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Choosing friends carefully: allies for critical computing

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Choosing friends carefully: allies for critical computing

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ABSTRACT

In this paper, we argue firstly that researchers in critical computing should address the specific information and communication technology (ICT) needs and activities of those agencies concerned with emancipatory issues. Secondly, we argue that a critical perspective, explicitly foregrounding empowerment and emancipatory concerns, forms a basis for emphasising the practice of individuals, groups and organisations, rather than purely focusing on organisational form in social action.

We discuss this context of social action, identifying some relevant ICT-related challenges. We identify three themes that highlight factors that differentiate ICT support for social action groups from the setting of conventional business and service organisations: Free / Libre Open-Source Software, techniques and technologies for engagement through storytelling, and learning and evaluation in social action.

Keywords

social action, critical computing, HCI

INTRODUCTION

Living in a world of illegal wars for oil, poverty, the warming of the earth and the AIDS pandemic in large areas of the developing world, it is self-evident to us that issues of empowerment and emancipation are as central as they have ever been. How, though, might critical computing researchers contribute to addressing some of these issues?

In this paper, we argue firstly that researchers in critical computing should address the particularities of the information and communication technology (ICT) needs and activities of those agencies concerned with emancipatory issues: for example, development agencies, human rights organisations, community and voluntary groups, environmental campaigners, trade unions and so

on. These agencies may variously be described as belonging to 'civil society', or as engaged in 'social action'. In such settings, the use of ICT has become a commonplace, not only as an aid to improving the efficiency of traditional activities but also enabling entirely novel forms of action and organisation [2,3]. Whilst we know that technology design and use is always (reflexively) shaped by contextual factors, there appears to have been little research conducted to examine how the contexts of social action differ from the commercial, educational or governmental environments in which the majority of computing research is conducted, or to examine how ICT might better address the needs of these organisations.

Secondly, we argue that a critical perspective, explicitly foregrounding empowerment and emancipatory concerns, forms a basis for avoiding an overemphasis on organisational form in discourses around social action.

We then report on work in progress within the UK research cluster 'Technology and Social Action'. In particular, we report some specific areas of concern that have been highlighted in discussions with practitioners and discuss how critical computing research might contribute.

CRITICAL COMPUTING & EMANCIPATION

The Call for Papers for a recent critical information systems workshop¹ posed the questions:

'Who is our research aimed at – is Critical Research in IS an 'empty rhetorical shell' or can it shorten the way towards emancipation and a power shift in IS practice?... can Critical Research in IS offer positive proposals leading to emancipation and change?'

One response to these questions is to align the concerns of critical computing with social agencies concerned with emancipation and empowerment in society more widely. The mainstream of computing research is concerned with corporate (and to a lesser extent, governmental) use of ICT. Critical computing has raised important issues in these

¹ Critical reflections on Critical Research in Information Systems, Universtiy of Salford, UK 1st July 2004

areas, in areas of job design and participative design methods. Those social agencies – human rights organizations, trade unions, alternative media networks and so on – which are implicitly or explicitly concerned with issues of empowerment are increasingly (in some cases centrally) concerned with the use of ICT in enhancing or even transforming their work. Blythe & Monk [1] describe a work system where volunteers who are ‘technology rich, but time poor’ work with Age Concern York to allow elderly, housebound people to take advantage of on-line supermarket shopping. Kleine [8] examines how three different fairtrade organisations in Germany have designed their websites to reflect their differing emphases between the goals of selling more fairtrade goods and educating customers about trade injustice. Social action groups are globalizing alongside corporate interests, representing a critically oriented globalisation movement. Watts et al. [13] report on Indonesian Non-Governmental Organisations (NGOs) use of on-line discussions to coordinate and promote action nationally and internationally.

Aligning critical computing with concerns of these organizations offers critical computing researchers a way of contributing to wider social emancipation.

SOCIAL ACTION, CIVIL SOCIETY, SOCIAL MOVEMENTS

A critical approach can lead to innovative responses to the “empty rhetorical shell” challenge.

We have taken some initial steps in exploring ICT use in social action from information systems and Human-Computer Interaction (HCI) perspectives through two workshops ‘Can there be a social movement informatics?’ [11] and ‘Designing for Civil Society’ [6] and through a special issue of the journal *Interacting with Computers* [12] We are now working to establish a research cluster in the UK, ‘Technology and Social Action’ as part of the ‘Design for the 21st Century’ research programme. A core aim of this cluster is to identify and create spaces where practitioners and researchers from multiple perspectives can develop a discourse of ICT in social action.

