

# Beyond The 'Binaries': A Methodological Intervention for Interrogating Maps as Representational Practices

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## Abstract

Over the past two decades, a growing number of geographers and cartographic historians have critically examined maps as products imbued with power, the social contexts of map production, and the intimate involvement of cartography in Western imperialism and the enlightenment project. More recently, a few scholars have applied critical approaches to studies of map use and

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interpretation. Much of this work reproduces, at least implicitly, a series of binaries that separate maps as representations of space from spatial practices. In this paper, we offer a methodological intervention by introducing a theorization of 'map spaces' as a way to move beyond the duality of representational and nonrepresentational theory in critical cartography. Methodologically framing how we can interrogate the binaries of representation/practice, production/consumption, conceptualization/interpretation, and corporeality/sociality upon which so much analysis is based affords us the opportunity to challenge the presumptions of critical cartography as either the study of mapmaking or map use. We use a tourism map of Fredericksburg, Virginia to demonstrate how to 'move beyond' a critical cartography that is based, as some suggest, in an analysis of representation and not practice.

Keywords: Critical Cartography, Map Space, Representation/Non-Representation

## Introduction

The map is open and connectable in all of its dimensions; it is detachable, reversible, susceptible to constant modification. It can be torn, reversed, adapted to any kind of mounting, reworked by an individual, group, or social formation. It can be drawn on a wall, conceived of as a work of art, constructed as a political action or as a mediation (Deleuze and Guarttari, 1987, 12).

When does the moment of map production end? At the time when the printing press stops rolling, or the crayon leaves the page, or when a *yahoo map* stops loading, or perhaps when the finished map is found embedded between columns two and three of the *New York Times*? Or, maybe, production never stops. Maybe maps are constantly produced and (re)produced as is suggested through the democratization of production in participatory GIS. Such questioning of production, however, should be accompanied by similar questions about consumption. When is a map first consumed? After it leaves the hands of its authors? Do authors not consume their own representation, see themselves in its images, reconstruct their own desires through this object, or dare we say subject? Still, many critical cartographers (Black, 1997; Harley, 1988; Harley, 1989; Harley, 1990; Wood, 1992) maintain an implicit duality between production and consumption, author and reader, object and subject, design and use, representation and practice. They still focus on how maps are produced in particular social, political, and economic contexts; or, they concentrate on the consumption and use

of these particular objects in their post-production phase. Yet, maps, to borrow from Gibson  $(2001)^2$ , are in state of "becoming." As such, maps stretch beyond their physical boundaries; they are not limited by the paper on which they are printed or the wall upon which they might be scrawled. Each crease, fold, and tear produces a new rendering, a new possibility, a new (re)presentation, a new moment of production *and* consumption, authoring *and* reading, objectification *and* subjectification, representation *and* practice.

Maps are thus not simply representations of particular contexts, places, and times. They are mobile subjects, infused with meaning through contested, complex, intertextual, and interrelated sets of socio-spatial practices. As Deleuze and Guarttari suggest, "the map has multiple entryways" (ibid., 12) and a myriad number of possibilities because it operates at the margin and center simultaneously. Maps are also not, as some may argue (e.g., Harley, 1989), fixed at the moment of production, a result of the hegemonic authority embedded by the mapmaker in/on the representation. Thus, while maps may be infused with power, and thus ripe for deconstruction, it is not enough to demythologize the map (c.f., Sparke, 1995). Instead, maps ought to be theorized as processes, "detachable, reversible, susceptible to constant modification." It is therefore appropriate to say that maps, as representations, "work" (Wood, 1992). As we contend, representations, such as maps, work because "they help make connections to other representations and to other experienced spaces" (Hanna et al., 2004, 464) suggesting that maps do, indeed, provide multiple entryways into how they are produced and consumed as well as how they are used, interpreted, and constituted.

