Mapping experiences of injustice: developing a crowdsourced mapping tool for documenting good practices for overcoming social exclusion.

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Abstract

Social justice seeks to support fairness through fostering relationships that enhance and strengthen responsibility for one another. It is built upon the principle of equality of opportunity. In the context of government and governance it is often linked to specific policies or programs that seek to ensure the fair (re)distribution of services and benefits. Information communication technologies (ICTs) have opened new opportunities and challenges for enacting social justice. We have identified eight groups who are often excluded from full access and participation in the digital realm: low-socioeconomic status individuals, remote and inner-city groups, indigenous groups, recent migrants, the homeless, people with disabilities, people with mental illnesses, and senior citizens. In order to better understand the relationship and tensions between and within these populations, and digital inequalities and social justice, we have developed an interactive website that uses crowdsourcing to facilitate the sharing of examples where organizations and governments have directly engaged with excluded groups using ICTs and more specifically, sites using ICTs with open data. Recognizing the existence of these efforts to address and overcome these inequalities, we provide a platform for the discovery and sharing of good practices. We anticipate that this platform will bring together activists, academics and government personnel in order to collectively learn as well as contribute to how ICTs and open data can act as a means to enhance social justice.

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Social Justice

The term 'social justice' was coined by Jesuit thinker Luigi Taparelli in the midst of the European social revolutions in the mid-1800s, however, it received little attention at that time (Behr, 2003). Throughout the 20th century the idea of social justice continued to reappear, although its usage did not explicitly outline how social justice would be realized (ILO, 2014). As a conceptual framework, social justice seeks to imbue fairness and mutual obligation through fostering relationships that enhance and strengthen responsibility for one another. It is built upon equality of opportunity (Rawls, 1971). Where social justice is contested is how, when, and to what extent these ideals are put into practice. For example, in the case that opportunities are not distributed equally, how ought that redistribution occur?

Social justice in the context of government and governance is often linked to specific policies or programs that seek to ensure equality of opportunity and the redistribution of services and benefits. Examples of this include: ensuring healthcare is accessible and affordable, establishing and protecting labour rights, and enacting laws to prevent discrimination. In the context of government, the implementation of such practices is often more influenced by human rights than social justice due to the of legal status of rights and the somewhat vague, and at times controversial, ideals of social justice. As a result, advocacy for social justice is often realized through human rights based initiatives and programming (UN, 2006).

In recent decades, information communication technologies (ICTs) have opened new opportunities and challenges for enacting social justice. While ICTs provide new means for governments and citizens to interact and engage, it also reposes challenges of unequal access and opportunity (as well as the protection of individual rights, such as privacy). Nonetheless, ICTs have the potential to strengthen social justice as government can enhance its transparency and accountability, and directly engage with the public.

This paper explores potential injustices that result specifically from the open government and data movements with a particular focus on excluded groups whose disadvantage may be further entrenched with the increasing use of ICTs. It will also present a research project which seeks to compile and present crowdsourced examples of initiatives that have tried to address the challenge of using open data in a way that is inclusive and enables greater opportunity of participation by all members of society.

The digital divide and digital inequality

The digital divide is a complex social issue characterized by gaps in ICT awareness, adoption or ownership, use, and skills (Hargittai & Hsieh, 2013). This divide has been heralded as "one of the defining challenges of our time" (Web Index, 2014, p. 1). The concept took shape during

the mid-1990s, when mass adoption of the internet fuelled discussions around how factors such as age, race and ethnicity, education, socioeconomic status, geography, culture, and international disparities frame access to ICTs (Wei, 2012). Inherent in the digital divide is the concept of digital inequality. This refers to the existing social inequalities that determine access and usage and can reproduce and even intensify social stratification (Hargittai & Hsieh, 2013) . While much of the research and debate around connectivity to information has been centred on the discourse of the digital divide, Salah argues that the narrow and binary conceptions of the "haves" and "have nots" fail to "capture the big picture" (2009, p. 244). Instead, he proposes that the digital divide must be viewed through a social justice lens to illuminate how ICT inequalities are reproductions of larger societal inequalities; groups who are disenfranchised by the divide are the same groups that have been historically disenfranchised by social, political and economic practices (Saleh, 2009). We have identified eight groups who have been marginalized and excluded from full access and participation in the digital realm: low-socioeconomic status individuals, remote and inner-city groups, indigenous groups, recent migrants (focussing on language barriers), the homeless, people with disabilities, those with mental illnesses, and senior citizens.

