

The cartographic ambiguities of HarassMap: Crowdmapping security and sexual violence in Egypt

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Abstract

In December 2010, HarassMap was launched as a Cairo-based interactive online mapping interface for reporting and mapping incidents of sexual harassment anonymously and in real time, in Egypt. The project's use of spatial information technologies for crowdmapping sexual harassment raises important questions about the use of crowdsourced mapping as a technique of global human security governance, as well as the techno-politics of interpreting and representing spaces of gendered security and insecurity in Egypt's urban streetscape. By recoding Egypt's urban landscape into spaces subordinated to the visual cartography of the project's crowdsourced data, HarassMap obscures the complex assemblage that it draws together as the differentially open space of the Egyptian street – spaces that are territorialized and deterritorialized for authoritarian control, state violence, revolt, rape, new solidarities, gender reversals, sectarian tensions, and class-based mobilization. What is at stake in my analysis is the plasticity of victimage: to what extent can attempts to 'empower' women be pursued at the microlevel without amplifying the similarly imperial techniques of objectifying them as resources used to justify other forms of state violence? The question requires taking seriously the practices of mapping and targeting as an interface for securing public space.

Keywords

Egypt, gender, human security, intervention, securitization, sexual violence, Crowdmapping

Introduction

In December 2010, HarassMap was launched as a Cairo-based interactive online mapping interface for the anonymous reporting and mapping of incidents of sexual harassment in real time, in Egypt. Going public concomitantly with the beginning of the mass demonstrations that have since come to be known as the January 2011 Egyptian Revolution placed the project in a timely position to address the issue of gendered sexual violence and assault. In the days leading up to former president Hosni Mubarak's ouster, numerous accounts of Egypt's popular protests were presented alongside reports of forced 'virginity tests' and women being insulted, beaten, and raped (Amnesty

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International, 2013). The issue received heightened international attention with the high profile assault of CBS reporter Lara Logan, with media coverage of the incident emphasizing culturalist interpretations of mob-style attacks on women protestors and accounts of the 'Arab street' teeming with hyper-sexualized, hyper-masculinized mobs of young Arab men (Amar, 2011a). In subsequent months, HarassMap received worldwide media attention for addressing the issue of sexual harassment in the country, which has increasingly been portrayed as an endemic problem 'deeply rooted' in Egyptian society (Chick, 2010; Bell, 2012).

HarassMap uses the Ushahidi open source crowdmapping platform and FrontlineSMS to create a cartographic representation of incidents of sexual assault that are reported through multiple channels and data streams, including SMS texting, email, Twitter and the HarassMap website (Ushahidi.org, 2014; HarassMap, 2014). Ushahidi uses the Google Maps application programming interface (API), which allows Google Maps to be embedded as a base map into the websites of third party developers. As a Ushahidi implementation for geocoding and georeferencing incidents of harassment, HarassMap presents geovisualized data points that represent spaces of violence which are geolocated through positional information reported, for instance, as text within an SMS report. The project's use of web-based spatial information technologies for crowdmapping instances of sexual harassment in Egypt presents a unique prism for theorizing about the increased interest in and adoption of Google's mapping applications for disaster management, conflict response, and other forms of humanitarian and human security intervention, including those related to gendered sexual violence.

My interest in this project focuses on how crowdmapping – understood here as a networked assemblage of technological devices including global positioning and imaging technologies, mobile phones, and Ushahidi software – is used to produce a particular biopolitical configuration of the Egyptian street. Like Bennett (2010), I am drawn to Deleuze and Guattari's notion of assemblage in my thinking of the relay between these different devices as 'ad hoc groupings of diverse elements... that function despite the persistent presence of energies that confound them from within' (Bennett, 2010: 23–34). Alone these technological devices are not necessarily biopolitical, but as they work together to aggregate data about sexual violence, they create the conditions of possibility for forms of population management through the 'targeting' of dangerous people, dangerous streets, and dangerous neighborhoods. My reading does not attempt to analyze the impact of the program's mapping and communication campaigns in terms of policy implementation or shifts in general sentiment on the ground with regard to perceptions or experiences of gendered sexual violence. Rather, I am interested in how HarassMap's specific configuration of data collection, processing, and representation produce a particular knowledge of targeting that resonates with other projects of securitization. As such, the project has more in common with forms of scopic engagement imbued in unmanned aerial vehicles (UAVs) than, for instance, how the same technologies are used for commercial purposes. Scholarship on the ethics of precision in contemporary war, specifically aerial warfare, is helpful for thinking about HarassMap's use of crowdmapping for generating criminalized subjects and spaces in need of intervention. Zehfuss (2011: 544) argues that precision targeting has made warfare more ethically acceptable because precision targeting is assumed to incur less collateral damage. The acceptability of intervention is justified by the ability of precision weapons to identify, locate, and 'hit' particular targets with accuracy while minimizing incidental damage. I suggest that a similar ethics of precision is evident in narratives that celebrate HarassMap's use of technology and its ability to target both individual harassers, whose pictures are uploaded to the site via smartphone cameras, and in the visual and statistical identification of 'hotspots' on the harassment map.

As with any evaluation of precision targeting, one needs to consider the question of incidental violence. The incidental violence of HarassMap turns on what I call the plasticity of victimage. To

the extent that HarassMap seems unequivocally positive, its location of the problem of gendered violence in Arab culture, its reliance on the trope of victimhood, and its appeal to both international organizations and local law enforcement are implicated in a project of population management that works through an assemblage of actors, objects, and affects that animate colonial archives of sexuality and 'Arabness'. As these archives resonate with new techniques of mapping and targeting, the project produces a series of tensions through demands for the expansion of the state's policing powers, more punitive sanctions for harassers amidst crackdowns on anti-government and anti-military sentiment, new prohibitive laws on public assembly, and the sexual torture of women and men arrested for protesting while in state custody.

This article presents an alternative reading of HarassMap that considers how the project presents a 'vertical solution' (Weizman, 2002; Crampton, 2010; Graham, 2004, 2011; Graham and Hewitt, 2013; Elden, 2013) to the problem of gendered human security through a series of technological interventions that attempt to create new forms of public consciousness in the presentation of targets. As a Ushahidi implementation, HarassMap's interfacing with Google Maps allows the project to engage in a kind of aerial targeting of harassment, creating a domain of intervention that is atmospheric, grounded, networked, and global. By recoding Egypt's urban landscape into spaces subordinated to the visual cartography of the project's crowdsourced data, HarassMap recodes the complex assemblage that it draws together as the differentially open space of the Egyptian street – spaces that are territorialized and deterritorialized for authoritarian control, state violence, revolt, rape, new solidarities, gender reversals, sectarian tensions, and class-based mobilization.