As is evident from the labels we have attached this work at different times, we have been struggling to articulate our precise concerns. We rejected the original term ‘social movement’ in preference for the broader concept of civil society, though is itself a rather ill-defined and problematic concept. The term is widely used to describe the totality of those networks and institutions that exist and operate independently of the state and the market. A widely accepted definition is:

“the arena of uncoerced collective action around shared interests, purposes and values. In theory, these institutional forms are distinct from those of the state, family and market, though in practice the boundaries between state, civil society, family and market are often complex, blurred and negotiated. Civil society commonly embraces a diversity of spaces, actors and

institutional forms, varying in their degree of formality, autonomy and power.” [4]

However, while this definition is commonly accepted (e.g. in Wikipedia 31/5/05), there are differences in the nature and reach of action taken by the groups that constitute civil society. For some, the significance of civil society is its role in sustaining social cohesion, in a sense closely related to Putnam’s [9] use of the term social capital. Participation in civil society through, for example, sports clubs and evening classes is important in maintaining a cohesive society. Others emphasise civil society as a source of social change, for example examining the emergence of a ‘global civil society’ comprised primarily of NGOs concerned with issues such as humanitarian relief, trade or the environment [5, 10]. Castells [2], uses the term in a way that he argues is closer to that intended by Gramsci [7], emphasising the role of civil society in legitimising the roles of society’s dominant institutions and reducing attempts at social change. The concept is further confused by the blurred nature of the boundaries with state, market and family .

The alternative term ‘social action’ developed in the context of the research cluster, defines the space in terms of the commonality of practices, values and activities that characterise it, rather than referencing abstract ‘movements’ or relations to other social institutions. Some characteristics that might distinguish social action organisations (whether formally constituted or operating as informal networks) are:

1. most rely heavily on the work of volunteers who are not professionally trained in their area of work and some of whom have limited experience of technology;
2. their values go beyond commercial profit and ‘efficiency’, often with a strong goals of inclusiveness and openness to sharing knowledge with external groups (where such groups hold compatible positions);
3. as organisations, they typically work with limited financial resources, relying instead on participatory structures to define and accomplish their goals;
4. they often aim to reach people with limited access to technology;
5. they may involve people who are widely distributed with little opportunity for face-to-face communication;
6. many address contentious issues that may put them in conflict with government, corporate organisations, or other agencies of social action.

These distinctive traits support our claim that the area of social action could benefit from targeted research.

While this use of the concept of ‘social action’ reduces the emphasis on organisational form (though this remains important), it doesn’t provide a basis for distinguishing between that social action which is (potentially) emancipatory from that which is (potentially) oppressive, as in some forms of nationalism. Adopting an explicitly

critical perspective offers a way of considering the emancipatory potential and practice of ICT use by social agencies, whilst attending to the degree that such agencies are supportive of emancipatory change.

AN AGENDA FOR ICT AND SOCIAL ACTION

We now turn to ICT-related issues of concern to those involved in social action. Identifying the space of social action as a topic for research in critical computing raises an important ethical issue. Research involves both benefits and costs. Sometimes the benefits are long-term and ill-defined, rather than readily identifiable and immediate. For people engaged in social action, costs to consider are the time and energy spent discussing with researchers which may distract from their current activities and goals. This places an ethical obligation on researchers to listen carefully to the needs and priorities *as perceived by practitioners*.

One goal of the Technology and Social Action research cluster is to identify those ICT-related issues of pressing concern to practitioners and to which researchers in design-related disciplines can contribute. This goal necessitates a process of dialogue in which practitioners can drive debate. We have been undertaking an on-line Delphi consultation with a panel of experienced (English-speaking) practitioners primarily in the UK and Europe, but also including a range of non-English speakers from around the world. Delphi is a multi-round consultation mechanism in which panel participants make their contributions in a series of 'rounds'. After each round, the inputs are anonymised, collated and fed back to the panel members. One of the key advantages claimed for this technique is that it ensures that panel members have an equal opportunity to voice their views, avoiding possible group dynamic effects. The Delphi method does not rely on statistical generalization but seeks to identify areas of consensus and disagreement in target domains. The members of the Technology and Social Action Delphi panel are practitioners in the application of technology to social action settings, each having at least 5 years experience. An initial invitation was sent to 80 individuals, of whom 25 have responded by contributing. The individuals are drawn from a wide range of social action settings including voluntary organisations, community development networks and trade unions.