When applied to the issue of the digital divide, a social justice lens reveals that access to ICTs does not happen independently of the barriers disadvantaged groups face in their daily lives (Saleh, 2009). In terms of socioeconomic status, those in more privileged positions with more resources – technical, financial, social, or cultural – end up benefiting more from ICTs than those who have fewer resources (Hargittai & Zillian, 2000). Along a similar vein, those in some of the lowest income brackets who live in remote areas and inner cities are among the least connected, often due to a lack of telecommunications infrastructure and low levels of technology adoption and use (McConnaughey, Lader, & Chin, 1998; Pearce & Rice, 2014). Indigenous peoples also remain excluded from equal access to ICTs as they face the multiple and interlocking challenges of poverty and geographical/economic isolation (Koncan, 2014). Recent immigrants are another group that face systemic inequality as a result of language barriers and lack of capital to purchase ICTs (Pearce & Rice, 2014). The homeless represent a group that also experience the "poverty of connections", a term that now holds as much weight as traditional poverty because it condemns the homeless to "local, place-based ties and relationships" and limits their access to information (Graham, 2002). For people with disabilities, one study found that poverty, a lack of ownership, restricted and inaccessible ICTs were major barriers to connectivity (MacDonald & Clayton, 2013). Another study set out to debunk the notion the notion that people living with mental illness were disinterested in ICTs by demonstrating that that cost and a lack of skills present considerable challenges to accessibility (Ennis, Rose, Denis, Pandit, & Wykes, 2012). Lastly, despite ICT's possibilities for empowerment and independence among younger generations, senior citizens face considerable barriers such as knowledge, skills, fear, accessibility, and ease of use that continue perpetuate unequal access (McMurtrey, McGaughey, & Downey, 2008). When applied to these groups, a social justice lens redefines the problem of the digital divide and offers a framework that addresses the underlying inequalities to posit solutions for openness and inclusion.

The open movement and open data

Harrison *et al.* note that the theme of "openness" in contemporary culture has come about due to the influence of technology in society and its ability to increase communication and access to information (2012, p. 901). In this light, Lathrop and Ruma define "open government" as government "where citizens not only have access to information, documents, and proceedings, but can also become participants in a meaningful way" (2010, p. xix). Open data, or data which is offered to the public free of charge without restrictions on how it's used (opendefinition.org), increases access to information, but does not necessarily guarantee civic participation.

Open data is an important component in increasing civic participation because it can allow public access to information such as pertinent policies, urban planning projects, and the inner workings of government. Gordon describes how civic engagement is important in the context of "smart cities" and urban planning by noting that technology, generally conceived as a way to create efficiency, can "create meaningful inefficiencies … when information is contextualized and opportunities exist for data not simply to be transmitted, but for ideas to evolve through deliberative dialogue" (2012, para. 1). Gordon further argues that people have particular understandings and insights around space and community that give nuanced meanings. These kinds of understandings can influence how space is articulated when put into dialogue (2012). As governmental bodies try to create spaces of dialogue, open data can help to further civic participation goals by allowing citizens make more informed decisions through a greater access to information.

Taking advantage of ICTs, many governments have adopted e-government websites as a way to more easily provide a variety of services to the public. With web 2.0 technologies, there is ample room for innovations to increase civic engagement as exemplified in cities such as Regina and Ottawa (Currie,2013). Useful websites are those that have easily available information, ways for citizens to engage in conversations directly with government, and are designed in intuitive ways (Janssen, Charalabidis, & Zuiderwijk, 2012). Open data and participatory ICTs can offer an alternative space to engage populations.

Although many governments are focused on encouraging civic engagement through ICTs and open data, there remains a divide in who is accessing and benefiting from this data. As the world becomes more digitally focused, social injustice is further reproduced because of digital inequalities. The groups identified above demonstrate how spatial data and inclusion in conversations that involve this data do not benefit everyone equally. Yet, we recognize that there are exemplary examples where municipal governments and NGOs have used open data to overcome exclusion.

Developing the mapping platform

In order to better understand the relationship and tensions between excluded populations, digital inequalities and social justice, we have been developing an interactive website that uses crowdsourcing to facilitate the sharing of examples where organizations and governments have directly engaged with excluded groups using ICTs and more specifically open data. The website provides an introduction, written using accessible language, to articulate social justice and open data issues. In particular it highlights the need to map the impact of the digital divide and access to ICTs for the groups identified above. We have a working model of the website, it will be ready for broader input in Febuary, 2015 (current progress can be viewed at: http://www.socialjustice.geolive.ca).

Our primary audience for the website are municipalities and NGOs interested in learning from examples of good practices in the use of open data to address social injustice. The secondary group of users will be individuals from the eight identified excluded groups and their allies. We anticipate that these users will be interested in learning more about issues related to social justice and open data. In addition, members of both the primary and secondary user groups can access the website as a tool to share their own experiences or present other examples regarding open data and social justice. Thus, the website acts as both a promotional tool, as well as a repository of examples of good practice that can be leveraged to better understand, as well as answer research questions related to social justice and open data.

To increase the accessibility of this website and improve user interaction, we are using a single page website design. This allows the user to navigate seamlessly from one section to another. While content is separated into different sections for ease of comprehension, users are still able to easily access specific sections of the page using a navigational menu (see Figure 1: Single page navigational menu). Each subsection has two major components: an introduction to the group highlighting specific challenges the population has encountered when accessing open data, and a Geolive map. Geolive is a flexible and extendable online participatory mapping tool that allows users to share information and experiences about a specific place. Each map contains a layer with case studies gathered from our research and another with crowdsourced information from municipalities, excluded groups, and researchers from the Geothink community.

