# Creative Uses of ICT in Connected Communities: A Scoping Study

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## ABSTRACT

In this paper, we present a scoping study about creativity and connected communities, funded by the AHRC Connected Communities programme and the EPSRC-funded SiDE (Social Inclusion through the Digital Economy) project within the Digital Economy hub. This project aims to problematise the notion of 'community' in the context of an increasingly technology-driven society. It also aims to provide a multifaceted analysis and critical discussion of connected communities and the creative ways they form, sustain and re-invent themselves creatively through technology. Thereby, we attempt to unpack the complex relationship between digital technologies, their creative uses by communities, and the socio-cultural impacts of this use.

## Categories and Subject Descriptors

H m [**Information Systems**]: Miscellaneous.

## General Terms

Documentation, Human Factors, Theory.

## Keywords

Connected communities, digital technologies, creativity, use.

## 1. INTRODUCTION

The concept of community has long been recognised as being difficult to define [3] Ferdinand Tönnies' early definition (gemeinschaft) in the late 19th Century emphasised reciprocal human associations and paid little attention to any bounded locality [2]. Many theorists have since regarded communities as networks of interacting people within a defined territory and policy-makers have tended to respond to this particular understanding [4]. In an era where the Internet and digital technologies have brought about global and transnational forms of connectedness, the notion of community is being once again redefined. Enabling new forms of grassroot movements as well as facilitating the efficiency of already existing ones, digital technologies are also re-placing communities at the forefront of social innovation, as an innovative fertile grounds for alternative social organisation.

Connected Communities is a cross-council research programme that aims to "understand the changing nature of communities" and "to mobilise the potential for increasingly inter-connected,

culturally diverse, communities to enhance participation, prosperity, sustainability, health & well-being by better connecting research, stakeholders and communities." [1]. As one of the first steps in this programme, the AHRC issued a call for scoping studies on this topic, in order to inform the future directions of the programme.

One of the awarded projects, our scoping study entitled "Situating Community through Creative Technologies and Practice" is a review and analysis of literature and projects focused on the relation between creative uses of digital technologies and the notion of connected communities; problematizing the notion of 'community' in the context of an increasingly technology-driven society

In this paper, we will introduce our scoping study and how we are exploring how creative practices and technology uses can play a role in building, sustaining and re-inventing communities.

## 2. OBJECTIVES AND APPROACH

We this project, our aim is to provide a critical think piece that contributes with the following:

- An understanding of how connective technologies modify the definitions of communities in relation to space, place and social structures.

- An analysis of how (whether constructively or disruptively) digital technologies, their design, and their creative uses, enable communities to sustain, empower, and re-invent themselves.

- An exploration of how digital technologies can open channels of expression to societal groups traditionally understood as being marginal or on the fringe.

- An analysis of the socio-political impact of community connectivity on society, in particular during this period of economic change.

- A highlighting of issues, successes and failures of research involving communities and digital technologies.

The scoping study consists of a robust and focused review of existing work on digital technologies, creativity and communities. As encouraged by the AHRC and due to the nature of our existing research group, our scoping study is inherently interdisciplinary and includes perspectives from the fields of history, geography, human-computer interaction, design, community arts, political science, philosophy, cultural theory and social science. Going beyond academic literature, our scoping study also includes a review of grass-roots community initiatives, pop culture artefacts, and current societal debates in the press and the blogosphere, thereby also addressing and learning from projects and initiatives not usually captured by academic research. Through this, we aim

to have a multi-faceted overview of 'connected communities' and inform future academic research about under-researched problematics in this area. Making use of our experience in technology innovation and social impact research, we select projects based on the criteria of their level of innovation with (and impact upon) digital technologies, as well as social impact.

In order to understand how the concept of communities has evolved through its interaction with technology, we attempt to redefine 'community' beyond its traditionally place-bound or ethnicity-related, or institution-related definitions by including notions of "communities of practice" [6] and their often distributed, grass-root nature. The idea of practice as what ties a community together rather than geographical location or common cultural references renders creativity and creative practices as relevant and even central element of the equation.

## 3. THEMATIC SCOPING

We approach connected communities in relation to their creative use of technology through the angle of four complementary strands: context, use, implications and alternatives.

### 3.1 Contextualisation: Technology and Communities in History and Popular Culture

Taking a historical perspective, we explore the relationship between society and technology from the 19th century onwards and evaluate how technologies in the past have impacted how communities have been realised over time. This connects the notion of community to technological development and how the way we have been thinking about technology, progress and their role in society influences how we relate to other members of a community.

### 3.2 ICT in Use: Cultural Expression and the Empowerment of Communities

Bringing together literature from the fields of computer science, human- computer interaction (HCI) and interaction design, with projects material from the participatory arts, the focus here is on the actual uses of digital technologies by communities, as well as on emergent technologies being developed for social interaction: We unpack how digital technologies are being used and misused in a resourceful way by communities – from 'positive' communities such as programmers, hobbyists, diasporas and families, to political extremists and criminal groups. By looking at how technology is used in an innovative, creative and sometimes unexpected way, we aim to understand how such use can help communities strengthen, empower and re-invent themselves.

More specifically, we look at how people and communities – whether co-located or distributed – use technology to connect with their families, friends, loved ones, collaborators and other members of a community as well as give design examples, guidelines, and analysis of underlying human behaviours influencing this use of technology. We also look at the fields of participatory design for communities and social informatics, and their relation to community empowerment.

### 3.3 Implications: Emergent Communities, Identity and Space

This strand of the study unpacks literature from the fields of geography and social science concerned with how digital technologies have transformed the nature of identity, our understandings of space, and the impact this has on community. In particular, we review the impact of networks and web-enabled technologies and how these have come to challenge 'classic' understandings of community by connecting people across multiple (local, global and transnational) scales.

Here, we look specifically at the socio-cultural nature and implications of Web 2.0, at the online-offline binary of distributed communities, their relation to space and borders, and at the evolving relation between the individual and the group.

### 3.4 Alternatives: Political Projects, Counter Cultures and New Social Models

This strand of the review is concerned with connected communities from a philosophical, political and cultural-theorist perspective. We look at underlying political thoughts and ideas behind community-based projects and see if they epitomise desires for a new society, for new economic models, and for different relationships in terms of governance. This includes looking at relationships between communities and utopias, and how technology enables collective projects to happen that can eventually 'change the world' or the way we fantasise about it. This theme also includes science-fiction literature in how popular culture has been exploring alternative and visionary futures for society.

## 4. CONCLUSIONS AND FUTURE WORK

We have introduced our scoping study entitled "Situating Community through Creative Technologies and Practice". Approaching this topic from an interdisciplinary perspective we cover historical and cultural context, studies of creative community uses of ICT and of technology design for communities, implications of connectivity on community emergence, identity and space, as well as emergent utopia and new social models. As part of the project, we are also organizing a public symposium that aims to open a dialogue on the topic of connected communities among international experts from various disciplines, grass-roots community workers, communities themselves and the general public.

## 5. ACKNOWLEDGMENTS

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