Leszczynski and Elwood (2015: 15) accurately note that HarassMap highlights how the spatial navigation of urban life is never a frictionless terrain of movement for women, but is always gendered and sexualized and must therefore be negotiated to minimize the possibility of violence. My analysis asks us to consider how the HarassMap's representation of space is also racialized, and how the project is skewed toward a particular internationalist interpretation of gendered space that relies on a liberal 'rule of law' framework, one that is highly problematic given the role of the Egyptian state in the creation of a climate of sexual terror as a form of political retribution and intimidation. Without discounting the potential ameliorative effects of HarassMap or dismissing the intentions of its founders and participants, I wish to highlight how HarassMap appeals to culturalist explanations of sexual violence in the Arab world that resonate with an ethics of precision that has filtered into the realms of human security and public consumption as satellite and imaging technologies become part of our everyday experience of *other* spaces. What is at stake in my analysis is this: To what extent can attempts to empower women be pursued at the microlevel without amplifying the similarly imperial techniques of objectifying them as a resource used to justify other forms of state violence? The question calls for a close analysis of the practices of mapping and targeting as interfaces for securing public space. Ultimately, we must consider the degree to which seemingly progressive uses of these technologies can exceed the martial logic of their origin.

By considering the relays between bodies and technologies in this context, I seek to develop what Law (2004) refers to as a 'sensitivity to materiality, relationality and process' to show how methods are performative in the production of political effects through the enactment of particular forms of knowledge (Aradau and Huysmans, 2014: 598). I experiment with different languages and disciplines for thinking about modes of agency that exceed liberatory projects, but also agencies that exceed explanations for effects and events that take only human action into account. I reflect upon the kinds of political projects presupposed and constructed by certain digital communicative practices, and suggest that there is a political valence to fields of practice, that in excess of any intentionality, work to transform the basis upon which different kinds of politics are envisioned and practiced by women and men on the ground. My

aim is to highlight not only what these practices mean, but also the subtle work that digital cartographic representations of sexual violence do to the experience of subjectivity, attachment, and community. Specifically, I am interested in the discursive representations of gender and race via HarassMap, the pragmatic effects of the technologies that make up the project, and the interaction between the two.

The original research for this article is based on an evaluation of 449 reports posted in English and 252 reports posted in Arabic, including pictures and video, to the HarassMap website between October 2004 and April 2014; two annual reports produced by the project; approximately three hours of video published on the HarassMap website; as well as several articles about and previously published interviews with members of HarassMap staff. Rather than explore the use of HarassMap as a strategy that either ‘works’ or doesn’t, or make claims about any number of reports representing epistemic breaks in practices of human security, I propose an engagement with the project from within the globalizing networks whereby bodies and data travel together to think about what it might represent in terms of incipient shifts in biopolitical logics of securitization. In other words, I explore how the concept of HarassMap is outpacing its application. The primary focus of the article is how the project makes sensible the targeting of space, and the emergence of new forms of intervention that point to larger systems of biopolitical ordering that may mutate and transform at rates often too slow to be seen.

In what follows, I consider the project’s specific policing techniques in the context of what I identify as an incipient merger between UN gender discourses on sexual security and the use of crowdsourced data for human security governance. I then argue that HarassMap employs a particular territorial strategy to capture and redefine the policing of urban sociality as a three-dimensional space, where planar perspectives on territory representing the so-called ‘reality’ of sexual violence on the ground are dependent upon a material assemblage of technologies, from satellites to mobile handheld devices, that make visible particular kinds of targets through the project’s mapping interface. Finally, I pose the question of whether or not sexual violence is best addressed through more totalizing forms of surveillance and paradigms of risk management that seek to order populations into profiles and probabilities as part of an internationalist and interventionist project of human security governance.

Security, devices, and the government of things

While spatial information technologies have deeply militarized roots, they are, like all technologies, ambivalent and contingent in how they organize knowledge (Coutard and Guy, 2007: 714; Burns, 2014). This is evidenced in the increasing public use of these technologies through platforms like Google Earth and Google Maps. A growing number of scholars have begun to consider the use of geospatial technologies and mapping platforms in theorizations of geopolitics and visibility (Weizman, 2002), urban life (Graham and Hewitt, 2013), critical geography (Elden, 2009, 2013; Crampton, 2010), and humanitarian intervention (Parks, 2009; Crutcher and Zook, 2008). Burns (2014: 52) defines digital humanitarianism as ‘the enacting of social and institutional networks, technologies and practices that enable large unrestricted numbers of remote and on-the-ground individuals to collaborate on humanitarian management through digital technologies’. Writing about the use of GIS in digital humanitarianism, Burns argues that the reliance on remote processing, aggregation, and the representation of user generated data results in each program or project also producing its own form of knowledge politics (Burns, 2014: 52; see also Zook et al., 2010; Brabham, 2008). For example, Lisa Parks’ (2009: 537) essay on Google Earth’s ‘Crisis in Darfur’ project shows how mapping platforms mediate affective visual-cartographic arrangements of satellite imagery, war photography, graphic narratives, and human rights monitoring meant to

provoke particular responses and preface particular geopolitical agendas. The use of Google Earth in creating both a knowledge politics about Darfur and the publics for this information is an example of what Burns calls 'moments of closure' in which certain forms of knowledge politics become temporarily 'fixed' in the software, hardware, and social practices of particular technologies (Burns, 2014: 52).

This scholarship presents a challenge to the idea of spatial information technologies as purely instrumental, instead attending to the social, historical, and political contingency of technical devices and platforms, and to how the functionalities of these devices shape human action and the representation of data to present a particular picture of the world. Focusing on the instrumentality of the devices employed in the production and distribution of HarassMap's crowdsourced data provides insights into how the project reorganizes concerns about development and modernization toward a gendered security paradigm invested in both feminist internationalism and free-market transnationalism. By feminist internationalism, I mean the move toward defining universal and measurable criteria to improve the conditions for women globally in a range of areas including health, education, and economic opportunity. These criteria, in particular those related to sexual violence, are increasingly being thought of in terms of surveillance and policing in UN gender discourses. As Foucault (2007) recounts through the work of Guillaume de La Perrière, policing requires the right disposition of people and things within a network of contingent interventions, technological innovations, and spatial arrangements, where life and the living are organized in such a way as to achieve these criteria. Free-market transnationalism, which I borrow from Sparke (2006: 153), is defined as 'the incorporation of economic imperatives that involve increasingly transnational capitalist interdependencies and the associated entrenchment of transnational capitalist mobility rights through various forms of free-market re-regulation'. Here neoliberalism is described as a set of contingent practices of free-market governance, which often incorporate illiberal forms of political management (Sparke, 2006: 153). I am interested in how the confluence of these two interests resonates with security as a form of governance, and how the goals of the advancement of women and the expansion of market reason come to inhabit the practices of sexual security.