The Technology and Social Action Delphi consultation is structured in three rounds. In the first round participants identify what they consider the most important issues under four general categories: 'wider social and economic issues', 'technology and related issues', 'design methods and processes' and 'other'. In each category, each participant could contribute up to six discrete issues (single line text fields), and could also make more general comments. The issues identified populated the second round of the consultation. Unsurprisingly, a diverse range of issues were identified by this first round, including questions of

'intellectual property rights', the internal management of social action organisations, funder awareness of total cost of ownership issues, organisational learning about ICT, security issues, skills and many more. A number of areas were suggested ranging from the use of ICT in campaigning, use of ICT in organising, social software to network infrastructure (broadband, wireless) The issues also raise questions about national and international policy: for example issues of media concentration, telecoms regulation, freedom of communication, technology transfer policy, and accessibility.

The results were clustered (by the authors), identifying 57 'consolidated' issues concerned with the design, implementation and use of ICT, 14 areas or domains of ICT use and 18 policy areas. The panel members were asked to select within each category a restricted number of items that they regarded as important areas for their own work, and then (independently) to select items where further research might make an important contribution. The results of this round are currently being analysed, to identify areas of commonality or differences. A final round of the Delphi is planned to explore degrees of consensus and disagreement about these prioritisations.

EXPLORING ISSUES FOR ICT IN SOCIAL ACTION

In addition to the Delphi consultation, the cluster is holding a series of workshops during 2005 to explore the space of ICT in social action and to promote new partnerships between practice and research. The first workshop brought together a diverse mix of practitioners and academics. A variety of brainstorming and clustering techniques were applied in the workshop in an effort to bring out key issues and to identify themes to explore in developing a research agenda. From the workshop, three key themes were taken forwards for further investigation and debate at later workshops and on-line. These themes do not represent any specific prioritisation. Rather, they reflect the current interests of the participants in that workshop. Other issues discussed included sustainability of ICT initiatives, relation to different geographic constraints (urban vs. rural). The topics we selected for further investigation and discussion are:

Free / Libre Open-Source Software (FLOSS)

Financial constraints and cooperative organisation suggests that the FLOSS community might have much to offer civil society groups. Open-source could offer social action organisations lower software costs, and demonstrates similar values of openness and knowledge sharing frequently claimed by the social action sector. But how well are current open-source projects matched to the requirements of social action organisations? Are there unmet needs or unrecognised opportunities for innovation? How well can social action organisations predict issues such as the 'total cost of ownership' associated with selecting open-source solutions? Where can organisations turn to for reliable advice? How might social action organisations work with open-source to promote social

innovation. Discussions that are planned will explore the current scope of open-source software and services in relation to the needs of the social action sector, and develop an agenda for future developments.

Narrative and Drama to galvanise social action

The need to foster deep participation in debate and inter-organisational cooperation suggest new "narrative" methods and resources could help to bridge between widely different people and groups. Whenever calls to take action are in the air, relations are more likely to be passionately animated than colourless and objective. The conflict of voices wanting different things can mean some people are put off entering the arena, and that energy fizzles out before action can be taken. People have stories to share, to mutually appreciate their excitement and their grievances. The ability to engage through storytelling could be a way for communities to build momentum, and to galvanise their efforts. Ongoing discussions are planned exploring the potential of online environments that provide opportunities for dramatic and narrative storytelling and exchange. How might new electronic media be designed to enable joint participation in writer-reader, publisher-subscriber, actor-audience roles? What are the design challenges and technological opportunities in narrative and drama for social action and understanding conflict?

Evaluating and learning from technology projects

The organisational culture of most civil society groups is quite distinct from those of government, business and education. Appropriate evaluation techniques are needed for social activists to monitor, learn and improve their effectiveness. While there is a large body of research to inform those concerned with the design and use of digital technologies in business and government, there is much less for those involved in social action settings. The purposes, contexts and values of ICT use in social action are frequently radically different, limiting the extent to which useful knowledge can be inferred. Hence, effective evaluation can play an important role as a vehicle for social and organisational learning about technologies and their use. This theme will focus on issues in the philosophy, design, conduct and dissemination of evaluation of technology-related projects. The objective is to ensure both that lessons are learned and that they are presented in forms which can be applied in other social action settings. A critical perspective, emphasizing learning about emancipation offers particular opportunities here.

Summary

We have argued that the concerns of those involved with ICT and social action are of particular importance to critical computing research, and that a critical perspective offers the potential of deepening our understanding and work in this area. The Technology and Social Action research cluster is an open organisation. See <http://www.technologyandsocialaction.org> for details.

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