Where’s Waddan?

Missing Maps and cross-cultural voluntary engagement in ICT4D initiatives

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Abstract

In the wake of the Haiti earthquake response in 2010, crowdsourced humanitarian mapping has taken off, and today is considered an essential tool by many humanitarian agencies providing assistance in disaster-affected and under-resourced countries and contexts. But what happens when there is no information on a map to help agencies decide how to respond? If they cannot find roads to take to get there? If they do not know how many houses are in a village? What if the map is – missing?

In response to this all-too-common problem, Médecins Sans Frontières (MSF), American Red Cross, British Red Cross and the Humanitarian OpenStreetMap Team (HOT) created and launched Missing Maps in 2014. A crowdsourced ICT4D tool designed to create accurate maps using satellite images, the initiative relies on volunteers – ‘digital humanitarians’ – to participate.

So why participate? Previous research has looked at motivations for participation in open street mapping and other voluntary contribution-based tools, such as Wikipedia. Other research has described how to attract people to Missing Maps – and retain them. But until now, there has been no research exploring why people are motivated to volunteer for humanitarian ICT4D initiatives, and no researcher has tackled this subject from a cross-cultural perspective. Here I attempt to answer the question: what are the motivations for people to map? And more specifically, are the motivations of someone in the Global North to voluntarily map different from the motivations of someone in the Global South?

In this paper, I outline the results of empirical research in the form of one-on-one interviews conducted across four cities I travelled to: London and Prague, to represent the Global North, and Beirut and Kampala, representing the Global South. In interviews in which a total of 21 participants were asked six standard questions about their interests, likes, motivations and challenges in mapping, I uncover clear differences between the motivations of not only people in the north versus south, but also amongst the young, and even between men and women.
The results show that, while people from all walks of life and socio-economic backgrounds are motivated by a multitude of reasons, young people, especially in the Global North, are more likely to map from slacktivism tendencies given their perceptions of the mapping software’s ease of use. People from the Global North – particularly young women – were also more likely to engage out of interest in humanitarian issues or organisations like MSF. Played right, organisers could groom these young people into the humanitarians of the future.

Meanwhile, people in the Global South were more likely to participate for both community and personal – such as career and life – benefits. This partly reflects previous research that has shown local bias to be a strong motivating factor for participation across other platforms. Although people across all four cities expressed some of their motivations to be altruistic ones, those in the Global South were more likely to express this response.

Taking these results, I explore themes of how an ICT4D tool like Missing Maps will not change the status quo of inequality in the world, while questioning whether that is important enough to undermine the initiative. I also investigate the likelihood of being able to turn today’s young digital humanitarians into the humanitarian leaders of tomorrow. I also explore the impact of mapping in the Global South, both for those doing the mapping and those being mapped. Finally, I look at what initiatives like Missing Maps mean in the world of communications for development.
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Introduction

Mapping for humanitarian purposes has its origins as far back as the 1850s, when Dr John Snow produced a map to discover the origin of a cholera outbreak in London’s Soho. (Rogers, 2013) However, it was not until the massive earthquake in Haiti, in January 2010, that humanitarian mapping became a mainstream, and essential, resource in humanitarian – and especially crisis – response. (Hunt & Specht, 2019)

Crowdsourced humanitarian mapping – as an information and communications technology for development (ICT4D) tool – comes in many forms. One form, which is deployed in times of crisis like the Haiti earthquake, has remote users tagging social media like Tweets and Facebook posts, or even SMS messages, on a free open-source mapping tool such as Ushahidi to help responders get a picture of the disaster area and the most pressing needs. (Meier, 2013, cited in Whittaker, et al., 2015)

Another form of ICT4D humanitarian mapping involves maps on which crowdsourced data – relying on satellite images – are outlined, tracing roads, marking buildings, and identifying water features. The Missing Maps project is one such form of humanitarian mapping. Relying on crowdsourcing from volunteers, or “digital humanitarians” (Meier, 2015), maps of un- or under-mapped areas are filled in, allowing access to crucial data for humanitarian organisations such as Médecins Sans Frontières (MSF), such as the location of roads to access towns and cities, population density, and availability of health posts and water sources.

However, the quickest way to get to someone in need during times of crisis is to have a map of the area before the crisis. Although Missing Maps does respond to crises, mapping affected areas during a cholera or Ebola outbreak, for example, having an accurate map at the beginning of a crisis would allow for faster access to the most vulnerable people. (Feinmann, 2014)
To have accurate maps such as these, an organisation like MSF cannot do it using their own resources. Missing Maps was started by MSF, British Red Cross, American Red Cross and the Humanitarian OpenStreetMap Team (HOT) in November 2014, with the goal “to map the most vulnerable places in the world”. (Scholz, et al., 2018) They rely on volunteers to crowdsource the data to literally put places on the map. However, it requires a community of volunteers, from all walks of life, and different levels of experience, to produce these maps, making it necessary “to foster a large global volunteer community in the process”. (Dittus, et al., 2016)

But what benefit is there for someone who volunteers? And with mapping volunteers and contributors located all over the world, do they map for different reasons?

Through interviews and subsequent qualitative and quantitative content analysis, I will attempt to answer the question, are the motivations of someone in the Global North to voluntarily map different from the motivations of someone in the Global South?

This project looks at what motivates people to participate or engage in ICT4D initiatives on a voluntary basis, using the Missing Maps project and mapping on the Humanitarian OpenStreetMap Team (HOT) platform as specific examples. Over the course of October to December 2018, I visited four cities – London, Prague, Beirut and Kampala – and conducted empirical research in the form of face-to-face interviews with Missing Maps and HOT volunteers to examine why people engage with these initiatives, and particularly whether there are any differences in their motivations on a cultural or socio-economic basis.

I explore the idea of whether people in the Global South derive more self-benefit from engagement with mapping than people in the Global North. This is an interesting question to pose given those in the Global South are often from countries that are usually the areas being mapped – they are mapping their own backyard, if you will.
I also delve into the notions of free digital labour and slacktivism, and find that people from the Global North are more likely than their Global South peers to volunteer using this ICT4D tool because of their self-stated ease of using the tool to ‘do a little good’.

Finally, I discuss what ICT4D tools like Missing Maps mean for young people in the humanitarian space and their engagement with it, finding that – while Missing Maps is not going to change the humanitarian world or the inequality one finds at the maps’ ground level – their engagement with the tool is a start and a step in the right direction towards increased commitment with the humanitarian community.

Background

The leading question in the title of this paper might seem a bit frivolous – it is a play on the title of the famous British children’s picture book, Where’s Wally? – but there is a genuine point to it. Where is Waddan? Waddan, as a town or village, exists in two places in the world, according to Google Maps. The first Waddan that comes up after searching for “Waddan” in Google Maps is an oasis town in the middle of the desert in Libya. (Google Maps, 2019) A town of about 28,000 people, it is located about 600 kilometres southeast of Tripoli. (Wikipedia, 2017)

The other Waddan is located in Pakistan. According to Google Maps, Waddan in Pakistan is a place where two roads simply switchback at perpendicular angles a number of times without actually meeting (Google Maps, 2019):
But switching to the satellite view tells you a very different story:

Waddan, Pakistan, is actually a small town of about 3,500 people. (Politic Pakistan, 2018) But according to Google Maps, Waddan, its streets, buildings and its 3,500 inhabitants, do not exist.
From a number of viewpoints, this is problematic. But it is particularly worrying in terms of disaster and disease outbreak response. Should an earthquake happen, or an outbreak of a disease such as cholera occur, responders to the disaster or the outbreak would be hard-pressed to find reliable information such as the number of households, and the facilities that exist in the town, without a reliable and accurate map.

