Digital Soapboxes: Towards an Interaction Design Agenda for Situated Civic Innovation

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Abstract
We argue that there are at least two significant issues for interaction designers to consider when creating the next generation of human interfaces for civic and urban engagement: (1) The disconnect between citizens participating in either digital or physical realms has resulted in a neglect of the hybrid role that public place and situated technology can play in contributing to civic innovation. (2) Under the veneer of many social media tools, hardly any meaningful strategies or approaches are found that go beyond awareness raising and allow citizens to do more than clicking a 'Like' button. We call for an agenda to design the next generation of 'digital soapboxes' that contributes towards a new form of polity helping citizens not only to have a voice but also to appropriate their city in order to take action for change.

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Civic innovation, situated engagement, interaction design, citizen activism, urban informatics, polity

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Introduction

Design research into human interfaces for civic and urban engagement is a significant and timely topic for three key reasons: First, place – the feared ‘death of distance’ that had been heralded when the internet first became commercially successful, never happened. In the contrary, the bold rhetorics that predicted face-to-face to make way for a proliferation of e-commerce, distant education, telework, and other remote online transaction capabilities, never became entirely true as predicted. Local place thrives, and does so in ways ameliorated by new forms of situated engagement, locative media, and location-based services [9]. This is further corroborated by the rapid pace of urbanisation that has tipped over 50% across the world, and reaches close to 90% in places such as Australia where the majority of the land is sparsely populated.

Second, technology – ubiquitous computing has spilled outside the traditional HCI bastions of ‘work’ and ‘home’ into every aspect of human endeavour. This trend brought about not just new technology and interface innovations but also new technical user practices that bridge the physical and the digital city: mobility, situated technology, embodied interaction, augmented reality, urban screens, big data, etc.

Third, people – they must no longer be understood as passive users or consumers placed by designers, developers and marketeers at the receiving end of products and services, since they are increasingly able and empowered to also be producers [1] and active agents of change [8]. Civic participation and engagement is thus a useful theme begging further exploration in light of cities turning more and more interactive and responsive [7], technology opening up new platforms and channels for citizens to be heard [11], and people no longer being limited to conventional modes of citizenship [2] – or are they...

In this paper, our understanding of ‘civic and urban engagement’ is not as broad as what the term may entail; it does not include municipal services that are being provided or enhanced through digital means. It does not focus on the usual array of citizenship (Figure 2) such as voting, jury duties, consular assistance, legal rights and obligations, although it does not explicitly exclude them when they become relevant as a consequence of citizen action. This paper concentrates on what is usually termed ‘civic action,’ ‘citizen activism,’ and ‘grassroots community engagement.’ Prominent examples of innovations in this space that combine the aforementioned trends across people, place, and technology, include ushahidi.com – a citizen journalism and news aggregator that was initiated as a result of the 2007/2008 Kenyan post-election violence [10] (Figure 1); crowdsourcing measurements of radiation levels around Fukushima following the 2011 nuclear disaster in Japan; and, the way social media and mobile devices were used to mobilise the masses from large scale, multi-country movements such as the ‘Arab Spring,’ to local issues such as ‘Stuttgart 21,’ a protest movement against a controversial railway and urban development project in southern Germany that contributed to the very first Green Party politician to be elected Head of State of Baden-Württemberg.

In this paper, we ask what the next generation of civic innovation should look like. We call not only for new ‘digital soapboxes’ that urban citizens can use to have a voice and make themselves heard, but also for new strategies and approaches to close the gap between community activism that ‘only’ raises awareness of a particular civic issue on the one hand, and on the other...
hand traditional forms of top-down governance, polity, and decision making that brings about societal change. It strikes us that currently, there appears to be not just a disconnect, but also an increasingly widening discrepancy in the level of interest and the pace of innovation on each side. We hope that this paper can contribute towards an interaction design agenda that informs the thinking of the HCI and Ubicomp community when designing new and innovative human interfaces for civic and urban engagement.