Critical feminist engagements with human security have raised important concerns about gendered, racial, and class-based exclusions produced in the construction of universal notions of human values, instead highlighting the ambiguity of 'security' and arguing for an emphasis on relationality and context in how security is conceived and operationalized (Hudson, 2005; Christie, 2010; Wibben, 2011; Marhia, 2013). The study of HarassMap contributes to this literature in two ways. First, it brings feminist security studies into conversation with feminist geographic research and postcolonial cartography engaging GIS technologies (Kwan, 2002; McLafferty, 2005; Radcliffe, 2009) to look at how the project's use of crowdsourcing and crowd-mapping produces racial and class-based exclusions in the interest of sexual security. Second, it suggests an incipient shift in how the use of crowdsourcing and crowdmapping by international organizations is reorganizing the locus of human security from the individual to what Deleuze (1990) terms the 'dividual'. Williams (2005) explains dividuals as embodied human subjects that are 'endlessly divisible and reducible to data representations via modern technologies of control', where information about *ourselves* can be separated from us and resynthesized in ways over which we have no control. As women who are subjected to sexual violence are encouraged to identify themselves as targets of intervention via HarassMap, their experiences are aggregated at the intersections of class, age, race, and gender to demonstrate large quantities or patterns of violence. Once this happens, it is no longer a particular person's experience or life that is to be secured. Instead, aggregate sums of experiences replace any one woman's life to determine the success or failure of an intervention, as well as indexing the targets of those operations. Spaces

and lifeworlds are thus decontextualized and made sensible to a quantitative index used to determine how liberal or illiberal a neighborhood, city, or even an entire region is. Here, the streets of Cairo become a space in which the highly sexualized bodies of Egyptian women and men are tracked, tagged, and coded in ways that seem innocuous, but in fact fall into a *dispositif* of security that renders all data useful in ‘manipulating, maintaining, distributing, and re-establishing relations of force’ (Foucault 2007: 312). Within this *dispositif*, security is no longer strictly disciplinary, but is dispersed along and within multiple layers and strategies of power whose project is to ‘make life live’ (see Dillon and Lobo-Guerrero, 2008; Muller, 2008).

Thus HarassMap cannot help but produce new data streams about the Egyptian population that can be redeployed by the matrix of liberal feminism and neoliberalism. Paul Amar (2013: 214) describes this phenomenon of UN-affiliated non-governmental organizations (NGOs) working locally on the issue of harassment within ‘a middle-class, law enforcement-centered rescue-protection framework’. My reading of HarassMap pushes Amar’s analysis further into the ‘government of things’, and specifically toward what Aradau (2010) identifies as the performative role of material objects in practices of securitization. The devices I am engaging in this article are performative in that they produce particular frameworks for security that privilege Western international norms and a middle-class and consumerist understanding of public space. We can neither graft Foucault’s account of 18th-century France onto the streets of contemporary Cairo, nor declare these new technological assemblages as unprecedented. Instead, what I am arguing is that innovative techniques of governmentality mobilize and mutate older epics of racial and sexual knowledge. Following this, technological devices, crowdsourcing, private enterprises such as mobile phone companies, datasets, satellite imaging, and international organizations become imbued with colonial legacies and the particularities of the Egyptian urban milieu to define a unique repertoire of human security interventions where social, political, and cultural life can be reduced to a set of calculations and codes.

HarassMap, crowdmapping, and laboratories of securitization

Amar (2013: 204) argues that the spaces in which gendered human security regimes operate in Egypt form ‘a crucial laboratory’ for experiments with an assortment of emancipatory and repressive securitization practices that shape what he calls ‘contemporary gender-sensitive security states’. I draw on this idea of the laboratory for thinking about HarassMap in light of the emerging alliance between UN gender norms as a human security priority, and the increasing move toward crowd-sourced mapping by international institutions as a strategy for disaster management and human security governance. These systems work together at the intersection of technology, calculation, and affect to produce two separate yet interfacing configurations of security governance. The first relates to the production of a particular kind of cultural security and social hierarchy that marginalizes class-based mobilization, and instead highlights the proper female citizen as a law-enforcement centered and gendered consumer marked by class (Amar, 2013: 128). The second form of ordering relates to the creation of what Jasbir Puar (2007: 107) terms ‘data bodies’, or bodies materialized through algorithms, statistics, and data streams that are racialized and sexualized through the information they assemble.

Originally created for the purpose of mapping reports of violence in the aftermath of the 2008 Kenyan elections, Ushahidi has since been used by numerous organizations to collect information about and create cartographic representations of crowdsourced reports on various issues, including those related to sexual violence and assault. In what appears to be a growing trend, other organizations have adopted the Ushahidi platform specifically for georeferencing crowdsourced data on gendered violence, including the Women’s Media Center’s ‘Women Under Siege’ (2014) website,

which documents reports of sexual assault in Syria, *Geographies of Violence Delhi* (2014), and the Open Institute for Gender Based Violence in Cambodia (2014).

The idea for HarassMap was developed in 2005 by two women working for the Egyptian Center for Women's Rights (ECWR) in Cairo: Rebecca Chiao, an American graduate of the Johns Hopkins University, Paul H. Nitze School of Advanced International Studies (SAIS), who currently acts as director of the project, and Engy Ghozlan, an Egyptian women's right activist (Tavaana.org, 2013). Both women recall experiencing daily sexual harassment on the streets of Egypt as a motivating factor in the project's beginning stages. As part of their work for ECWR, Ghozlan and Chiao began developing an anti-harassment campaign and communicating with other organizations and NGOs addressing the issue. It was at this time that they met two of the other core members of the HarassMap team: Sawsan Gad, a geographic information systems (GIS) data analyst, and Amal Fahmy, who had worked for the United Nations Population Fund (Tavaana.org, 2013; HarassMap.org). The harassment map was conceived in part with technical assistance from NiJeL, a group that partners with other organizations to create custom systems for data visualization and analysis (Nijel.org, 2014). Nahdet El Mahrousa, an incubator focusing on 'social entrepreneurship,' currently provides a legal umbrella for the organization to operate within the country. Since its initial launch, HarassMap has received a two-year grant from Canada's International Development Research Centre (IDRC), and has raised more than US\$25,000 from a 2013 Indiegogo crowdfunding campaign. The project has also received several international awards including the 2012 World Summit Youth Award, which acknowledges organizations working toward the United Nations Millennium Development Goals, the 2012 Deutsche Welle Award for best use of technology for social good, and a certificate of recognition from the Association of American Geographers 'My Community, Our Earth' partnership.

