well there and the setting itself. Combined with action research, these understandings are then used to develop the effectiveness of their projects.

Thus, the methodological approach is based on combining two research approaches (ethnography and action research) and is participatory to the extent that participants in the projects are fully engaged in the research process. We use ethnography to guide the research and action research to link the findings back into the project’s ongoing development. The approach has been developed to focus on the actual use of, and interaction with, technologies in the wider context of people’s lives and social and cultural structures – what we term ‘communicative ecologies’ (Slater and Tacchi, 2003). There are two main types of research that make up ethnographic action research: broad research that helps you to understand the wider society, culture, social and technological structures and communicative ecologies in which projects work; and more targeted research aimed at understanding one particular issue or set of issues or one particular part of the communities served. For both types of research activities, the same research process is implemented:

- 1 planning research
- 2 conducting research (collecting and documenting data)
- 3 organizing, coding and analysing data
- 4 planning and action.

It is a process that needs to be constantly repeated throughout the life of the project and linked into an ongoing project development cycle consisting of: plan, do, observe and reflect – a typical action research approach.

In this way, research continually investigates what the ongoing impacts of a project are, in what ways it is working and in what ways it can be improved, continuously building on rich understandings of the project, its context, its possibilities and its potentials.

In the first research project described below, this method is used to help nine dispersed projects ensure that they meet their aim to use ICTs to help in poverty reduction. The actions concerned are to refine and adapt their own work in creative ways to respond more effectively to the communities they seek to benefit.

In the second, the research recognizes that while, in regional and remote Australia, there is increasingly good access to infrastructure and connectivity (though not necessarily fat pipes), the challenge is to educate people in content creation, to allow them to engage in more active ways with the new network economy. The method is used to ensure that the participants in the project (groups of young people) are able to influence and shape the network that is being established.

ICTs for poverty reduction

Putting ICTs in the Hands of the Poor is a UNESCO programme that focuses on the innovative use of ICTs to empower people living in poverty. Research is integrated into nine projects in South Asia to help those projects develop effectively while, at the same time, investigating (through site-specific research and comparison) how ICTs can contribute to poverty reduction strategies. The focus is less on the technologies themselves than on their innovative and creative uses, in various combinations, in specific locations. Each site has a project worker, trained in the methodology, who is responsible for ensuring that the research is undertaken and fed into each project's development. These researchers are trained, supported and supervised by research coordinator Savithri Subramanian (based in New Delhi) and by Don Slater (London School of Economics) and myself. Training, support and supervision happen online (via email, a research website and chat) and face-to-face (via workshops and site visits).

One of the main challenges for us as researchers overseeing the whole project is the way in which its success relies on our ability to use the very same new technologies that we are researching. We have established a web-based interface for remote and widely dispersed researchers – who we are, at the same time, training – to communicate with us, to store and discuss research data and provide a space where we can develop and maintain a research network capable of generating significant findings. The research process itself will provide us with a level of understanding about how new networking technology can be applied and adapted in creative ways for this kind of dispersed research project.

The projects themselves cover a range of poor communities with a variety of technologies. They each present different social and technological access models that address both the root causes of poverty and key barriers to ICT usage by the poor. The project sites have been established (in India, Nepal, Bangladesh, Sri Lanka and Bhutan) in partnership with NGOs, governments, universities, private companies, media and technology groups as well as poor women, youth and their families. To give just three examples:



Figure 1 Nabanna project team and lead researcher holding a group meeting with direct beneficiaries at the home of a local woman. *Photo: P. Niranjana. Reprinted with kind permission*

Nabanna: Networking Women and Indigenous Knowledge (Baduria, North 24 Parganas District, West Bengal, India) uses a grassroots process to build an information-sharing network among low-income women to share and develop their indigenous knowledge. A core group of women (direct beneficiaries) are trained in computers and the internet. Each of these women forms an information group of 10 other women in their neighbourhood, bringing those women into the information-sharing network. In addition to using the internet as an information-sharing resource, a print newsletter is produced and distributed to the whole municipality.

Youth-led Digital Opportunities (Sitakund, Chittagong District, Bangladesh) provides an ICT centre linked to a grassroots youth development network addressing root causes of poverty and key areas of social and economic development. It promotes the empowerment of marginalized youth through ICT skills training and access to computers, the internet and other multimedia facilities.

Namma Dhwani Local ICT Network (Budikote, Kolar District, Karnataka, India) combines a radio studio, an audio cable network that delivers radio to local households and a telecentre with computers, internet connection and other multimedia tools. It is run by and centred on a network of women's self-help groups and linked to two government schools and a local resource centre. Daily community radio programming addresses local information and communication needs, drawing on a variety of multimedia resources.



Figure 2 Computer class in Sitakund, Bangladesh. *Photo:* Don Slater. Reprinted with kind permission



Figure 3 Radio studio, Budikote, Karnataka, India. *Photo:* Don Slater. Reprinted with kind permission

In each site, research is undertaken to obtain appropriate and effective project development. At the same time, we are combining and comparing research in order to answer the fundamental question that UNESCO and other donor agencies are grappling with: what are the potential impacts and potentials of ICTs on poverty reduction in a development context? The appeal, in this case, of the combination of ethnography and action research is the promise it gives of ensuring that each project produces rich research

data that will deepen our understandings of both the experience of poverty in different locations and the potential of new technologies to alleviate the situation, allowing each project the best chance of success by feeding research findings back into the projects' activities in order to achieve their aims.