**Citizen Activism and Community Advocacy**

Dutton [6] refers to the public participatory capabilities of the internet and the web as the ‘fifth estate,’ as distinct from the legislative, executive, judicial branches of government, and the press. In the following, we look at three forms of citizen activism and community advocacy that operate within the fifth estate: First, established non-government organisations (NGOs) that embrace the web to extend their campaign efforts; second, web-based petition sites that heavily employ social media for viral marketing of ‘people-powered politics’ and campaigns; and third, examples of ad hoc, impromptu, and in situ (at times, hyperlocal) activism that employs hybrid – combining physical and digital – forms of engagement.

**Old Dogs**

Even before the advent of the internet, citizens sought to come together to form clubs, movements, societies, organisations, and associations for various, often non-partisan but issue-specific purposes. These non-government organisations (NGOs) often focus on broad societal issues such as development (Oxfam), environmental degradation (Greenpeace, WWF), or human rights (Amnesty International, HRC). Many of them have started to utilise the web to enhance their missions (Figure 3). How can users get involved? The core set of options usually comprise: donating money, becoming a member or volunteer, join demonstrations or related events, sign petitions or letters of protest that are sent to elected constituents and politicians.

Although many NGOs transitioned from a single web site to a distributed web presence that encompasses several social media platforms, there are few examples of situated civic innovation that combine physical and digital means. Notable examples are often skewed to either the digital or the physical: Movember is a movement encouraging men to grow a moustache in the month of November to raise awareness and funds to help combat prostate cancer and depression in men. The moustache turns into a physical symbol, and social media is used to assist the campaign. Similar signs and manifestations are employed by the Leukaemia Foundation’s ‘Shave for a Cure,’ as well as the ubiquitous red ribbon worn on 1 Dec for World AIDS Day. A recent digital case was a red variation of the Human Rights Campaign (HRC) logo being adopted by millions of Facebook users as their profile picture – turning news feeds into a bold statement in support of same-sex marriage (Figure 4).

**New Kids on the Block**

The above NGOs tend to focus on large-scale issues and so-called ‘wicked problems.’ Digital newcomers such as change.org, getup.org, avaaz.org, one.org, have specialised in more local and regional issues using predominantly online campaigning. Offering multiple topics allows these sites to cross-fertilise their campaigns. Some have also recognised a need for DIY campaigning, allowing users to employ the power of their mobilisation capabilities to start and maintain their own campaigns (e.g., communityrun.org, Figure 5).
Despite quite progressive uses of social media, the array of what users can do remains limited, and tends to stay online-only. Is clicking a ‘Like’ button or sending a petition email sufficient to solve today’s societal problems? How could NGOs and citizens employ situated technology to not only raise awareness, but also participate and engage in a new form of polity?

**Urban Guerrillas**

In seeking answers, ideas and inspiration may be drawn from what Futurists call ‘weak signals,’ that is, innovative small-scale movements or sub-cultures with the potential to grow and mainstream. Ad hoc gatherings in urban public places such as dancers in ‘Flashmobs’ and cyclists in ‘Critical Mass’ use both realms of the digital (to organise, document, scale up) and the physical (to gather, perform, create spectacle). Related hybrid examples of situated engagements that are being assisted by digital means include seed bombing, permablitz, guerrilla knitting, Park(ing) Day, Dîner en Blanc, parkour, and various artistic and media performances and installations [3] (Figure 6).

**Conclusions**

We argue that it may be useful to apply the lessons learnt from the way situated civic engagement is enacted by the urban guerrillas, to the so far mainly online focussed campaigning efforts of civil society organisations. However, the more pressing and challenging issue is to find new ways to expand the toolbox that is available to citizens to take action and bring about change [4, 5]. Can we offer more options than the usual array of petitioning, protesting, volunteering, and donating? Or, how can we improve the way that they are performed? How can interaction designers use their expertise, skills and craft to make a contribution to better the connection, the exchange, and the dialogue between community advocacy and activism on the one hand, and polity, governance, politics, and decision making instruments on the other hand? How do we exploit and influence the role that new technology plays in this context, such as mobile devices, next generation screens, gestural and human-brain interfaces, and augmented reality glasses?

Interaction designers collectively created the tools that helped consumers turn into ‘produsers’ [1]. Let’s apply our magic to do the same for citizens and citizenship.

**References**