HarassMap has both an Arabic and English language interface for reporting incidents of sexual harassment. Individuals are prompted to assign the incident to a particular category of harassment provided by the site (touching, rape, catcalls, etc.), the location of the incident, and a summary of what happened along with a series of demographic indicators including age, gender, and level of education (HarassMap). These reports are reviewed by the HarassMap team and then geovisualized as a geographical data point over Google Maps in the form of a red dot that can be aggregated or individuated depending on the position of the zoom toggle (Figure 1). Its multiple filtering options for refining the presentation of data reinforces the perception of the map as both totalizing and infallible in terms of its ability to penetrate a particular space. HarassMap's research team regularly reviews the map to identify 'hotspots' where community organizers deploy communications campaigns aimed at encouraging action against sexual harassment in accordance with a series of guidelines provided by the organization (Rissman, 2014). Chiao states that the outreach program takes what she calls a 'social approach' to addressing harassment: 'We do direct interventions to rescue the women, but in our normal long-term work we target bystanders to intervene' (Tillet, 2013).

HarassMap has 10 full-time employees, at the time of writing, and claims over 1000 volunteer members for its community outreach program (Rissman, 2014). These volunteers are trained to speak with 'locals' and those with a visible presence on the street, and printouts of the map are distributed to demonstrate 'proof' of the problem as endemic to a particular area (HarassMap, 2014). Those with whom HarassMap makes contact are asked to sign an agreement that they will intervene when acts of harassment occur according to the guidelines provided, and in instances where people are reluctant to sign a document, HarassMap reads this contract to them, asks them for a verbal agreement, and signs it on their behalf (Rissman, 2014). HarassMap also encourages shop owners who have signed the pledge to put stickers in their windows indicating their support for the project, presumably with the promise of potential revenue generation, and as a visual marker of HarassMap's presence on the street.

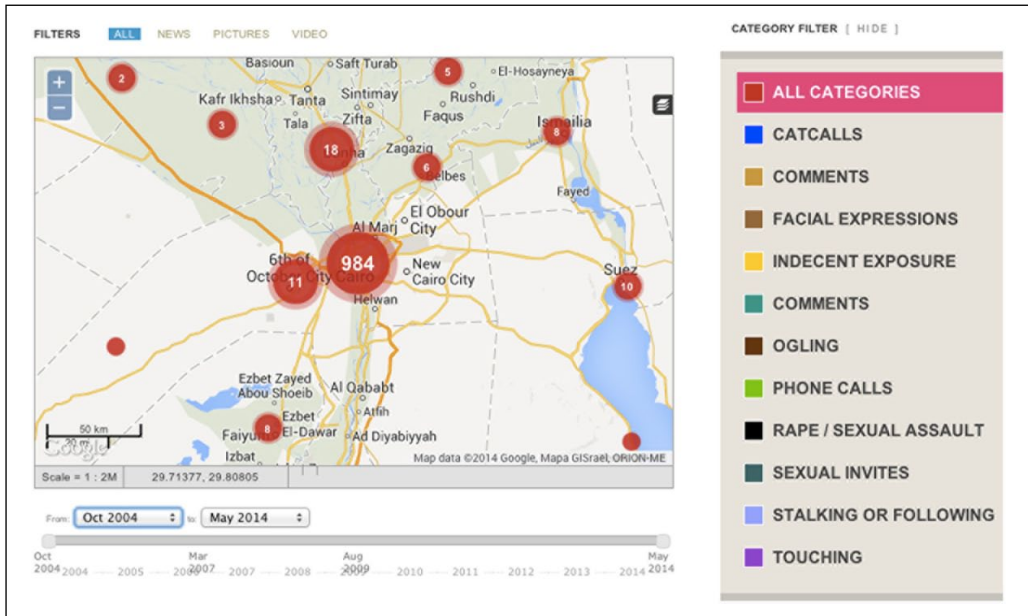


Figure 1. HarassMap – <http://HarassMap.org/en/what-we-do/the-map>.
 Source: HarrassMap (2014), author screenshot (accessed 2 May 2014).

The techniques described here allow us to situate HarassMap within a particular system of UN-recognized feminist campaigns identified by Amar (2013: 204) that emerged between 2003 and 2010. These campaigns rejected class-conscious movements for social change and instead focused on cultural explanations for gendered sexual violence. Organizations working within this framework called for an intensification of policing on the streets to combat harassment, and promoted campaigns geared toward ‘social respectability’ that facilitated ‘securitized and militarized appropriations of internationalist gender and security interventions’ (Amar, 2013: 204). For example, HarassMap’s 2010–2012 annual report, despite acknowledging that some instances of sexual violence reported to the site were committed by Egyptian security forces, focuses its criticism of the police and military solely in terms of a lack of presence or a lack of willingness to intervene (Gad and Hassan, 2012: 6, 9). Chiao has also advocated in numerous interviews for increased policing on Egypt’s streets as part of an integrated campaign to fight sexual harassment: ‘We’re also going to give the map to the police, who want to increase their activities against sexual harassment but still don’t have a system for finding out exactly where the incidents tend to happen. The map will reinforce the protection of women, especially in so-called “hot spots” ’ (Shibib, 2011). This position ignores how the Egyptian security state has institutionalized sexual violence against women and men as a way to undermine political dissent (Amar, 2013; Slackman, 2005; Allam, 2014).

Amar traces the development of the legislative language around sexual harassment as a human security priority within UN gender discourses back to October 2000 with the UN Security Council (UNSCR) Resolution 1325 on ‘Women, Peace and Security’, which was designed to ‘mainstream gender’ into practices of peace and security among member states (Amar, 2013: 205). UNSCR 1325 was incorporated into the 2005 United Nations Development Program’s ‘Arab Human Development Report’, which identified the problem of sexual harassment and the discriminatory dispositions of Arab men as a human security concern. The Egyptian government also used UNSCR 1325 in 2009 as a precedent for consolidating executive powers and increasing security during

civil unrest, supposedly to protect women from street harassment (Amar, 2013: 205). Referencing Sally Merry (2003: 943), Amar describes the Convention on the Elimination of All forms of Discrimination Against Women (CEDAW) as:

a cultural system whose coin is admission into the international community of human-rights compliant states. At the heart of this legal process of monitoring this international human rights convention is the cultural work of altering the meanings of gender and of state responsibility for gender equality [through which] national and international NGOs . . . shame noncompliant governments [whose] sovereignty was increasingly defined as contingent on its human rights performance. (Merry cited in Amar, 2013: 206)

HarassMap draws directly on these UN gender doctrines and CEDAW institutions, funds, discourses and legal-juridical mobilizing strategies; two of its four core members have worked for the UN, and the project has a standing relationship with the UN's Safe Cities project.