Humanitarian aid organisations such as Médecins Sans Frontières (MSF) rely on detailed and accurate maps to “focus on efficiently reaching out to the people in need” to conduct health promotion activities in response to a disease outbreak, for example. (Scholz, et al., 2018)

To improve the maps available in humanitarian and disaster response, MSF, along with the British Red Cross, the American Red Cross and the Humanitarian OpenStreetMap Team (HOT), founded Missing Maps. (Missing Maps, 2019) Missing Maps relies on teams of volunteers – who some refer to as “digital humanitarians” (Meier, 2015) – to accurately map roads, buildings, and geographical features such as forests, lakes and rivers on an open source mapping platform, such as OpenStreetMap, using satellite images. Missing Maps and other HOT mapping volunteers literally put on the map places that do not exist or are under-mapped according to popular map platforms like Google Maps.

My interest in Missing Maps stems from my work at Médecins Sans Frontières, where I work in communications, and am responsible for the content strategy and direction of the main website, msf.org. In my work, I have seen both first-hand, in the field, and remotely, from my desk in Geneva, the difficulties MSF teams have in responding to humanitarian needs. A current outbreak of Ebola in Democratic Republic of Congo means teams on the ground need accurate maps and information to trace contacts of people diagnosed with the disease and the epidemiology of the outbreak. In working for MSF, and having attended ‘mapathons’ – Missing Maps events where a number of volunteers come together at the same time and place to map for a common goal or purpose – I wanted to understand why people are
motivated to volunteer, or voluntarily participate, in an ICT4D initiative like Missing Maps.

While the majority of the mapped areas are located in developing countries in the Global South (HOT, 2019), Missing Maps engages people predominately located in the Global North. London and Prague in particular are two cities that have large communities of volunteer mappers and regular mapathon events. (Missing Maps, 2019) Why do these people keep engaging, keep coming back, to volunteer to map areas that are tens of thousands of kilometres away?

But voluntary mapping is not limited to people located in the Global North. A number of countries and cities in the Global South have communities of mappers, including Beirut in Lebanon and Kampala in Uganda. So why do these people volunteer to map? Knowing that most areas that need mapping are located in the Global South, I wanted to know if volunteer mappers in the Global South, are any more, or any differently, motivated to map than people in the Global North.

**Literature review**

**Existing research in similar fields**

Since Haiti, there has been a lot of studies and literature produced which either praises (Meier, 2012) or criticises (Shanley, et al., 2013) crisis mapping; on whether it is good for local people or not (Sumadiwiria, 2015); the dynamics between different groups (Starbird, 2012); and so on. Crisis mapping has, at the very least, spawned a new and developing theme for researchers, both critics and fans alike, to sink their teeth into. However, few people have looked at the public participation and public engagement in humanitarian street mapping initiatives like Missing Maps.

Martin Dittus is perhaps the most prolific researcher looking specifically at initiatives like HOT, including Missing Maps, as an ICT4D tool to engage people. He and his colleagues have produced a number of papers looking at people’s participation, but are particularly interested in strategies to build volunteer engagement. A 2016 paper explores the data of first-time contributors to different HOT initiatives, and the
coordination set up of these initiatives, in order to find which profile of initiative retains the most contributors (Dittus, et al., 2016). Another 2016 paper takes those findings a slight step further by evaluating “the relationship between co-located practice and newcomer retention in a crowd-mapping community”; in other words, whether newcomers to Missing Maps and HOT initiatives are likely to keep mapping if they map in the context of a mapathon or social group setting. (Dittus, et al., 2016). A 2017 paper investigates the impact on retaining newcomers to mapping when they are given encouragement by way of private peer feedback. (Dittus & Capra, 2017)

While the work of Dittus and his colleagues are important for those in the ICT4D, HOT and Missing Maps communities for understanding how to engage people, how to retain them and build a community, they have not explored why people engage. In their research, Dittus, Quattrone and Capra have posited “that project attractiveness and individual motivations play an important role in the decision of a newcomer to join a project” (Dittus, et al., 2016), but without examining what those motivations are. In their exploration of the setting and task design types that are likely to attract and retain newcomers, they have also asserted that “one should also consider the motivations of contributors to participate” (Dittus, et al., 2016) in designing tasks and settings, briefly citing motivational categories proposed by Clary and colleagues (1998), Oded Nov (2007) and Nama Raj Budhathoki (2010), but without advancing any of their own ideas.

However, their work is exclusively quantitative research, analysing the data of contributors and their contributions. There have been no questions asked of why people are interested in coming to mapathons, what motivates them to go, or to open their computer and map in the first place.

The work of Budhathoki is perhaps the closest that research has come to exploring the question I am seeking to answer. His thorough, largely quantitative, research for his doctoral dissertation in 2010 does answer the question of why people contribute to volunteered geographic information (VGI) initiatives, like OpenStreetMap. His work uses a combination of qualitative and quantitative methods, analysing 3,000
text message conversations, the mapping contributions of 34,000 users and survey responses of 444 people. (Budhathoki, 2010)

Budhathoki’s research is undoubtedly on a much larger scale than anything I could attempt to do given the time and resources limitations I had for this project. But nonetheless, his work has its shortcomings. In sending a survey to just over 31,000 contributors, in which he received 444 responses, over 80% of the respondents live in Europe and 96% are male. (Budhathoki, 2010) This would suggest his findings are virtually limited to the motivations of European men, almost totally excluding the motivations of women, and people living on different continents, including in Africa and Asia. It also allows for no comparisons of motivations between gender and cultural backgrounds. The method of sending a survey is also problematic to answer this inherently qualitative question. Budhathoki used potential motivational factors identified by previous researchers as a theoretical guide to develop a survey questionnaire. Survey respondents were then asked to rank these motivational guide statements by using a Likert scale from ‘strongly disagree’ to ‘strongly agree’. (Budhathoki, 2010) This approach presupposes motivational reasons based on previous research – perhaps justifiably – but nonetheless the research method form of a Likert scale survey does not allow participants to put their reasons and motivations into their own words.

The key finding of Budhathoki’s research is, while altruism, ‘self-need’, and learning are motivational factors, local knowledge – that areas that people know or live in are “blank or erroneously mapped” – is the biggest motivator for engagement. (Budhathoki, 2010) It should be noted that while my own research is looking at HOT mapping, including Missing Maps – where people are mapping areas mostly remotely on a humanitarian basis – Budhathoki’s research covers more VGI initiatives, including OpenStreetMap, in which people can make map contributions, including to their own area, much like a contributor contributes to an entry on Wikipedia.

In a review of the literature, and in undertaking this work, my research seems to be among the first that addresses why people engage with Missing Maps and HOT
mapping initiatives, and so far the only one that explores these motivations on a cross-cultural, gender, and age-based basis.

Theoretical framework – slacktivism and free digital labour

In conducting interviews, I noticed time and time again, in every city I visited but especially in the Global North, participants mentioned how easy it was to map. They liked mapping because it was easy. They were interested in mapping because it was easy. They continued to map because it was easy.

This led me to explore the notion of whether people were motivated to participate simply because it was easy – and if so, how is this branded. Is it slacktivism? Free digital labour?