In this paper we are particularly concerned with interrogating the binaries – such as representation/practice, production/consumption, map/space – upon which critical cartography and critical GIS are partially based. This is a methodological intervention because, like Harding (1987, 3), we view methodology as "a theory and analysis of how research does or should proceed." This suggests that geographers must first ask how they conceptualize and frame their questions and data. In offering this critique, however, we are not simply moving toward a nonrepresentational theory of maps and mappings as practices (Perkins, 2004), at least as Thrift (1996) has conceptualized the non-representational (see critiques of Thrift by Nash, 2000; Smith, 2003). Instead, we are interested in pushing our methodological (and by default our epistemological and ontological) assumptions and processes toward thinking of maps as spaces. As such, maps and mappings are both representations and practices (read: performances) simultaneously. Neither is fully inscribed with meaning as representations nor fully acted out as practices. As Nash (2000, 662) avers we must "allow room for considering visual and textual forms of representations as practices themselves." As will be argued and shown

<sup>&</sup>lt;sup>2</sup> Gibson is drawing here on the work of Judith Butler (1997) and William Connolly (1999).

through a case study, it is rather beneficial, therefore, to talk about map spaces instead of maps and spaces. As we have argued elsewhere "Any critical perspective of mapping must...investigate the multiple historical and spatial referents that are part and parcel of any...map. This compilation of referents comes together and constitute what we call a map space" (Del Casino and Hanna, 2003). In this paper we extend this argument further, examining maps and mappings as experiences, practices, and, more importantly, following Butler (1988; 1990; 1993), as performances.

We examine these issues in the following three sections. Beginning with a discussion of critical cartography, we examine the ways in which some of the binaries listed above are reproduced in this literature's theoretical discussions. We suggest that collaborative GIS research may offer a partial opening for rethinking the binaries upon which mapping is based, but argue that we must push this analysis even further by theorizing those collaborations as performances that are parts of the reflexive bodily actions of social actors working with, in, and through maps and mapping processes (c.f., Edensor, 1998). Next, we offer a critique of the 'non-representational' and how this particular body of work has been deployed in discussions of geographic practice. Specifically, we argue that a nonrepresentational cartography might limit (or even eliminate) any discussion of representational practice in critical cartography and GIS by severing the reflexive from the non-reflexive and bodily acts from conscious and unconscious thought. Finally, we offer an example that might help further push how we go about 'getting at' the messiness of everyday life that is embodied through the work of mapping the world. What we want to suggest is that representations are not simply visual objects ripe for deconstruction. Representations, maps included, are tactile, olfactory, sensed objects/subjects mediated by the multiplicity of knowledges we bring to and take from them through our everyday interactions and representational and discursive practices.

We do this through a brief examination of a tourism map that is part of the everyday experiences of both tourism workers and tourists traveling to Fredericksburg, Virginia. Like other heritage tourism spaces, Fredericksburg's success as a destination depends on making its past(s) present, accessible, and attractive for tourist consumption (Shields, 2003). This requires not just the production of representations, including maps, but their use by tourism workers and tourists as integral parts of experiencing this historic city. The case study presented here is drawn from continuing research on Fredericksburg's changing heritage tourism space. Specifically, the quotations are drawn from interviews conducted in Fredericksburg in 2001 and 2002 with workers at Fredericksburg's Visitor's Center and the owner of a private trolley-tour company. These interviews were organized to solicit information about how tourism workers interact with visitors to the City. Each informant was provided with an introduction to the research and asked to comment, generally, to a number of open-ended questions that asked about how

they were trained, what role they played at the Visitor's Center, and how they interacted with visitors. In particular, we were interested in gathering information on how these tourism workers worked the city as a representational space. In addition, we hopped aboard the trolley tour and conducted participant observation in a number of tourism spaces throughout the city. During these moments of participant observation, various acts of public behavior amongst tourists were observed. Also, during these moments of interaction, cues from the trolley tour operator/driver were collected. Moreover, Stephen Hanna is a resident of Fredericksburg who actively participates in the everyday contexts we discuss below through his ongoing research on heritage tourism in the city. In so doing, he has further observed the public behavior of 'touring' Fredericksburg through daily interactions with tourists visiting Fredericksburg.