This research provides a valuable context for considering the use of geo-spatial technologies in the ordering and management of urban Arab populations, and how crowdsourced mapping is emerging as a preferred technique within global human security governance. UN General Assembly Resolution 61/110 established the UN platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER) on December 14, 2006 (UN, 2014). The stated goal of UN-SPIDER is to provide 'universal access to all countries and all relevant international and regional organizations to all types of space-based information and services relevant to disaster and disaster risk management' (UN-SPIDER, 2014). In 2011 the UN General Assembly Committee on the peaceful uses of outer space released report AC105/1007, which emphasized the importance of crowdsourced mapping facilitated by spatial technologies, satellite imagery, telecommunications satellites, and global navigation satellite systems for disaster management, and acknowledged the importance of collaborative ventures between UN-SPIDER and its Volunteer and Technical Communities (V&TCs) including Ushahidi, Google Mapmaker, OpenStreetMap, and CrisisMappers (UN, 2011).

Ushahidi is an example of how advances in software, mobile technologies, and geo-spatial data collection and interpretation have facilitated the move of geodata collection from commercial uses to crowdsourcing data for human security governance. Crowdmapping has become increasingly popular for addressing what Ushahidi co-founder Erik Hersman calls the problem of 'wasted crisis information', which he explains as an ability to 'produce' crowdsourced reports in excess of the ability to 'consume' them (TED, 2009). We can infer here that Hersman means the data collected via crowdsourcing often exceeds the ability to use it for disaster response, but his language of production and consumption is also telling. Crowdsourcing, which was born in user-generated advertising content and online commercial competitions, speaks to a particular kind of relationship between space and calculation that contributes to a phenomenon Crampton and Elden (2006: 681) call the 'mathematization of the subject'. Following Osborne and Rose (2004), they argue that a model of population management based on ordering, ranking and measuring relies on a mode of rationality that makes space 'amenable to thought'. Consider this insight in the context of HarassMap's ability to differentiate between types of harassment and their degrees of violence in order to manage the level of response. The coding of the different types of sexual harassment (cat-calls, comments, facial expressions, stalking, etc.), of the number of incidents, and of their precise location speaks to HarassMap's own projection of the relationship between space and calculation that allows the project to produce through crowdmapping a particular visualization of urban life in Egypt. Here geo-spatial technologies become tools for HarassMap's unique form of population management around statistical inferences about sexual violence that remain distinct from questions of economics, inequality, austerity policies, geopolitical relations, international arms trade, and fiscal policy.

The illusion of transparent space and an all-seeing vision has been described elsewhere by Donna Haraway as the 'view from nowhere' (1988; see also Rose, 1997). Given that sexual violence is not the traditional way political geography situates knowledge, HarassMap does appear to present a feminist cartography via crowdmapping. However, the project does not appear to engage working-class Arabs, alternative feminist movements within the country, or movements mobilized around religion or class in the building of categories and the assignment of names in the process of mapping.

Mapping gender securitization in the volume

The notion of terrain as volumetric is incorporated in a provocative range of scholarship on the vertical dimensions of security (Adey et al., 2011; Elden, 2013; Graham and Hewitt, 2013; Williams, 2007; Zehfuss, 2011) and on the more overtly militaristic control of aerial space (Williams, 2007; Gregory, 2011; Adey, 2010a; Adey, 2010b). However, the aerial politics of domination are not always overtly militaristic. The use of mapping and geo-positioning technologies also engage the vertical dimensions of territory and security, highlighting new spheres for intervention and new spaces of vulnerability. HarassMap uses mapping as a territorial strategy to capture and redefine the policing of urban sociality as a three-dimensional space. The ability for HarassMap to approach the problem of sexual harassment from a multi-scalar perspective is dependent upon an assemblage of devices that are atmospheric, grounded, and networked. Here, the securitization of feminist internationalism dovetails with practices of aerial targeting (of individuals, neighborhoods, even whole 'cultures') not dissimilar from what Wall and Monahan (2011: 239) call the 'drone stare', or a form of surveillance that abstracts life on the ground and reduces difference, variation, and 'noise' in an effort to achieve a strategic advantage through systems of verticality.

Graham and Hewitt's (2013) work on 'Google Earth urbanism' highlights a series of useful vantage points from which to consider HarassMap's 'vertical solution' to the problem of sexual violence. In their account, global satellite imagery, digital cartography, geo-spatial data collection, street level digital imagery, social media, and other data and software that make up Google's mapping interface are combined as an 'always on' interactive datascape. These platforms become 'a flexible and multi-scaled portal through which urban life can be enacted, mediated and experienced in profoundly new and important ways' (p. 75; citing Scott, 2010). The increasing public access to these technologies is reshaping our relationship to the world as one that is becoming 'radically accessible, zoomable and pannable in a myriad of mobile and (near) real-time ways'. The fact that Google does not produce any of its own aerial images, instead acquiring them through various commercial entities and governments that produce satellite imagery (Parks, 2009; Kurgan, 2013), does not diminish the fact that 'any distinct spatial patterns within uploaded information have the potential to become real and reinforced as Google is continually relied on as a true representation of the offline world' (Graham and Zook, 2011: 115). Roger Stahl's (2010: 67) discussion of aerial representations facilitated by Google Earth provide some insight into how aerial representations of space produced through the Google Maps API create a new kind of public consciousness through a particular 'aesthetics of visibility' that make certain kinds of knowledge visible while obscuring others.

Following Stahl, the layered regimes of visibility, access, and control embedded in these interfaces speak to HarassMap's use of geospatial data for targeting, as well as the use of the harassment map as irrefutable evidence that sexual violence is happening in a particular locale. As co-founder Rebecca Chaio notes, 'It's so easy to zoom in ... make a printout of the map and bring it to people in the streets and show them, *this is our neighborhood*' (emphasis mine; IDRC, 2013).

Crowdmapping, together with the delegation of on-the-ground outreach activities, makes visible a particular interpretation of Egyptian urban sociality that is not only reflected in, but also defined by, different interfacing technologies, aerial images, and digital representations of



Figure 2. HarassMap.org/en.
Source: HarrassMap (2014), author screenshot (accessed 12 April 2014).

violence. Hence, more than a digital depiction of an existing reality on the ground, HarassMap aims to shape the spaces it claims to represent.