In looking at slacktivism as a motivation, I’m aware that the term has negative or pejorative connotations. As Cabrera, Matias and Montoya point out, Evgeny Morozov is often the most cited author in defining slacktivism – yet in his 408-page book, *Net Delusion*, he mentions slacktivism on just six pages. (Cabrera, et al., 2017). Morozov defines slacktivism as:

“…activities that are easily performed, but they are considered more effective in making the participants feel good about themselves than to achieve the stated political goals.” (Morozov, 2009, cited in Christensen, 2011)

Others look at the nuance of slacktivism, with Cabrera, Matias and Montoya noting that the term “has been divided into five subcategories: clicktivism, sympathy, political, charity (direct) and charity (by-product of consumption).” (Cabrera, et al., 2017)

There is a much simpler definition, where slacktivism is someone “having done something good for society without actively engaging in politics, protest, or civil disobedience, or spending or raising money”. (Neumayer & Schoßböck, 2011) As Stephanie Vie highlights, slacktivism “is critiqued as an easy—to—engage—in effort that makes little difference in the world.” (Vie, 2014) The latter part of Vie’s take on
slacktivism – that it ‘makes little difference in the world’ – is worth later bearing in mind; I will come to argue that although there is value in participants’ engagement in Missing Maps, looked at from a slacktivism point of view, from a number of points, this engagement won’t change the world.

It is important to critically look at Morozov’s definition of slacktivism, given that today it has largely derogatory undertones. My use of the term in the context of this paper is by no means to judge or to replicate the negative connotation of the word, applied to participants. It is simply a way, much in the manner of how Neumayer & Schoßböck and Vie have done, to describe the ease of the tool’s use, as remarked by so many participants. It is crucial to look at this in a positive light, as – ease of use aside – these people are engaging with ICT tools for humanitarian development, a theme I will expand on later.

In fact, it seems the term slacktivism originated with much more positive connotations, with the term first used in a series of seminars held by Fred Clark and Dwight Ozard in 1995. They used it to describe a shortened form of ‘slacker activism’, in which youth attempted to change society on a small individual scale through “bottom up activities”. (Christensen, 2011)

However, contradictorily, Christensen examines whether online activities such as hacking can be considered slacktivism since they require more effort than a simple signing of an online petition or sharing a political article on Facebook. (Christensen, 2011) It is a legitimate question to ask, as a mapathon – the social events where mappers come together to map – is a play on the word ‘hackathon’, where ‘hacking’ is the spirit of playfulness and exploration of acts by people looking to creatively overcome intellectual challenges using software. (Wikipedia, 2018) While mapathons and the mapping community share characteristics and even ideologies from hacking subculture, the view from participants themselves is that the task of mapping is very easy, simply a few clicks – the opposite of the typical hack that requires more effort.

It is also worth investigating the part of the definition of slacktivism in which (usually political) goals are (usually) not achieved. Christensen partly describes slacktivism
as “effortless and ineffective activities… [made] possible for a large number of people to be active without making a large effort.” (2011) Does this necessarily follow that for Missing Maps – for which large numbers of people are active without making a large effort – to be considered a form of slacktivism, it must also mean that it is ineffective? As I have already stated, the practice has value, and while – as I will come to argue later – Missing Maps and HOT mapping are not the world’s answers to solving inequality between the Global North and the Global South, the practice is not ineffective. Missing Maps and HOT have a simple goal – putting places and people on the map – and they achieve this through the participation of the digital humanitarians who volunteer.

While I principally view the practice of mapping through a simplified, un-pejorative definition of slacktivism because of the ease and effortlessness of the task, it is important to explore the practice within the theoretical framework of free digital labour.

Tiziana Terranova explored the concept of free labour, highlighting that it involves “voluntarily given, unwaged, enjoyed and exploited” work on the internet which can include “modifying software packages, reading and participating in mailing lists” (Terranova, 2000) So far, this applies to Missing Maps – participants are not paid (at least in money; free pizza – if they can get it before it all goes – could be up for debate as a form of payment), they volunteer their time and they enjoy the task.

Terranova goes on to explain that free labour is where “this knowledgeable consumption of culture is translated into productive activities” – the production of knowledge – “that are pleasurably embraced”. (Terranova, 2000) Once an understanding of mapping is easily gained, people enjoy and derive pleasure from, the ‘productive activity’ of it. This definition of free labour also applies to Missing Maps.

In free digital labour, while the work is certainly there, there is nonetheless a low threshold and entry point for this labour. “Casual digital labour looks merely like the expenditure of cognitive surplus, the act of being a speaker within communication
systems. It doesn’t feel, look, or smell like labour at all”, as Trebor Scholz highlights. (Scholz, 2012) These forms of labour – as partly already noted above – specifically include labour in the digital space: “web design, multimedia production, digital services, and so on, but is also about forms of labour we do not immediately recognise as such: chat, real-life stories, mailing lists, amateur newsletters, and so on.” (Terranova, 2000) Missing Maps is a good example therefore of free digital labour – the entry point is low, no-one needs to make a living from it and people participating don’t ask for much in return.

As participants repeatedly mentioned the effortlessness and ease of mapping, I find it more appropriate to brand mapping a non-pejorative form of slacktivism – which explicitly mentions simple, easy-to-do tasks – but do acknowledge that it can also be framed within free digital labour.

**Methodology**

To answer the questions, why do people continuously voluntarily engage with Missing Maps, and is there any difference in these reasons why between Global North and Global South, I interviewed people in a number of cities in the Global North and Global South.

To select which cities I should seek participants in, I drew on my own knowledge of Missing Maps and mapathon events, and the advice of my MSF colleagues. London, the birthplace of Missing Maps and mapathons, was the first, and easiest, choice of city in which to find research participants, given its large and well-established mapping community and regular mapathon events; at least two are held each month in the British capital. On the advice of an MSF colleague, Jan Böhm, I selected Prague as the second of the cities located in the Global North, again for its established mapping community and monthly mapathon events.

I selected Beirut, Lebanon as the first of the Global South locations based partly on a scheduled work trip, and partly on my knowledge that my MSF Lebanon colleagues had held mapathon events in the city. Lastly, keen to include participants from a
country in Africa – a continent where the vast majority of areas mapped are located (HOT, 2019) – I selected Kampala, Uganda, as the second of the Global South cities, based on the advice of Jan, and his knowledge and contacts in the mapping community located there.

I could have chosen more and/or different cities in which to conduct this research; however, more cities would have added to an-already heavy logistical burden to find participants. Many other cities I could have included either did not have mapping communities as well established as those that were chosen (eg, Geneva, Nairobi), had potential language barriers (Paris, Dakar), or where they did have established communities, were too far away with significant time differences (New York, Dhaka).

With four geographically dispersed cities – London and Prague in the Global North, and Beirut and Kampala in the Global South – in which to find participants, I considered methods including issuing surveys to potential respondents. I chose instead to interview my respondents, which would allow me to draw out responses from people. Surveys and questionnaires would have been too short, too impersonal, non-specific and would not have allowed me to ask follow-up or clarifying questions.

Next I considered how to conduct the interviews. Conducting the interviews by teleconference or Skype was one option, but doing so would not have given me the opportunity to really engage with, and gain the trust of, research participants. I also needed to find participants and judged it best to relatively randomly select participants by going to a mapathon or choosing participants within a group setting. I finally decided to travel to each of the four cities to interview people face-to-face. During the interviews, I advised participants that they would be audio-recorded and the conversation subsequently transcribed, but that they would remain anonymous in the paper and neither the transcriptions nor the recordings would be released.