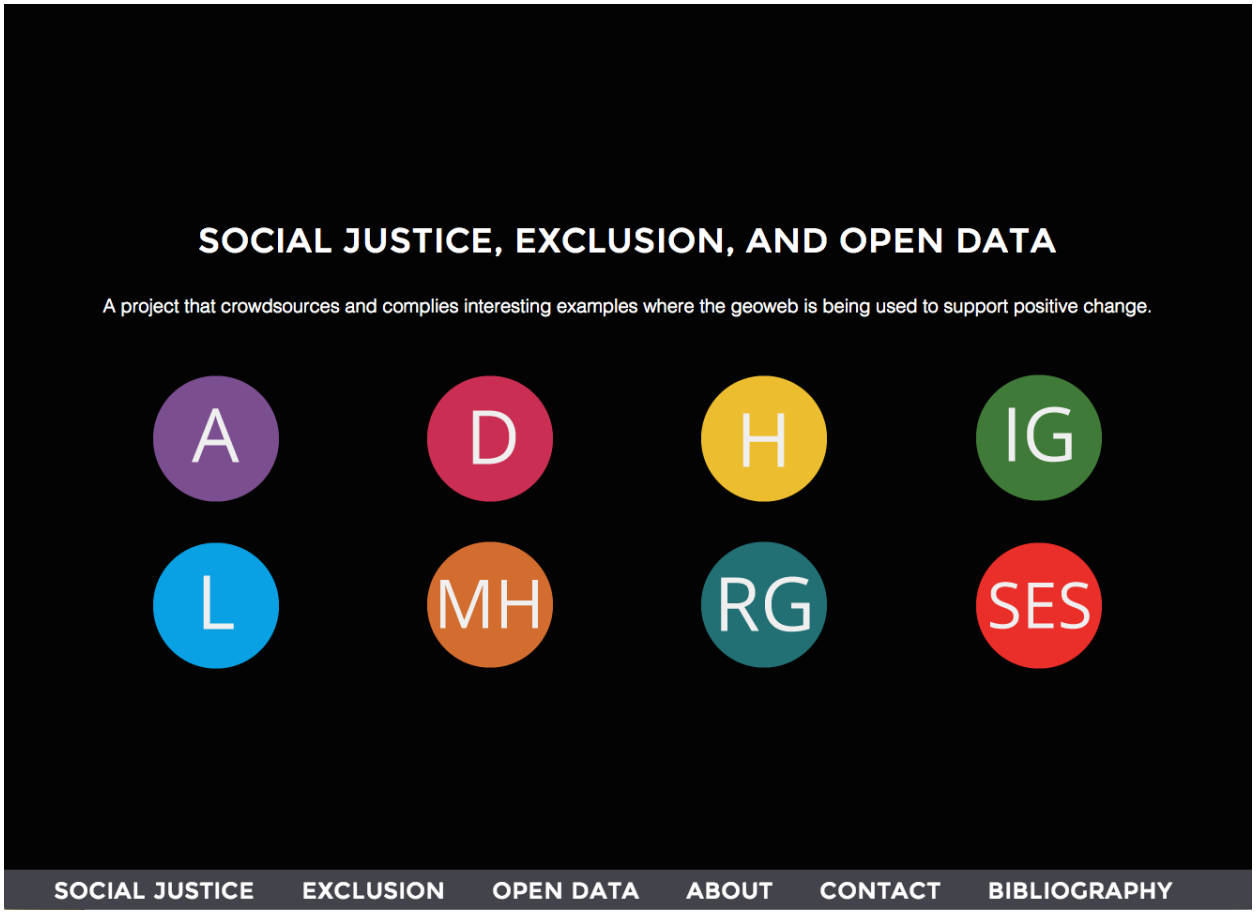

Figure 1: Single page navigational menu

A map was chosen to present our data for three reasons. First, we are interested in capturing diverse international examples of ICT inclusion. A map allows us to communicate this geographic spread in a meaningful and visually engaging way. Second, a Geolive map offers an interactive way for users to view and analyze the information presented. Finally, before users add data to a Geolive map they must undergo a registration process, which allows us to verify that the user interested in adding data to a map is indeed qualified to do so. Thus, the user must identify as a member of the group whose subsection is being viewed, represent a municipality or NGO, or be a member of the Geothink project. In addition, Geolive also allows users interested in sharing their own personal experiences to add text, images, video, or audio, thus allowing users to share their experience via voice or video recording if literacy is a limiting factor. This would not be possible if a different online media such as a survey or forum was used.

Conclusions

Increased access to ICTs and expanded governmental engagement through technology has changed the way government and citizens engage. However, digital inequalities exist such that not all people are equally included. The reproduction of exclusion and marginalization as well as the creation of new forms of inequalities necessitates that we analyze the use of ICTs with a social justice lens. Recognizing the existence of efforts that address and overcome these inequalities, we provide a platform for the discovery and sharing of good practices. We hope that this platform will bring together activists, academics and government personnel in order to collectively learn how ICTs and open data can be a means to enhance social justice.

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