HarassMap as a tool for mapping sexual violence in real time is only possible because of today’s real-time zoom, from the entire surface of the Earth to a single individual on the ground. Through its interfacing with the Ushahidi platform, the website is able to present a totalizing picture of incidents of sexual violence from 2004 to the present day as a comprehensive and filterable set of geo-spatial data points organized along a uniform spectrum that smoothes over the varying origins, sources, motivations, and contexts that belong to the patchwork of individual reports and news items compromising its archeological record.

HarassMap claims to represent the material conditions of sexual violence and assault on the ground through its ability to zoom in and out of a series of frames that present a ‘view from above’ of incidents of harassment. The zooming function of Google Maps creates the aesthetic experience of sliding along a scale by constructing an uninterrupted flow between different spatial planes whereby sexual harassment is captured from the air to the ground target and then back again into the Earth’s atmosphere at a scale of 1 pixel to 111 meters. This experience of scale is illustrated in Figure 3, which depicts four different zoom positions, from the global to the street level, on a single reporting map. At its maximal aerial

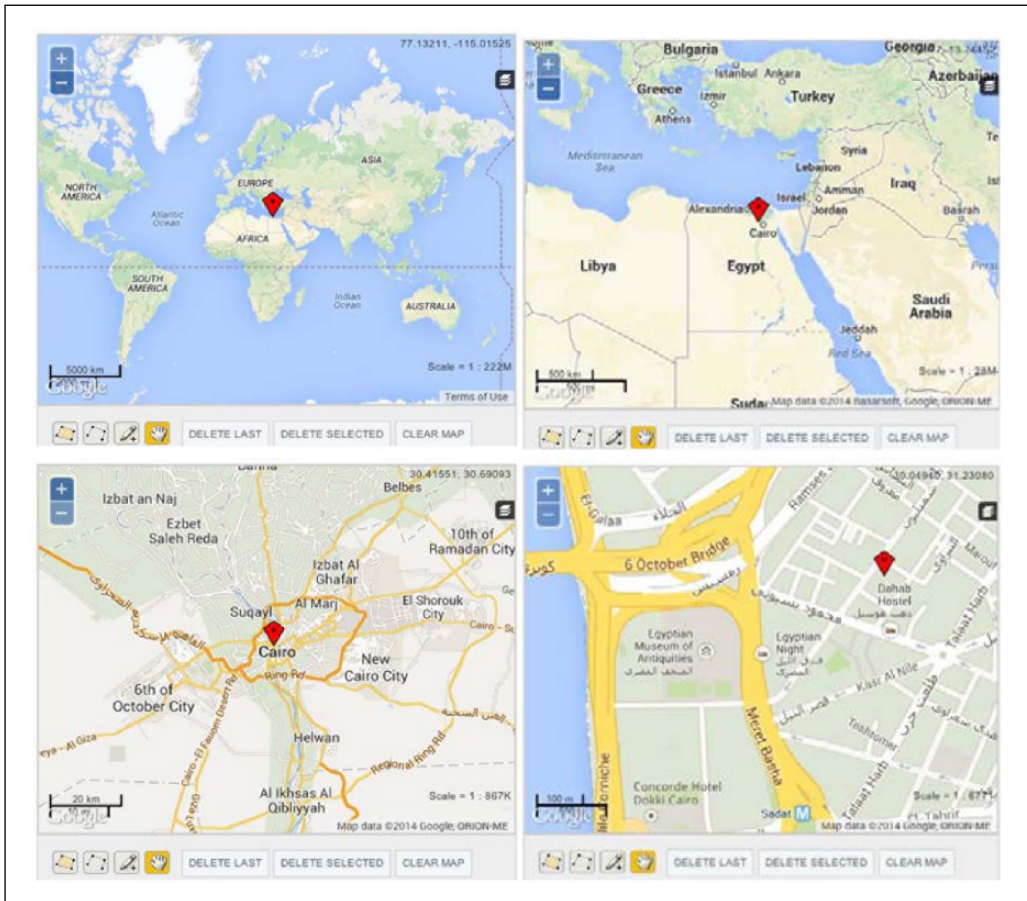


Figure 3. Four different zoom positions on a single reporting map.

Source: HarrassMap (2014), HarrassMap.org/en/submit-report, author screenshot (accessed 12 April 2014).

vantage point (Figure 2), the red dot representing instances of harassment and sexual violence in Egypt visually dwarfs the entire country, spreading into Turkey, Iraq, Saudi Arabia, Sudan, and Libya. The number of reports (1272 on April 12, 2014) mostly originating from Cairo vastly overshadows the single digit reports made in the United States (two reports) and those made in Europe (three reports).

Applying Kurgan's (2013) engagement with Google Earth to the Google Maps interface, we can see how the political, economic, and security stakes that underwrite the creation of the map disappear (p. 21). All that remain are the markers of sexual violence as time stamps and a series of coordinates (p. 21) made available for public view. Certainly it could be argued that HarrassMap's efforts are focused primarily on Egypt's urban areas and not on the United States or Europe. The program's target areas notwithstanding, global surveillance is a specter residing within the combination of Google Maps satellite imagery and the international purview of the UN gender conventions and norms cited on the HarrassMap website. The assemblage of interfaces that make up the harassment map generate a visual representation of the project's global jurisdiction, as well as a visual representation of its crowdsourced data.

Kurgan (2013: 20) draws our attention to the 'radically decentering' effect of the seemingly 'uninterrupted flow' of the map as one moves smoothly from one scale to another. The combination