After providing demographic information such as age group, gender and level of experience mapping, all participants were asked to respond to the same six base-level, open-ended questions (see Appendix 1, Interview Guide). My questions were designed not to make assumptions about people’s motivations or potentially lead
respondents’ answers. Questions included what people liked and were interested in about mapping, why they continued to map, and what challenges or limitations they found in mapping. Where I needed to clarify, or prod or wanted to further explore a response, I asked respondents follow up questions that were not included in the Interview Guide.

In total, I conducted 28 in-person interviews between late October and early December 2018. I travelled to all four cities, attending pre-organised regular mapathons in London and Prague, and observing a mapping group in Kampala. I interviewed 6 people each in London and Prague, 5 in Beirut and 11 in Kampala.

However, for the purposes of this paper, I have included in my final results 21 respondents; all 6 respondents in Prague, but only 5 of the respondents in London (one respondent being one of the coordinators and founders of mapathons, a very experienced, expert mapper who tended to give very technical responses), 4 in Beirut (the audio quality of one recording being too poor to subsequently use), and only 6 of the 11 in Kampala (the other 5 being students of the same course at the same university, who gave more or less the same responses, despite being interviewed independently). Of the 21 people whose interviews I am including in the results of this paper, just over half are women; just over half are aged 26-35, with three-quarters aged 18-35; and just over half have mapped regularly for some time (see Appendix 2, Demographic Breakdown).

There are some flaws in my methodology, including in my choice of cities, and the manner in which I selected participants. Beirut was chosen partly because I had a previously-scheduled a work trip to the city, however mapathons in the city had not been held for nearly a year by the time I conducted the interviews. While the mapping community still exists, I was not able to attend a mapathon, and although a couple of participants still mapped on their own, answers from participants were mostly reflective – that is, they provided answers based on their mapping experiences in the past. These more reflective answers could be construed as problematic in a study that is looking at current engagement, but I have included these answers as they are ultimately relevant to the question being posed.
In London and Prague, while my selection of participants was random, approaching people attending the mapathons and asking them if they would be willing to be interviewed, I was not able to replicate this random participant selection method to the same degree in either Beirut or Kampala. In Beirut, I chose to interview a mix of my MSF colleagues (who, while still volunteers, nonetheless work for the organisation that arranged the mapathons, a potential conflict of interest), a contact recommended by colleagues, and two people who responded to my post on a Beirut community mapping group on Facebook looking for people to interview. In Kampala, I relied heavily on the contacts provided to connect me with potential willing participants; most are or had been students of the local universities, with much of the mapping community formed through university chapters of Humanitarian OpenStreetMapping Team (HOT) in Uganda. In HOT Uganda’s Kampala headquarters, I was able to observe a small mapping group and randomly selected three willing participants there. The lack of a completely random participant selection in both Global South cities is methodologically not ideal, however I believe the people selected in both cities are nevertheless representative of their respective mapping communities.

With the interview transcripts, I conducted a qualitative content analysis of the data by taking the words in the participants' responses outlined in the transcript and coding them into different groups of the same or similar responses. For example, each time a participant mentioned that they like to map because “it’s easy” or “it’s not difficult”, these responses would be grouped under the node “It’s easy”; the number of responses in each node were subsequently tallied and sorted by geographical location, including north/south, gender, age group, and level of experience. Once the responses were coded into different nodes and sorted, the nodes were then categorised into four different parent groups, or themes, which I had identified. In analysing the content in the nodes, I categorised the responses into the broad themes of Slacktivism, Self-benefit, Self-fulfilment and Helping Others. While Slacktivism and Self-fulfilment were drawn using just one node each, Self-benefit and Helping Others were drawn from six and five nodes, respectively. Once all the data had been coded, grouped, sorted, and given a theme, I highlighted the outlying
Inevitably, this process of coding and analysing data under a qualitative content analysis is inherently flawed. As Heidi Julien states, while “qualitative content analysis can be helpful in answering ‘why’ questions and analysing perceptions”, it is nonetheless highly subjective, with a single line of text being “open to different qualitative interpretations by different researchers”. (2008) Ultimately I did not have multiple researchers providing their own content analysis of my data, which perhaps makes the analysis less rigorous than ideal. However, I am confident that I have analysed and coded the data to the best of my ability.

Results and analysis

In analysing the responses, I identified four main themes behind the motivations of participants. Slacktivism, where participants said they liked or were motivated to map because ‘it was easy’; self-benefit, where participants were motivated because of some interest or benefit for themselves; self-fulfilment, where participants were motivated from a feel-good factor; and helping others, or altruism, where participants wanted to make some form of contribution outside of some benefit to themselves.

While the themes of slacktivism and self-fulfilment are relatively easy to identify, each having only one node, or group of responses, categorised under each theme, self-benefit and helping others are much more nuanced. Self-benefit is a particularly interesting theme of motivation because the nuances within it are significant. For example, under this theme, I identified that someone may be motivated to map because mapping was fun for them; because of the community that gathered and/or the friends made while mapping; because of an interest in MSF and/or humanitarian response; because it related to work or study; because of an existing interest in maps, cartography or data representation; and because there was a benefit to the participant’s life – such as providing career or travel opportunities – and/or their local community, such as improved services and representation on maps.
There are also a few nuances within the theme of helping others, with participants expressing a general desire to help, including within the contexts of wanting to help but without either the financial or pragmatic means to do so; voicing an explicit wish to improve the lives of others; or wanting to make a contribution.

**Patterns identified**

In tabulating the data (Appendix 3), it is easy to see which cities, socio-economic divide (Global North or South), gender and age groups identify with particular themes of motivation. Of 11 people who responded that they were motivated or liked the benefits to themselves or their communities that mapping brought them, 8 – more than three-quarters of respondents – were from the Global South, with 6 of those responses coming from participants in Kampala.

The responses were varied between personal and community benefits. When asked what they liked about mapping, one male respondent in Kampala replied:

“I like quite a lot of things, but I've never thought about what I like exactly. I think, maybe, what I can say is I think I like what mapping has done for me. For my life and career personally.” (18-25 year-old man in Kampala)

Other respondents in Kampala were thinking of the practical benefits to themselves and their communities:

“Know[ing] that you are actually participating in the benefit of your community is one thing I like”. (36-50 year-old woman in Kampala)

“I am so excited that I'm adding roads, my own area, I really mapped my area.” (18-25 year-old woman in Kampala)

One respondent in Beirut believed that mapping – and by extension, fixing the “humanitarian and social justice issues” in his own city – should start at home, before trying to do so “in Africa, or in certain African countries”. (26-35 year-old man in Beirut)
These responses from people overwhelmingly located in the Global South show that, while there are other influences and motivations behind why they map – including an eagerness to make a contribution and improve the lives of others – benefits to themselves and/or their community is a strong one. This result resonates with Budhathoki’s findings that mapping local knowledge – and benefiting from it – is a compelling motivating factor. (2010)

Other prominent motivations among participants included the self-benefit of satisfying their interest in MSF or in humanitarian response. This was particularly relevant in the Global North, with 6 of the 8 respondents in this theme coming from either London or Prague. One female respondent aged over 50 in London said it is “the humanitarian end that I find interesting” in coming to mapathons. A young male participant in London said because of mapathons, he got to learn about an issue which affects women and girls almost exclusively in the Global South, female genital mutilation (FGM):

“…[w]ith the presentations here, you get some tangible benefits of why it's worth doing this. The first time I came to one of these, there was a presentation on FGM and how doing the mapping helps them protect girls who are fearful... due to FGM. Each time I've come, there's been a building of a case, basically, of why it's important to build on the maps in these rural areas.”

