A queer theory of software studies: software theories, queer studies

Abstract

This introduction to the themed section 'Queering code/space' poses the question: what is the *spatial* relationship between technology and sexuality? To discuss this, we outline two overarching issues concerning the relationship between technology and sexuality that lie beyond geographical scholarship. We then introduce software studies and queer theory as separate scholarly approaches to technology and sexuality respectively. We briefly outline the effects the combination of software studies and queer theory have already had on geography and what more they might have to offer. We conclude by providing an overview of the papers in the themed section.

Key words: geography; queer theory; sexuality; software studies; space; technology

Before it was a themed section of *Gender, Place & Culture*, "Queering Code/Space" was a session at the 2016 American Association of Geographers' Annual Meeting in San Francisco, California. Even before that, it was a nascent set of conversations centered on normativity, difference, and technology among graduate students and early career scholars who study digital geographies. Part of our goal through these conversations was to produce something new and creative by combining two distinct intellectual trajectories: software studies and queer theory. We wanted to see what their combination might bring to bear on the discipline of geography and ask, what is the *spatial* relationship between technology and sexuality? In addressing this question, we sought to bring together reflections on how, whether intentionally or not, writing about code/space implicates the topics of sexuality and normativity. As a way to introduce these reflections, we briefly discuss two overarching issues concerning the relationship between technology and sexuality that lie beyond geographical scholarship. We then outline what effects the combination of software studies and queer theory have already had on geography, and what more they might have to offer.

The first issue arising from the above question is concerned with whether a philosophy of technology is able to account for queer forms of difference and, if so, which sexual subjects can be said to be included in or excluded from this account. From the point of view of feminist and postcolonial critiques of science this of course is not a new question. These critiques can in part be understood as a response to insufficient representation of women and (former and continuing) colonial subjects in classical philosophies of technology. Feminist and postcolonial critics have therefore emphasized situated knowledge and embodied experience as alternative narratives of 'scientific progress' and technological expansionism (Haraway, 1997; Harding 2008; Plant 1997; Wajcman 2000). In opening up alternative speaking positions, this work highlights the potential problems of representing science and technology as universal and singular. By occluding the non-linear, multiple, and diverse spatial and temporal reach of various technologies, a monolithic understanding of science and technology treats bodies as uniform, undifferentiated, and neutral. Feminist and postcolonial critics of science seek to avoid such a conceptualization, that in their analysis amounts to the unacknowledged assumption that bodies are only white, male, heterosexual, and cisnormative. Given the merits of this type of critical analysis, issues arise about who speaks for technology, and concomitantly, who is spoken for by technology. In our discussions, we were interested in what a focus on queer experiences and bodies could bring to studies of digital technologies (c.f. Chen 2012; Giffney and Hird 2008; Landstrom 2007; Shaw and Sender 2016; Yusoff 2015).

The second issue queries the implications of attending to queer difference in discussions of technology. Though wary of any direct link between representation and power (e.g. Ahmed 2012), we felt that sustained attention to different and differentiating subject positions necessarily implies a more nuanced examination of the intersections between technology and the figure of the human throughout Western modernity (Povinelli 2015). As part of the discussion, we were interested in how queer theory might challenge the centrality of a universal and naturalized category of human in accounts of social and political life. Reframing the relationship between technology and the human as a discursive and material fiction could very well disrupt understandings of the human as a coherent entity with discrete agency (e.g.

Foucault 1970). As Braidotti (2013) notes though, to challenge the human by situating it either against or alongside technology risks asserting an epistemic stability to that very figure, enabling humanism as a stable framework to sneak back in. Instead, a method must be found to theorize the technological and the human without assuming the coherence of either in advance. In one of queer theory's founding gestures, Foucault's (1978) analysis of the discourse of sexuality operates in a similar manner by both assuming and establishing difference in the production of the social order of subjects. Thus, queer theory might contribute to an ambivalent theorization of the relationship between the human and technology that would emphasize both a spatio-temporal contingency to the assertion of 'the human' as an ordering device, and an instability that potentially troubles the logic of that order.