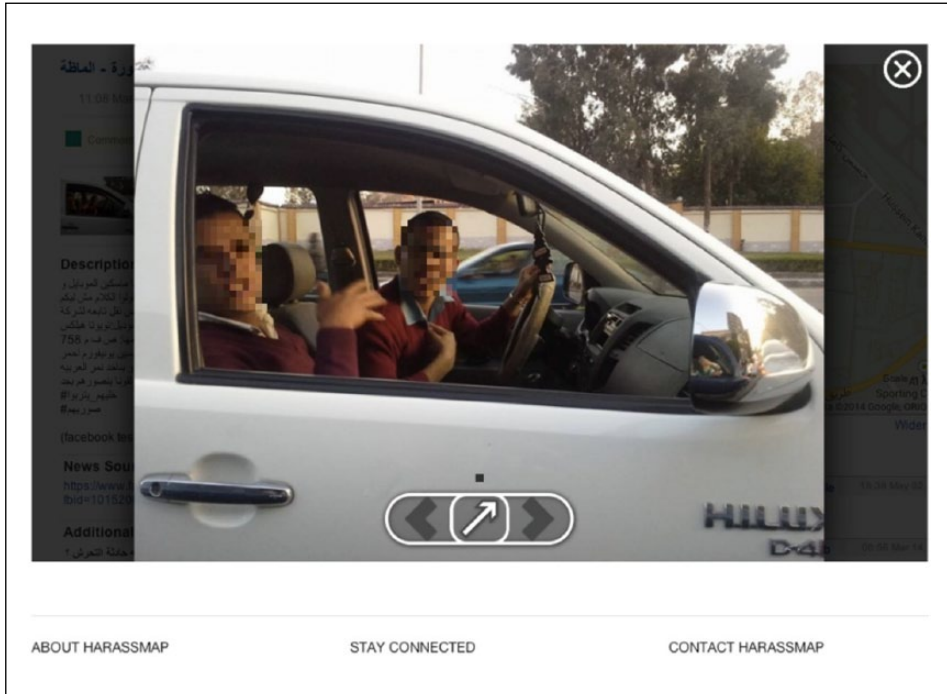


Figure 4. Image of harassers, accompanying a report dated 21 March 2014.

Source: <http://HarassMap.org/en/what-we-do/the-map/>. HarassMap (2014), author screenshot (accessed 7 May 2014).

of interfaces that make up the harassment map do not give preference to any particular scale, as there is no 'natural or logical starting or stopping point for the zoom'. As Kurgan notes about the decentering effect of the zoom toggle more generally, the scale is 'relativized by its proximity to and distance from the next'. The map is not bound to any particular location or scale, 'least of all the human scale' (Kurgan, 2013: 20), which is where HarassMap identifies the emergence of the subject as victim or perpetrator. This creates a visual representation of HarassMap's jurisdiction as global, a presentation that works concomitantly with the project's promotion of UN gender norms. As such, Egyptian urban sociality and sexuality appear as a series of flattened and homogenous images that can be evaluated and monitored at the minutest level.

Targeting chains and the plasticity of victimage

HarassMap points to how advances in mobile technology have deterritorialized the capacity for aerial surveillance from overhead images produced by military-grade satellites to quotidian ground-level mobile communications devices for capturing video, photographs, and other forms of data. The complex interfacing between practices, technologies, people, and policies creates a 'target-chain' used to direct HarassMap's management of Egypt's urban spaces. My use of the term 'target-chain' is inspired by Derek Gregory's (2011: 196) theorizing of the 'kill-chain' in his discussion of more overt forms of violence related to drone warfare and unmanned aerial vehicles (UAVs). In Gregory's description, a 'kill-chain' is the dispersed apparatus of networked actors, affects, objects, discourses and practices that produce targets as these elements pass through the chain. This process of passing through creates particular kinds of subjects when bureaucratic

practices and acute forms of violence are brought together in the creation of targets. For Gregory, what is unique about the late modern kill-chain is that it must contend with mobile targets, which requires the rapid processing of information. This results in an experience of time–space compression that draws more dispersed elements within the apparatus closer to the visual field of the ‘killing space’ (Grant, 2008 cited in Gregory, 2011: 196).

A less overtly militaristic yet similar organization of actants and processes can be found in HarassMap’s geospatial interventions. These interventions are also comprised of an assemblage of disparate and dispersed elements, including Egyptian women, NGOs, liberal international discourses on human rights, smartphones, GIS software, the Ushahidi platform, local shop keepers, international donors, images of young Arab men in moving cars, and security states that are drawn together in the creation of decisive objects for aerial targeting. Through its community mobilization campaigns, HarassMap engages everyday citizens in the practice of targeting (on the street when asked to ‘speak out’ against the harasser, in uploading reports, in taking photos of harassers with mobile devices, in identifying target areas for community intervention), creating a target-chain comprised of nodes and links that engage other areas of social, legal and political life.

We should give closer consideration to the networked engagements between ground and air surveillance that make it possible for HarassMap to act on real objects and complex urban environments, where the violence of such interventions has otherwise become increasingly abstract and obscured. This is in part, I think, a result of crowdmapping’s so-called utility, as well as the discourses of innovation and progress that filter into HarassMap’s use of imagery and navigation to be able to intervene on victims’ behalf with increasing precision. It is here that we find the answer to the ethico-political problem of sexual harassment in Egypt – in discourses about Western technological superiority and a market-based ethics that sees life as enhanced through its subjection to free-market governance. Yet HarassMap’s ability to hit its specific target is, as Zehfuss (2011: 551) has argued about targeting precision more generally, not the same as not hitting anything else.

The targets visualized through the HarassMap interface are also more than just marks on the map representing an ogler, toucher, or rapist. In fact, it might be more accurate to say that HarassMap produces a series of interfacing targets. There is the materiality of the targets themselves, which are actual people, objects, and environments that can be acted upon immediately, decisively, and with such speed that the violence of these interventions often appear abstract. Within this material and holographical target space are racialized and sexualized women who themselves become targets for rescue operations. There is also Egypt’s cultural acceptability of harassment as a target, which plays into culturalist explanations of sexual violence that rely on Orientalist tropes of unchecked masculine aggression and the ‘predatory sexuality’ of the so-called Arab street, which, as Amar (2011b) argues, resonate with a commonly accepted presumption that Egypt needs an authoritarian government to keep its politics and population in order.

More importantly, the idea that the proliferation of sexual violence emerged as a result of the power vacuum left by Mubarak’s ouster is factually inaccurate. Sexual violence committed by security forces, police, and hired ‘thugs’ [*balagiya*] was a frequently used element of Mubarak’s repertoire of political intimidation tactics. One of the more notable examples is the event known as Black Wednesday, when in May 2005 security forces held back crowds so that plainclothes policemen could beat and sexually assault four women, including journalists, who called for a boycott of a constitutional amendment that would strengthen Mubarak’s position in government and solidify the succession of his son, Gamal (Ahram.org, 2013; Slackman, 2005). Mubarak’s government also used sexual violence and harassment as a justification for mass arrests of presumed political dissidents. This move was seen as a victory among many women’s groups demanding more police intervention on the street. In another example, in November 2008 Egyptian security forces arrested

400 young males between the ages of 15 and 17 for ‘flirting offenses’ according to Cairo police director Faruq Lashin (Amar 2011a: 319).