Of the 8 respondents with an interest in MSF or in humanitarian issues, 6 were aged 18-35, and 5 were female. The latter shows that, for all the justifiable concerns and controversy around the #aidtoo movement – where women in humanitarian roles have been subjected to harassment and abuse – women nonetheless remain interested in humanitarian issues and response. That many young people were interested in MSF or humanitarian response shows that youth are thinking beyond their social media feeds, and thinking about the world beyond their own community, to the humanitarian world. What this augurs for youth engaging in humanitarian issues is a theme I’ll return to later on.
Continuing with the theme of self-benefit, 17 people – more than 80 percent of all respondents – said making friends and the community of mappers was a motivation to map or to go to mapathons. There was no one city or socio-economic divide that stood out with a high outlying number of these responses; however, London was notable for how few people – only 2 out of 5 London respondents – mentioned this as a motivation. By contrast, all 6 respondents in Prague, all 4 respondents in Beirut, and 5 of the 6 respondents in Kampala, replied that they found additional incentives to map because of the community and friends made.

I found the lack of this response from London participants somewhat surprising, especially given that the London mapathons are perhaps the most developed, with a regular monthly mapathon, the promise of free pizza during mapping and the chance to go for a drink at the pub afterwards, making it one of the most socially-focused events. When asked why he keeps coming back to mapathons, one young male respondent in London simply replied, “Why come back? – because of the good social aspects”.

As Budhathoki notes, “motivation is necessary, but is not a sufficient condition for contribution in an online community” (Kollock, 1999, cited in Budhathoki, 2010), therefore, additional conditions to persuade people to contribute, such as social aspects, are needed. Indeed, Dittus and colleagues found that regular mapathons retained the highest number of newcomer contributors (Dittus, et al., 2016), with people attending evidently meeting and making friends, and the mapping community becoming a new social circle.

While there are some strong self-benefits behind motivations to map, people did express more altruistic impulses. Of 12 people who said they were motivated by wanting to improve the lives of others, over half – 7 people – were in the Global South, with one-third in Kampala.

“I contribute from my heart, hoping this edit that I’m making there is going to help somebody get food, is going to help somebody get shelter.” (18-25 year-old woman in Kampala)
“About mapping, there are a lot of things, and the main interest is when I do an edit, I really am helping someone out there.” (18-25 year-old woman in Kampala)

Respondents in Kampala were struck by how they could help their fellow citizens, with many offering mapping as a way to help those who are simply less fortunate, or people affected by a specific disaster; for example, a number of Kampala respondents referred to helping people in the wake of landslides in Uganda’s eastern Bududa district in October 2018, which killed more than 40 people. (Biryabarema, 2018) While wanting to make a contribution or improve the lives of others was expressed by participants in all cities, it was particularly marked in the Global South, indicating perhaps that those in the Global South are more aware of, or more in tune with, inequality and poverty.

In conducting interviews, I was struck by how repeatedly participants mentioned that they were drawn to mapping because “it’s easy”:

“It's an easy thing to do, so anyone can pick it up and do it.” (Woman aged 50+ in London)

“I feel the need to help those organisations [like MSF] as much as I can and this is a very easy way to do it.” (26-35 year-old woman in Prague)

“I think it's quite an easy way to help. You don't have any education in it, you don't have to have any appliances, just your own computer and you can start. It's really easy… it's really surprising that it's so easy.” (36-50 year-old woman in Prague)

These responses came overwhelmingly from the Global North, with 9 out of the 12 respondents based in either London or Prague. Interestingly, two-thirds of respondents were women, indicating that women are not deterred by the technology.

Elements of slacktivism?

Catherine Turk notes that “help by mouseclick or ‘keystroke tap’ is the relationship established in a range of participatory mapping projects that fall under the umbrella
of digital humanitarianism.” (2017) So the oft-repeated responses of ‘it’s easy’ from participants led me to question how much of an element of slacktivism there is in people engaging in mapping, especially in the Global North where most participants who responded about the task’s ease were based.

Can Missing Maps and HOT mapping be considered a form of slacktivism? It is certainly a form of “help by mouseclick or ‘keystroke tap’”, as Turk has stated above. (2017) The question of whether Missing Maps and HOT is considered a form of slacktivism is fraught with contradiction. As earlier noted, the most commonly cited definition of slacktivism is that of Morozov:

“[slacktivism]… generally refer[s] to activities that are easily performed, but they are considered more effective in making the participants feel good about themselves than to achieve the stated political goals.” (Morozov, 2009, cited in Christensen, 2011)

This view seems to accord with the view of one of the participants themselves:

“It's quite an easy access way to do some charity work and get that feel-good factor.” – 26-35 year-old male participant from London.

Despite some ambiguity in whether the whole definition of slacktivism applies to Missing Maps (for example, parts of the definition that relate to political goals), I believe the term is nonetheless relevant, as it is clear – through participants’ self-stated ease of the activity, and the ‘feel-good factor’ most of them derive from it – that there are major elements of the term that are applicable to Missing Maps and HOT mapping.

However, scholar and participant are at odds on whether Missing Maps could be considered slacktivism. Dittus and colleagues note that “a key barrier to entry for first-time HOT contributors is the fact that mapping with OSM is a complex practice”, requiring specialist tools and knowledge to undertake it. (2016) Michal Givoni noted that “remotely identifying, tracing, and tagging geographical features in unfamiliar
territories is a perplexing task”. (2016) Catherine Turk claims that with the “technical sophistication” of HOT and Missing Maps, they are different from slacktivism. (2017)

And yet, my results do not at all reflect these views. I note with interest that, in terms of identifying the motivations of mappers or digital humanitarians, none of the above scholars conducted qualitative, interview-based research – none actually asked mappers themselves. In my interviews with participants, I frequently heard that people engaged because it is an easy – even relaxing – way of contributing:

“A lot of people bring people from work to try mapping and they always ask, ‘oh I've never done this before do I need to do anything special?’ and it's literally nope - you're just drawing lines and squares on the map and that's all you need to do.” – 26-35 year-old female participant from London.

“For me, its somehow calming, because you click and click and you don't need to concentrate that hard.” – 26-35 year-old female participant in Prague.

“If you think about it, there's no easier way to access helping people out than to map.” – 18-25 year-old male respondent in Beirut.

These views – from digital humanitarians themselves who engage in mapping – directly contradict the view espoused by many of the researchers on the subject that mapping is hard. These people are not engaging only for “slacktivism” reasons – all of these participants cited other motivations to map, including for altruistic and self-interest reasons – but it is clear that among participants in the Global North, and among the young, their perception of the ease in which to use and participate in mapping is a strong contributing factor to their engagement in it.

Discussion

Slacktivism tendencies aside, what does youth and cross-cultural engagement in ICT4D tools like Missing Maps mean for humanitarian response, including for those in the Global South?
ICT4D tools will not change inequality in the world – but does that matter?

A number of articles have stood out for the critical tone they have struck on the value of crisis mapping, particularly around the ownership of knowledge or data produced – much of it by people in the Global South, who are often the intended recipients of the resulting aid – and by the effect that this has on producing results.

In conducting my interviews, a number of respondents were struck by how few places were properly mapped, much like the town of Waddan in Pakistan that inspired the title for this paper.