It is already clear that, for the nine projects, one key issue revolves around the need to create what we might call 'spaces of innovation' rather than any inherent properties of new technologies. This was clear in the Sri Lankan research: these spaces of innovation are generated or restricted by complex combinations of technical, local, bureaucratic and other factors (including complex relations of new technologies and organizations to existing communicative ecologies in each place). Ethnographic action research is therefore important in project development; to develop or protect emerging spaces of innovation and engagement, it is important to combine rich local knowledges with action and experimentation.

Youth Internet Radio Network (YIRN)

This project, led by John Hartley at CIRAC, has attracted widespread support (including financial) from the Australian Research Council and from state and local government organizations from across Queensland, including at ministerial level. The research team (John Hartley, Greg Hearn and Jo Tacchi) combines an interest in 'innovation at the margins' with an agenda that is seeking to bring together economic policy (emergent industries), content creation and an interest in how new technologies and enterprises are taken up among young people, the marginalized and indigenous communities. YIRN is:

1. establishing a network of young content providers across urban, regional, remote and indigenous locations;
2. researching how young people interact as both producers and consumers of new media content and technology;
3. identifying how different communicative ecologies within the network influence and learn from each other; and
4. understanding how culture and creativity combined with new technologies can be a seedbed for innovation and enterprise.

An audio streaming website is being developed and hosted at QUT in the Creative Industries Streaming Studio. Groups of young people across Queensland will have access to, and be trained in how to produce content for, the site: audio (music and speech), text (stories, reports, journals) and visuals (photographs, artworks). Through this network and the website, young people will be provided with a distribution platform for their locally-created content. In addition, the network will allow groups of young people to interact with each other and with others (including government) on topics and issues chosen by them via forums, messaging services, message boards, blogs and emails.

YIRN provides an ideal research opportunity to investigate how ICTs are used for interaction, creativity and 'innovation at the margins'. Essentially, we are working with the streaming and digital technologies available to us and our content providers to establish a network based upon a mix of old/new technologies and sophisticated/basic ('fat'/'thin') means of circulating content. This will allow participation from a variety of groups with different levels of access to infrastructure and equipment while at the same time uncovering innovative connectivity solutions at local levels.



Figure 4 The Creative Industries Streaming Studio at QUT. *Photo: Inside QUT.* Reprinted with kind permission

Training in content creation will provide this project with an important way of interacting with and getting to know the content providers in their localities. A series of workshops (three over two years) will be carried out with each group. Ethnographic fieldwork will also be conducted at other times. A rich soundscape, supplemented by text and visuals, will be streamed on the internet and archived for time-shifted consumption to produce a mosaic of local content reflecting the diversity of the lives of young people across the state as well as their shared experiences and interests. Through the workshops, young people will learn about the possibilities (and restrictions) of new technology and, through their experimentation, they will shape the content of the website and the development of the network. The success of this project is to a large extent dependent upon the quality of the research we carry out and our ability to feed it back into the project by allowing the network to develop according to participants' needs and desires rather than our own agendas. We must keep the centre of the network simple and allow intelligence (and creativity and innovation) to thrive at the ends.

The combination of media ethnography (method), enterprise development (policy) and creative industries (media innovation among consumers and content creators) promises to investigate and answer important questions. If the new economy is a network economy, if the new raw materials are information and knowledge and if the new workforce needs content creation skills, how will these young people actually utilize, be a part of and develop the network we present them with? Will it make them more employable and will it enrich their local social and cultural lives? How do creativity, access, networks and connectivity work together (i.e. what are the results of ensuring access and training at this level to a diverse and dispersed set of groups of young people living in urban, regional and remote locations with different socioeconomic backgrounds, genders and racial heritages)? Furthermore, an important part of the ethnographic research will be to look at the ways in which this network works as a communication space: on the one hand, how will young Aboriginal people in Mapoon (remote far northern Queensland) talk to other young people in (relatively) nearby Weipa or faraway Longreach (central Queensland) or Brisbane? How will they represent their very local lives and their notions of local and national identity? On

the other hand, how will they communicate with government? What information will they ask for and what information will they present? Do young people in different parts of Queensland see themselves as active citizens? Do they want to be active citizens?

Similar questions can be asked of the UNESCO research. What kinds of information will some of the poorest people in the developing world be offered? What information will they access? What do they want to access? What will they do with this information and what information sources will they trust? Just how will they engage with new technologies and how relevant will they seem to their lives? What channels of empowerment does new technology offer them beyond access to basic information on health, market prices, government schemes, and so on? And how does all of this relate to their wider communicative ecologies and everyday lives?

These, therefore, are two large and ambitious research projects that use and adapt traditional ethnographic research approaches to create an applied methodology – and apply it – in two very different contexts. Harrison et al. would perhaps consider both of the projects as attempts to ‘advance some version of democracy through experimentation with new technologies or with new social formations that are embedded in some way through new technologies’ (2002: 150–1). However, from a research perspective and in the wider context of other ethnographic work being undertaken, they offer the chance to begin to develop answers to some very basic – and, as yet, partially or totally unanswered – questions about the implications of new technologies on the everyday lives of a wide range of people and the implications of the everyday lives of those people on the uses and potential uses of new technologies. Further than this, they seek to examine whether new media technologies promote new forms of creativity and enterprise in practice.

Note

- 1 See the e-democracy website at the Department of the Premier and Cabinet (<http://www.premiers.qld.gov.au>) for a Queensland example; and (<http://www.dfes.gov.uk/ukonlinecentres/>) for a UK example.

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