## On the 'Critical' in Critical Cartography (and GIS)

As most are now aware, the age of 'critical cartography' was ushered in during the late 1980s prompted largely by the work of historical geographer, J. Brian Harley (1988; 1989; 1990). Although cartographers themselves launched several internal critiques of their own work throughout the 20<sup>th</sup> century (e.g., Peters, 1990; Tyner, 1982; Wright, 1942), Harley (1989) offers a distinct challenge; the development of a critical cartography depends on cartographers engaging in the theoretical innovations taking place in human geography more broadly. For Harley, geography's growing concern with the social theoretical advances of deconstruction, and with the work of Derrida and Foucault in particular, influence his own theorizations of maps and mapmaking. Relying on these theories, he suggests that cartography, as a practice, and maps, as social products, are inextricably tied into various systems of power and knowledge. "Like the historian, the map maker has always played a rhetorical role in defining the configurations of power in society as well as recording their manifestations in the visible landscape" (Harley, 1988, reprinted in Harley, 2001). Following Foucault's theorizations of power-knowledge, he is thus critical of any intellectual practice that cleaves differences along an "arbitrary dualism" (Harley, 1989, 11, as cited in Crampton, 2001, 240). This includes, for example, the distinctions cartographers traditionally made between "propaganda versus true maps, or scientific versus artistic maps" (ibid.). Harley, therefore, like other deconstructionists and critical cartographers (Black, 1997; Gregory, 1994; Pickles, 1992, 1995, 2004; Sparke, 1998; Wood, 1992; Wood and Fels, 1986; Woodward, 1991), remains skeptical of the binary logics that seek to privilege one set of knowledges over an 'other.'

Of course, Harley is not without his critics who challenge his reading and interpretation of the work of Foucault and Derrida (e.g., Belyea, 1992, Sparke, 1995). Belyea (1992, 1), argues that Harley's presentation of his work as "deconstruction" is misleading and that he still "accepted without question the

orthodox definition of maps as images of the world." Agreeing with Belyea, Sparke (1995) suggests that Harley confuses demythologizing a map with true Derridian deconstruction. As a result, Harley's analyses tend to fix a map's meaning at the moment of production. Moreover, we suggest elsewhere that,

Harley's incomplete dialectic between space and representation is a...limitation of his critical cartography. Although he seeks to break the mimetic and unidirectional link from space to representation that dominates cartography, his flawed deconstructionist method seeks to find the real power relations in some space that is outside of and concealed by the map (Hanna and Del Casino, 2003).

Crampton (2001) notes that Harley's theoretical developments were cut short by his untimely death; he was never able to provide a complete critical methodology of maps and mappings. "Deconstruction might reveal what the map was not (i.e., innocent, scientific, optimal), but what is left to say about what the map is?" (Crampton, 2001, 241). That said, Harley does "emphasize the importance of multiple perspectives and multiple maps" (ibid., 244) and, therefore, provides a starting point for thinking about maps and mappings as more than simply pieces of paper designed to communicate and represent information about various places and spatial patterns. As Crampton argues, "the production of multiple maps ... [in the context of] geographic visualization, which overturns the communication model by promoting exploration rather than presentation, contingency rather than finality" (ibid., 244), might provide a new way forward.

Geographic visualization is informed by scholars, such as Wood and Fels (1986), who draw their inspiration from semiotics and the analysis of signs. MacEachren (2004) argues explicitly for using semiotics in the analysis of "how maps work" at both the individual and societal level simultaneously. Cartographers must investigate maps, not as communicative devices, but as representations. Maps, like other representations, are open to interpretation, contested, and mutable. Informed by structuralist<sup>3</sup> conceptualizations of semiotics, MacEachren (2004, 242) argues that "a semiotic perspective offers a structured way to consider the interaction of the explicit and implicit meanings with which maps are imbued." As such, maps are more than simply devices of communication produced by cartographers, they are also constructed by map-users who bring their understandings to the map in a process by which they "develop a consensus about