“There are many places that are not mapped. A friend worked for Oxfam in South Sudan - and couldn't find the place she was working in on Google maps. It’s incredibly powerful to find a place that exists that isn't mapped.”
(26-35 year-old woman in Beirut)

“Why continue? Because there's so much of the world that isn't mapped.”
(Woman aged 50+ in London)

Participants acknowledged that not being on the map represented not being recognised, being invisible to the rest of the world. While some have made arguments that being mapped can be counterproductive – Turk cites papers by Fox (2008), Raftree (2013) and Sumadiwiria (2015) echoing these findings, saying the “revelation of sites and settlements may be contrary to the interests of local owners” (Turk, 2017) – on the whole, an up-to-date map is vital in humanitarian and disaster response. A missing map makes it difficult for first responders to make valuable decisions if they lack critically-needed information contained on an accurate map.
(Missing Maps, 2019)

In her paper that critically reviews mapping initiatives – including Missing Maps – and how their work juxtaposes with the work of local ownership over local geospatial data, Catherine Turk reflects that the stated mission of these projects implies that “once on ‘the map’ people will be less vulnerable or will be able to be helped.” (Turk, 2017) I find her inferred criticism a little disingenuous. In being mapped, the people
in these locations are – for a start – no longer invisible. Invisibility of people contributes to their vulnerability. They are more vulnerable if they are not on a map and therefore literally cannot be counted for inclusion in vaccination campaigns that prevent children from dying of preventable diseases, or inclusion in programmes that improve access to clean water and proper sanitation facilities. Being ‘on the map’ is a start towards reducing vulnerability – the raison d’être of Missing Maps and HOT.

Turk also writes of the role of the web interface in participatory digital mapping and, citing a study by Palmer, how it “enhances a sense of empowerment” (Turk, 2017) for the user that nevertheless conceals “the material inequalities that engender and sustain the unfortunate need for crisis mapping in the first place”. (Palmer, 2014, cited by Turk, 2017) Participants need to be given a lot more credit. In my interviews, it was clear that participants are very much aware of the inequality found in un- or under-mapped areas, and the needs of the people who live there.

“Sometimes you aren’t sure what you’re mapping but you know there’s a need, and you can see the need.” (Woman aged 50+ in London)

Participants in the Global South were also astutely aware:

“So there’s a need to rescue these people. So I wake up and say, ‘today I will make time to map’, with the perception that somebody in this polygon that I am mapping is going to get food and water.” (18-25 year-old woman in Kampala)

It is clear that from the responses I received, people are not simply turning on their laptops, staring at a satellite image and mindlessly clicking a mouse to trace and create a map. Among participants in the Global South, inequality is a factor of which they are acutely aware. Participants in the Global North meanwhile – leaving aside slacktivist tendencies to engage in mapping – nevertheless do so with a purpose beyond self-interest or self-benefit. At mapathons in London and Prague, organisers are keen to highlight what it means for their volunteering digital humanitarians to be there contributing, emphasising the resulting work that can be carried out because of the contributions they have made.
For all of the defence I have made above against overt criticism of participatory mapping, the aims of Missing Maps and HOT are not without flaws. Patrick Meier claims that crisis mapping will “change the world one map at a time” (Meier, 2012 cited in Givoni, 2016). Unfortunately, I do not see this happening. Michal Givoni is also critical of the ‘change the world’ claim of some mappers. She writes that participatory crisis mapping runs the risk of “reinforcing a resilience thinking that promotes the building of local capacities as the cure for global inequality”. (Givoni, 2016)

Although I earlier defended against Turk’s inferred claim that crisis mapping will not help vulnerable people – I believe, and have seen, that it indeed does – I nonetheless agree with Givoni that it will not solve global inequality. In fact, it is rather unsurprising that it will not do so.

Are today’s mapping youth tomorrow’s humanitarian leaders?

With nearly three-quarters of participants aged between 18 and 25, it is clear that Missing Maps has youth on its side. With another three-quarters of respondents saying they were motivated by their humanitarian interest also aged 18-25, what does this augur for youth’s engagement in the humanitarian world?

HOT and Missing Maps have been provided with “a genuine cause with which to ground [their] incipient humanitarian stance” (Givoni, 2016) in going where Google does not and creating a “cartographic presence for people and places that both governments and powerful corporations do not care to represent on maps” (Givoni, 2016). In doing so, through the means of ICT4D tools, they have created a platform that is an entry point into the humanitarian space for the predominately young people who are engaged. As we have seen above in the responses of participants often surprised that so much of the world is not mapped, mapping through Missing Maps has provided these people with a starting point to understand and question humanitarian response.
However, there is some scepticism behind youth participation in ICT4D initiatives. In his examination of slacktivism, Christensen questions whether digital volunteering replaces volunteering through traditional means, believing that digital activities are “a sufficient replacement”. (2011) While there have been scores of studies that look at slacktivism as a replacement for traditional volunteering for causes, my question in response is: if young people did not engage in digital humanitarianism, would they otherwise engage in humanitarian issues and humanitarian response at all?

There is also the question of once engaged, do youth stay. Turk states – legitimately so – that “there is a danger that the superficial engagement of online volunteers satisfies their passing interest but fails to generate longer loyalties or reward effort spent mapping.” (2017) But I believe she does not account for, or is overlooking, people’s motivations to engage with mapping in the first place – and the settings in which they do so. Dittus has shown that regular mapathons, with a diverse mix of people, held the most engaged group of mappers. (Dittus, et al., 2016) As my participants’ responses have shown, there are many reasons why young people are motivated to map – outside of the potentially ‘superficial’ engagement of slacktivism. Youth are motivated by reasons that provide self-benefit to themselves, including an advantage to career and social circle, but also by genuinely altruistic reasons. These reasons, it is hoped, can engage youth in humanitarian interests on a longer-term basis; the majority of participants who said they were regular or experienced mappers had been involved for more than a year, which suggests more engagement than ‘just a phase’ or a ‘passing interest’, as the following participant notes:

“Why come back? Every time it's a new project, and I get to know about some issues around the world. Right now there are some problems in Congo and it's quite interesting for me.” (36-50 year-old woman in Prague)

Givoni concludes her paper by stating that the lesson to be learned from Missing Maps’ introduction as an ICT4D tool is that it is “too tightly interlocked with the political orderings of a world in a normalized state of crisis to be able to” change the world. (Givoni, 2016) As I have concluded above, Missing Maps will not change the world or change the inequality that one sees in it. However, for young people, it is a foothold into the humanitarian world, particularly where they may not have the time,
or the money, or the ability to be physically present in disaster or humanitarian response. An important positive point of the crowdsourced, digital humanitarian approach is that “volunteers do not necessarily have to invest long periods of time to participate, nor do they need to be near the emergency or disaster-affected area”.
(Whittaker, et al., 2015)

Missing Maps fills the void of a genuine need, in using a unique method, relying on a niche audience that traditionally may not have engaged in humanitarian response. We can recognise it creates a sense of purpose and an entry point for continued action while also recognising it has limitations and will not, in itself, change the world or the inequality behind the reason for mapping. Missing Maps brings people together, especially the young, and engages a digitally savvy youth in interest, in conversation, in perhaps starting to critique and question, the humanitarian space and principles:

“Also, in addition, you have the opportunity to learn about contexts that you don't know. We have the flash talks in the middle of the mapathon, so people actually pay attention on Congo. I've never experienced that in my life. Normally when you say Congo, people start snoring, but people are actually listening - it's fascinating when people start exchanging more, and talking about Congo over pizza and the mapathon.” (26-35 year-old man in Beirut)

At a minimum, Missing Maps and HOT mapping, through its ICT4D approach, sparks youth curiosity and causes them to ask questions about development. It can also draw young people into the humanitarian world – a new breed, a new generation that can participate and agitate for change.

What does mapping mean for people mapping in the Global South and the people being mapped?