In seeking to offer an intellectual lineage through which to address these issues concerning the relationship between technology and sexuality and bring the discussion into geography, we now turn to a brief examination of two largely distinct literatures: software studies and queer theory. Here we assess their respective characteristics as systems of academic inquiry in order to examine what might be found at their intersections. What we are calling software studies includes research across various disciplines on technology, data, algorithms, digital platforms and media, online spaces, and internet infrastructures. Software studies remains broad in conceptual approach and it privileges neither a single set of theorists, nor a single empirical site of engagement. Within geography this conceptual multiplicity has productively led to sophisticated accounts of the mutual productions of software and space (e.g., Dodge and Kitchin 2005). Yet, in terms of both spatial form and intellectual inquiry, software studies - by tending not to interrogate software itself as a starting-point for analysis - often relies on a relatively coherent, as opposed to multiple, object of study. In contrast, queer theory occupies a narrower conceptual position, at least insofar as it has become more like an academic discipline in its own right in comparison to software studies. It has a core set of theorists, a distinct anti-normative critical politics, and frequently engages in self-conscious inward-facing conversations. This apparent consistency in critical orientation has led geographers to use the term queer to construct accounts of a spatial politics of deviance and transgression (Bell et al. 1994). Paradoxically, these anti-normative foundations of queer theory have themselves been

criticized for forming a normative basis upon which to ground a properly queer critique, thereby inadvertently policing (or normalizing) queer theory's politics of difference (Weigman and Wilson 2015).

As we were talking of a *study* of software alongside a *theory* of queerness, with their inverted emphases, we realized the need to draw out the differences between the empirical and conceptual in each. Software studies tends to leave unexamined its empirical focus on software as well as the question of difference in terms of its users. Queer theory operates as a narrow set of conceptual approaches that ostensibly are open to ambivalence and nuance, yet are potentially limited in their implications and politics. Between software studies and queer theory then, there is a sharp contrast: the former, a set of academic traditions and discussions with an empirical focus but without clear conceptual unity; and, the latter, a highly focused, critical debate, albeit one with a high bar for understanding and establishing critical norms. We wondered if outlining these different characteristics of software studies and queer theory could help us to understand their respective approaches toward technology and the human and the possibilities for (and limitations of) a progressive politics and critique therein. If *study* implies that there is a coherent object to which one can apply academic research, would *theory* imply the impossibility of such an object? Indeed, if one of the foundational errors, as identified above, is to designate a coherent object of knowledge (for example, the material-discursive fiction of the human) as prior to our situated and contextual observations of it, then perhaps what is needed is a queer theory of software, or a queering of the *study* of software through the application of anti-normative, multiple, and decentered tenets.

In a broad reading, geographical scholarship could already be said to have set about this dual task of creating a queer theory of software and theorizing software from queer perspectives, without directly bringing these two areas of thought together. In relation to software studies, geographers have challenged the straightforward teleology of deterministic narratives such as time-space compression that has been a popular and uncritical way of characterizing the relationship between technology and space (Kirsch 1995). Geographers have instead situated technology's relationship with space as complex and uneven to emphasize that internet infrastructures are produced and located *somewhere*, against dominant discourses that frame the internet as singular yet amorphous, and everywhere yet placeless (Graham 1998).

Geographers have also challenged assumptions about software as a singular object with an undifferentiated user by looking at the local biases of digital cartographic representations (Graham and Zook 2013), access to and differential use of the internet (Stephens 2013), and the uneven spatial politics of data (Leszczynski 2014). We were also intrigued to discover that the precursor to some of the earlier work on code/space (Dodge and Kitchen 2005) focused on sexuality and the city. Drawing on Foucault, Kitchin (2002; see also Kitchin and Lysaght 2003; 2004) examined how the possibilities for regulation and resistance are embedded in urban infrastructures, setting some of the groundwork for later observations that implicate how particular spaces and infrastructures are saturated with software and digitally coded with uneven effects (Kitchin and Dodge 2011). Though not examining technology directly, Kitchin's earlier work (alone and with Lysaght) does point to the imbrication of socio-sexual codes with the physical infrastructure of the city, whether technologically saturated code/spaces or otherwise.