A similar culture of sexual terror continues under al-Sisi’s rule despite recent overtures to international demands for more government response to the issue. Egypt signed the United Nations Declaration of Commitment to End Sexual Violence in Conflict in 2013, and in 2014 made sexual harassment a criminal offense with a punishment of up to five years in jail and fines ranging from £ 400–7000 (US\$52–US\$917) (Allam, 2014). It seems clear that the enforcement of sexual harassment law seems highly selective at best, and at worst has been used as a justification for extending political brutality and the mass arrests of protestors. In October 2012, another 172 men were arrested during the first two days of the Eid al-Adha [*Feast of the Sacrifice*] holiday (*Egypt Independent*, 2012). There have also been widespread reports of women being assaulted while in custody after they have been arrested to ‘protect’ them from harassment while engaging in demonstrations. Male dissidents are also regularly raped and tortured while detained by security forces (Kingsley, 2014). If, according to government figures, more than 16,000 people have been arrested for political dissent between July 2013 and April 2014 (Kingsley, 2014), it is daunting to consider the number of incidents of rape and assault committed by security forces that have gone unreported.

HarassMap has almost nothing to say about the role of the Egyptian government and Egyptian security forces in directly perpetuating a culture of sexual terror among its citizens. When explaining why they think sexual harassment has become so common in Egypt, they argue that there is no data that exists to explain this phenomenon, but that based on their experiences it seems reasonable to attribute it to a form of ‘general aggression, power, and violence’ (Harassmap, 2015) within Egyptian society. Women are more likely to be attacked, in their explanation, because they occupy a lower position within society, and the government’s passive attitude toward the problem of sexual harassment seems to be exacerbating the issue (HarassMap, 2014). However, the examples of state-sanctioned violence illustrated here seem anything but passive.

Bringing Zehfuss’ (2011) discussion of precision back in, these examples also ask us to consider what else might lie within the ‘radius of the blast’ of HarassMap’s targeting campaign. Do the HarassMap team and its volunteers consider those who might not otherwise become targets of the state – for instance women who are ‘protectively detained’ (Amar, 2011a: 319) from harassment during protests? Are these women simply considered ‘collateral damage’ in the overall appeal for more policing of sexual harassment? Does the program offer justifications for its own ‘casualty levels’ that also rise as sexual harassment becomes targeted more decisively by security and legal apparatuses? As Zehfuss (2011: 553) points out, ‘technological advances might lead to an increasing – or at least different – exposure of civilians, as did the possibility of aerial warfare in the first place’. In this instance, faith in precision may also encourage engaging targets in new ways and in more problematic environments.

Could the problem of sexual violence be considered in other ways? And more specific to this analysis, could the map itself be used and interpreted in a different way? Given the prevalence of the state’s use of sexual violence against political dissidents, is it possible that ‘hotspots’ might also reflect areas where class-based mobilizations against Egypt’s politico-military infrastructure are gaining traction, and thus where ‘thugs’ and other plainclothes police might be deployed to do their dirty work? Where do lesbian, gay, bisexual, and transgender (LGBT) communities fit, or alternative forms of public sexuality? And how might HarassMap be used to reduce state intervention in political publics rather than increase it? Rebecca Chiao has stated that she and her team are not academics, from which I infer that she means the program is more interested in putting ‘boots on the ground’ (or eyes in the air) than speculating about the political, legal, and juridical spaces that the map creates, as well as the consequences, intended or not, of its framing.

Conclusion

This article has shown how HarassMap's use of crowdsourced data for mapping sexual harassment helps us to think about both technological contributions to securitization and the hidden violence of feminist humanitarianism that translates Arab bodies, Arab streets, and Arab cities into targets for remote monitoring and intervention. The militarized systems and market rationalities from which these technologies have emerged cannot be entirely separated from the techniques of ordering and targeting that they make possible in the context in which I have described. While I readily acknowledge the variation and diversity in reports and in the emerging community responses within and across these security-scapes, the map's resonances with other forms of aerial targeting reveal broader patterns that depoliticize class-based politics around the issue of harassment, as well as promote increased state security presence without acknowledging the violence inherent therein. Aerial targeting via crowdmapping and online mapping applications attempts to subject whole populations to scrutiny and intervention, and treats them as targets that can, without careful scrutiny, be abstracted from political, cultural, and geographical contexts, thereby reducing difference that might otherwise highlight the moral and political ambiguity of the map. The combination of UN gender norms and the turn to crowdmapping for the purpose of human security governance normalizes the ongoing subjugation of those who find themselves outside of these international norms and legal regulations, becoming racialized and sexualized targets for discriminatory observation and intervention. However, aerial observations and interventions operate on multiple discursive and affective registers where the categories and identities they create are far from objective (Wall and Monahan, 2011: 250). In the present context, these identities include but are not limited to *baltagiya* and civilians, women and middle-class consumers, and working-class youth and the 'Arab street'. The use of HarassMap as evidence of gendered sexual violence blurs how these categories are constructed and conflated, flattening their nuance into a calculative set of variables that can be mapped, ordered, and filtered into zones of security and insecurity. These zones are then constructed as the differential borders between the powerful discursive tropes of developed and undeveloped, between civilized and backward, and so forth.

Campaigns like HarassMap reveal what Wall and Monahan (2011: 251) call 'an unstable fault line' within societies in which the control of individual behavior is subordinated to the preemptive imperatives of risk and preemption. This targeted control is diffuse and can work in multiple directions, for instance in the hands of state security forces for the purpose of obstructing other forms of anti-government political mobilization. If we take HarassMap, which makes claims about the moral significance of its precision technology, at its word, how can such technology be used in a way to help stop gendered sexual violence against women without depoliticizing the strivings of working-class Arab youth, or obscuring other extant attempts to combat gendered sexual violence? I concede that the Ushahidi platform works very differently when it is used, for instance, to locate individuals and communities in need of provisions after a tsunami or an earthquake, than when it attempts to locate 'hotspots' of sexual violence. Also, the targeting logics that organize the HarassMap project may work differently in Egypt than they do in other locations.

The geo-spatial technologies that HarassMap uses in the biopolitical management of Egyptian urban sociality remain open to experimentation, and offer the possibility of becoming a tool for bringing a heightened awareness to other types of violence with certain categorical adjustments and visual reorientations. What might the same technologies being used to police young Arab men do if they were redirected, for example, at Egypt's security forces and its implementation of state-sanctioned violence against women to thin their presence on the street? This potential resides in the realm of speculation for now. Still, we should be wary of the idea that better, more total surveillance will produce accurate depictions of the environment of gendered sexual violence. We should

also be critical of paradigms of risk management that seek to sort whole populations into ‘profiles and probabilities’ (Wall and Monahan, 2011: 251) as part of a feminist internationalist organization of security governance in Egypt.

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