For those in the Global South, mapping creates opportunities. As respondents have noted, mappers see benefits, including benefits for their community:
“Getting do this work and getting to know that you are actually participating in the benefit of your community is one thing I like also.” (36-50 year-old woman in Kampala)

However positive the impact might be for people in the Global South to join mapping initiatives, there are nonetheless those who view this critically. In her criticism that given the need to demonstrate public involvement, “participatory digital aid mapping projects rather appeal to global online publics” than “invoke local audiences” (Turk, 2017) Catherine Turk is both harsh and false. Many of the crowdsourced mapping projects – including Missing Maps – rely on the critical input of local people, those being mapped, to complete the project. Without local knowledge, a map cannot be considered complete or accurate.

This is a view shared by the World Bank, and the OpenStreetMap community in general, who saw the effectiveness and sustainability of mapping as depending “to a significant extent on local ownership” (Mulder, et al., 2016), and that the best way of maintaining up-to-date maps was through community participation and local knowledge. (Mulder, et al., 2016) For local knowledge to be shared and for community engagement to complete maps, it is indeed true that barriers need to be overcome, particularly those related to digital inequality. While crowdsourced data, particularly with the input from local communities, has the “potential to shift the ownership of knowledge” (Read, 2015), initiatives like HOT mapping and Missing Maps do rely on access to the internet, and services in Africa are often either sporadic and/or “largely unaffordable” (Read, 2015), as many Kampala-based participants noted:

“Sometimes I think I'll be mapping often, but sometimes data is a challenge to me. I don't have the data at home. So, whenever I want to map and I don't have money for data, I have to come here to the office. I look at the cost of transport, to bring me from home to here, and it's cheaper than when I buy data at home.” (18-25 year-old man in Kampala)

Efforts to engage people in the Global South then, need to be doubled. Including the voices of people in areas being mapped are crucial for “facilitating transformative communication between mappers, mobility between the hierarchical positions they
occupy, and a transfer of knowledge from the global north to the global south and back” (Givoni, 2016), which is part of Missing Maps’ aim. However, despite this reliance on people from the Global South to engage, Missing Maps could be seen to be “not much of a departure from a Foucauldian view” of modern forms of power, “but rather as a particularly expedient offshoot of humanitarian biopower”. (Givoni, 2016) While ICT4D initiatives like Missing Maps will not change the inequality of participation between Global North and Global South, the participation of the Global South is nonetheless essential.

While mapping participants in the Global North and South shared common challenges, internet connection being a main one (5 respondents in the Global North and 5 in the Global South noted internet connection problems as being a challenge in mapping), mappers in the Global South faced other, unique issues. Mappers in Kampala also undertake field mapping – validating and adding on-the-ground information – in addition to remote mapping. One participant in Kampala noted with frustration an effect of field mapping – that it creates expectations and raises hope among those that are being mapped:

“Like currently as it comes to the rainy season, you found they normally face a lot of challenges at the [refugee] camp. So every time, the leaders normally, raise complaints and saying really if the data collection that we have made is made to change them, or maybe it means to change the society or their situation in that, why can't we, or why can't the NGOs, or maybe why can't the government, now implement those [changes]? We normally go carrying [out] this data collection but there [has been] no implementations since. That's also one of the challenges that we are facing as being the surveyors. We found with some people who've got our phone numbers, they normally call us, 'When is the implementation to be done? When are you people coming to prove what you have done?' So it's also a challenge that we are facing actually as surveyors.” (18-25 year-old man in Kampala)

Previous researchers, notably Carmen Sumadiwiria, have found the benefit outcomes to local people who map come up short – notably that maps are not produced according to the usage needs of local communities, but rather those of NGOs that provide humanitarian assistance. (Sumadiwiria, 2015) And although, as noted earlier, some researchers such as Turk are sceptical of people being mapped
actually receiving help, there is more nuance to it than this view, with identifying vulnerable people on the map as a starting point. While the system is not perfect and does not challenge existing power structures, with people being mapped often “marginalised in subsequent response decision-making that affect[s] their very lives” (Mulder, et al., 2016), there are nonetheless the positives from this process. Missing Maps, while also being about disaster response, is more ‘in it for the long game’, including for disaster preparedness. When a disaster does strike an area, with an accurate map already created by Missing Maps, including contributions from people in the Global South, the humanitarian response will be much faster, and more lives can be saved.

What does mapping mean for communications for development?

In 2006, Jacob Srampickal devoted the number two issue of the Communications Research Trends journal for that year to ‘Development and Participatory Communications’. (2006) By then, the idea that participation is necessary in communications for development was not something new. However, the digital era of C4D was in its infancy; crisis mapping, or crowdsourced humanitarian mapping, would not be born for another two years, with the creation of the Ushahidi platform in Kenya, and would not take off for another two years after that, with Haiti. (Wikipedia, 2019)

From the earliest days of crowdsourced humanitarian mapping, the participatory element has been crucial – obligatory, even – to ensuring these ICT4D initiatives could take off, let alone be successful. But like participatory C4D initiatives in general, there are no clear answers to the questions of why people should participate or why they choose to.

The findings of my research indicate the reasons for people’s participation are not black and white. We cannot simply put people’s motivations into individual boxes with single labels; it is not as simple as ‘slacktivism’ or ‘career benefit’ or ‘improving lives’. Participants who have answered my questions have proven that, no matter what the approach, engagement in ICT4D is complicated. There is a Venn diagram-
like balance between people engaging for slacktivist reasons; for selfish, self-benefit reasons; for altruistic ones. Coordinators of ICT4D initiatives like Missing Maps need to be realistic; it is impossible to get these projects done by finding people with purely altruistic and good intentions to participate. If it takes free pizza and a friendly crowd once a month to get people involved, as Dittus has suggested, so be it.

So do the ends justify these means? Yes. Will Missing Maps and many other ICT4D initiatives like it change north/south power relations or end poverty? No. Nonetheless, people get involved, even for their selfish reasons, and they get results. I see the consequences of this almost daily from my desk at MSF in Geneva; mappers’ participation means there is a decent map from which my colleagues in the field can trace Ebola contacts in DRC as they work desperately to stop an outbreak in its tracks.

Ever an ICT4D enthusiast, Patrick Meier summed up this point in his book, reflecting on his experience coordinating the crisis mapping in Haiti:

> While many media organizations around the world covered our efforts, they typically focused on the technology angle of the story, hyping up the narrative around new technologies. They completely missed the most important part of this story: both digital maps—the OSM and Haiti Crisis Map—would have been completely blank, completely devoid of information, were it not for the thousands of digital volunteers who cared (Meier, 2015)

So, what of the future for communications for development, ICT4D and Missing Maps? Is there a way to turn the participatory model upside down and have some form of radical alternative? Could Missing Maps and ICT4D initiatives like it be turned over entirely to the Global South? It is happening already – many Kampala respondents cited that they sprang into action in response to a local disaster, a landslide, that occurred shortly before my visit in December 2018. However, for as long as there are Global North-based NGOs running the show, directing people to which areas to map, north-south power relations will always be maintained, even with increased Global South participation. Perhaps those in the Global South can try the alternative of proactively organising to map their own areas, without waiting for
directions from ‘up north’. While there are barriers to overcome in achieving this, we have seen that people in the Global South have the tools, and they certainly do not lack the motivation.

Turning the concept of participation in ICT4D completely on its head, what if robots and computers replaced humans? People are currently using computers to map using satellite images – is this something a robot or a computer could do? It is something many in the mapping community, including several respondents during this research, mooted as a potential development for humanitarian mapping. Suffice to say, if and when that ever occurred, the participatory model of this form of ICT4D would be radically changed, perhaps even thrown out the window.