Regarding a multiple and decentered queer theory, geographers have been instructive in engaging debates around queer diffusions and the queer global (Knopp and Brown 2003), framed by Oswin (2006) as the relationship between Western and non-Western same-sex sexual identities and practices (see also Puar 2005; Oswin 2015). This raises key questions for queer theory concerning normativity. Which and whose (sexual) norms does queer theory challenge? Or, put another way, "can queer theory be recognizable as such when it emerges from elsewhere" (Mikdashi and Puar 2016, 215). Such geographical questions feed into the more inwards-facing debates within queer theory mentioned above, concerning its signature mode of critique: anti-normativity. Although not directly challenging Mikdashi and Puar's (2016) accusation that queer theory is implicitly American studies, Wiegman and Wilson (2015, 17) suggest that queer theorists might question a spatial imaginary of the norm as a device that "divides the world into centers and peripheries." Indeed, they argue for an understanding of normativity as "a structure of proliferations" that affords opportunities for duplication, twisting, minimizing, amplifying and warping already existing terms (p. 17). Challenges to both the normative location and the

spatial imaginary of norms in queer theory have already begun to offer some of the multiple and decentered perspectives required to queer the study of software.

This themed section offers some openings for thinking through these relationships between normativity, difference, and technology through a focus on queer as both lived experience and theoretical perspective. Three of the four papers collected here were presented at the AAG session. The fourth is our written contribution to furthering the conversations we had at and since the conference. In the first paper, Sam Miles examines the changing sexual politics of urban space through an empirical focus on locative dating and hook-up smartphone applications. He considers how experiences of the city are augmented and altered through the digital, impacting understandings of community and the classic constructions of the public and the private for queer bodies in urban spaces. For Miles, digital applications only partially reconstitute urban space in ambivalent ways. There is need for further debate on the implications of the (almost) ubiquitous access to locative apps and the divergent individual and social responses. Carl Bonner-Thompson too focuses on dating and hook-up applications. He uses Grindr to examine the embodied constructions of gay and queer masculinities corroborated at least in part through the use of digital devices and applications. He notes two main forms of masculine performativity on Grindr, 'hypersexualized masculinity' and 'lifestyle masculinity,' that together highlight both the range of masculine performances and how those performances are limited by the application and its users.

Olu Jenzen offers a critique of online cisnormativity in a rich examination of how transgender identity is conferred and communicated through web-based platforms like Tumblr. Through empirical work with trans youth, Jenzen explores the youths' activities online and their navigation of online content to demonstrate how online spaces can enable trans lives. She shows less how online space is figured as evidence that trans youth are able to optimistically pursue a 'good life' framed necessarily through an already heteronormative lens, but more ambivalently that they are able to use these spaces to render everyday life livable. We, Daniel Cockayne and Lizzie Richardson, contribute a theoretical appraisal of Kitchin and Dodge's important concept of code/space as one early contribution to studies of software in geography. We argue that, while the topics of code/space and sexuality have remained relatively distinct

in geographical thought, many of the concerns of the latter are endemic in studies of the former. This is evident in debates around safety and security, biopolitics, the (re)production of public and private space, the procurement of subjectivity, and the proliferation of software into not-necessarily-normative everyday life. We offer a series of approaches to examine technology and space that utilize different areas of queer theory through interrogations of anti-normative queer politics. In a post-collection commentary, Jack Gieseking offers critical comments on these contributions framed through a discussion of the attractiveness algorithms that characterizes online dating platforms. In exploring the hetero- and cis-normative biases programmed in these algorithms, Gieseking is able to comment on the literatures in geographies of sexuality, queer theory, and software studies. Reflecting on how these algorithms work and their effects, he provides nuance to a complex politics of visibility that continues to animate not only academic discussions but also queer lives, politics, and histories.

In organizing the session at the AAG, bringing together this collection of papers, and writing both this introduction and our own paper, we hope to have drawn attention to some of the connections that already exist between two different areas of academic scholarship and geographical thought. We also hope to highlight the impossibility of accounting for technology without taking seriously the question of difference. In studies of technology, what must be taken into account is not only how queer bodies and queer difference matter, but also how they *come to matter*, or how and why they remain undiscussed.

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