For now, however, Missing Maps sits somewhere in the middle. It is neither purely slacktivist (although there are certainly those elements to it) nor is it a radical model of a participatory ICT4D initiative. It provides people with the space to learn and to connect – but it will not change power relations or eradicate poverty.

**Conclusion**

While Waddan in Pakistan is not yet on the map, the need to put it, and places like it, literally on the map is clear. The pursuit of Missing Maps to ensure that “people, needs and issues that are ignored, forgotten or silenced” are brought to the surface and are represented is, as the concept of témoignage – or witnessing – goes, one of the holy grails of humanitarian action. (Givoni, 2016)

In this pursuit, Missing Maps is joined by – so far – nearly 156,000 people, including those from the Global South, who have mapped nearly 38 million buildings and traced nearly a million kilometres of road. (HOT, 2019) And we should call them digital humanitarians, since the principle of this form of crisis mapping corresponds with a definition from Ryan Burns on digital humanitarianism:

> “The enacting of networks, technologies and practices that enable large, unrestricted numbers of remote and on the ground individuals to collaborate...”
As an ICT4D tool to engage volunteers, we can see through the work of researchers like Dittus that there is an attraction in the retention of volunteers, particularly in the Global North, through regular mapathons. Dittus’ research has shown that newcomers who experience mapping through the forum of regular mapathons that include a diverse, enthusiastic group of people, are likely to stay engaged. The social aspects of mapping, and the community and friends that it brings is a theme that was repeated over and again in the responses to the interviews I conducted. The mappers themselves concede that mapping is not perfect – obstacles such as poor satellite photos and bad internet connections were challenges mentioned by at least a couple of people in every city I visited.

However, it is in the results that we can see what really engages people to join the digital humanitarian community. The motivations expressed across the four cities are as varied as the people I met. But they form common themes and patterns. People in the Global South – in Beirut and especially in Kampala – are well aware of the worth of their self-engagement in mapping, both to themselves, in terms of career and life prospects, and to their communities. Particularly the latter, the benefit of imparting and sharing local knowledge, with the potential benefits that literally being on the map brings, was not lost on participants. This also proved an important motivating factor, echoing the previous results from the study conducted by Budhathoki. Those in the Global South were also more likely to be involved for altruistic reasons, wanting to help their fellow citizens and those who are vulnerable, that a high awareness of the inequality in the region brings.

The Global North meanwhile – and especially young people – were more likely to be engaged for the social aspects, particularly in Prague, but also for the slacktivist tendency to appreciate how easy it is to map and get that ‘feel-good’ factor. The fact that there is a perceived slacktivism element from those in the Global North should be something that is capitalised on by organisers of mapathons in attracting and retaining newcomers, in line with the open social settings that Dittus has identified.
The perceived ease of mapping is not the only motivating factor to engage people in London and Prague, especially young people – although it may partly keep them retained. Many did express more altruistic motivations in wanting to help. However, the number of young people who expressed an interest in MSF and in humanitarian response is worth keeping in mind and pursuing as potential future humanitarians, beyond the digital space. Their introduction to humanitarian issues through Missing Maps has provided an opening that will hopefully continue to spark their interest and engagement in humanitarian issues, and enable them to become a new generation that is involved in the sector, and that challenges and questions the system.

ICT4D tools like crisis mapping will not change or challenge inequality in the world. But it is false to claim – as Turk and Palmer do – that the user interface of a mapping tool conceals the inequalities of the world underneath. Digital humanitarians are just that – humanitarians but on a digital platform. And like other humanitarians, they know why they are engaged, why they are mapping at their computer, likely several thousand kilometres away. People in the Global South are even more painfully aware of the inequalities on their doorstep.

The key points I take away from my research are that people engage for a wide array of reasons and motivations; there are no single labelled-boxes, there is no black and white. But yet, even the more selfish reasons – those who are motivated from slacktivist tendencies or from some form of self-benefit – are not a bad thing for ICT4D or the humanitarian world, as their participation does have value. Whatever their reasons for engaging, people’s participation yields results.

The other point is that this project could not be done – as effectively, if at all – without the participation from the Global South. But we need more input from the south and more north/south collaboration on ICT4D and humanitarian issues. This was something participants, from both geographical divides, noted themselves. Many from both north and south expressed a wish for more collaboration with the other, providing food for thought for organisers on how to open this collaboration up between communities of mappers.
Missing Maps itself is not without its flaws. It is a fun, easy, necessary digital humanitarian activity, but nevertheless maintains and replicates existing power structures, for all of the crucial input that people in the Global South provide. Through Missing Maps, the decisions on which areas to map are ultimately made by NGOs like MSF and Red Cross in the Global North. The subsequent aid provided comes primarily from the same Global North-based NGOs.

But that is not to diminish the vital role the Global South has in the process. Without those on the ground in countries being mapped, the project would be stalled: maps would not be as accurate and would not be available as quickly. However, the greatest role that mappers in the Global South can play is to hold those who promise a response to areas being mapped accountable. People in these areas must use their voices and amplify their digital humanitarian actions to ensure that the benefits of being put on the map flow to the mapped communities and the people who live in them.

References


Christensen, H. S., 2011. Political activities on the Internet: Slaktivism or political participation by other means?. First Monday peer reviewed journal on the Internet, 7 February.16(2).


OCHA, 2013. Humanitarianism in the network age including world humanitarian data and trends 2012, s.l.: OCHA.


[Accessed 3 February 2019].


**Appendices**

Appendix 1 – Interview guide

Appendix 2 – Demographic breakdown of participants

Appendix 3 – Quantitative tabulation of data into grouped themes
Appendix 1 – Interview guide

Broadly covering:
- How they heard about it
- What attracted them/why are they interested in mapping
- What are the challenges or difficulties in mapping
- What would they change about mapping

Introduction
I’m a student at Malmo University, Sweden, undertaking a Masters in Communication for Development. For my final degree project dissertation, I’ve chosen to focus on ‘Missing Maps’, a voluntary ITC4D crowd-sourcing initiative designed to help map under-mapped areas. I will be investigating what motivates people to engage in ICT4D projects and initiatives. However, I’d like to focus particularly on these motivations from a cross-cultural basis, by investigating if there are any different reasons for why someone in the Global North would voluntarily choose to participate from why someone in the Global South would voluntarily participate.

Thank you for agreeing to be interviewed! I’ll be taking some brief details on name, age range and level of experience in mapping. Other things to note:
- I’ll be asking 6 open-ended questions, and the entire interview should take no more than around 15 minutes.
- The interview will be audio recorded, in order to enable me to properly transcribe what is said.
- Neither the recording, nor the transcript, will be released – only the relevant quotes and information within will be used to help in the final analysis of the paper.
- In the final paper, your responses will be anonymised – your name won’t be used – however your location will be disclosed.

Interviewee’s details
*Note: names will be anonymised, however locations won’t be*

Name/initials*
M/F
Age group*: 18-25 26-35 36-50 51+
Level of experience with mapping:
Never mapped before
Mapped a couple of times
Have mapped regularly for some time
Experienced/expert mapper

How did you hear about mapping?

Why are you interested in mapping?

If you map on a regular basis, why do you continue to map?

What do you like about mapping?
Do you face any challenges or restrictions in mapping?

If there’s one thing you could change or improve about mapping, what would it be, and why?

Many thanks for participating! Finally, do I have your permission and consent to use what you’ve said here today in my research and final dissertation paper?
## Appendix 2 – Demographic breakdown of interview participants included in research results

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