<sup>&</sup>lt;sup>3</sup> What we want to suggest is that MacEachren (2004), while on one level opening up the possibility of multiple interpretations of maps as representations, fails to take on the underlying structuralism that identifies and orders signs into a system to find deep and universal rules that produce surface meanings. This is, perhaps, also a result of his dependence on cognitive theories of map use and interpretation. This might also be tied to his general interest in a particular type of map product, one developed by professional cartographers.

letting symbols (in the broadest sense of the word) stand for objects, relationships, events, and the like, in the 'real' world" (MacEachren, 2004, 14). This process is, of course, never complete, as map-users can produce a multitude of interpretations.

The production of "multiple maps" offers the opportunity to democratize cartographic production, at least theoretically (c.f., Ghose and Elwood, 2003). It also exposes the "hidden" a priori decisions that are made before and during map production and thus challenges the hegemony of cartographers over the mapmaking process (Crampton, 2001). Crampton's suggestion that critical cartographers use the approaches of geographic visualization thus partially upends the binary logic of map producer and map user. This echoes the earlier calls of Wood (1992), who ends The Power of Maps by criticizing the arrogance of professional cartographers who worry about "cartographic problems" and praising people who make their own maps to serve their own interests. In fact, the push toward more collaborative cartographies and geographic information systems (GIS) has become an important part of the growing critical literature on maps and GI/Science (e.g., Ghose and Elwood, 2003; MacEachren, 2000; as well as the two special issues of the URISA Journal in 2003 dedicated to participatory GIS). For the most part, this work is focused on how the participatory context functions between various actors. But, like Crampton's and MacEachren's discussion of geovisualization, there are several potential limitations to this analysis. Most importantly, there remains in this work a lingering emphasis on authoring, production, and writing. The only way a map becomes something more than what Harley envisioned is if users become involved in the production process. It is not surprising, therefore, that Pickles (2004, 35) suggests

[w]hile the limitations of a communication model for understanding map-making and map use soon became apparent, subsequent attempts to model the mapping process quickly approached the baroque...Cartographic representations continued to be conceptualized as the technical transfer of real-world information to users...It left cartography in the Kantian dilemma of how it knows the world and how it can represent the 'real' world adequately to control the misreading of map users.

Thus, while semiotic analyses of the communication model are now fully embedded in the self-critique of the practice of cartography, and cartographers like MacEachren (2004, 459) fully recognize that map users "yield multiple alternative representations" of a single map, other scholars have chosen to turn more directly to poststructuralism as way to theorize maps and map use.

The turn to poststructuralism suggests that a focus on the democratization of mapping, albeit unintentionally, may marginalize the consumptive processes of mapmaking, maps, and mappings. It may also fail to take into account the constitutive nature of consumption *as* production and reading *as* authoring, which

is critical to poststructuralist theories of representational practices (c.f., Barthes, 1978). Further, it delinks maps from spaces by pushing aside the intertextuality and relationality that are part and parcel of the relationships between spaces and representations. This is not to suggest that there is some "real" space out there. Rather, it is to argue that all spaces are always already representations that are produced by and productive of a myriad number of bodily practices and performances as social actors draw on their intertextual knowledges while reauthoring both space and representation simultaneously. This echoes Butler's theorization of sex not as a fixed, real identity but as a ritualized set of performances.

...[C]onstruction is neither a single act nor a causal process initiated by a subject and culminating in a set of fixed effects. Construction not only takes place *in* time, but is itself a temporal process which operates through the reiteration of norms; sex is both produced and destabilized in the course of reiteration. As a sedimented effect of a reiterative or ritual practice, sex acquires its naturalized effect, and, yet, it is also by virtue of this reiteration that gaps and fissures are opened up as the constitutive instabilities in such constructions, as that which escapes or exceeds the norm... (1993, 10, her emphasis)

Applying this to maps and mappings, we suggest that the reiterative processes of consuming maps may temporarily 'naturalize' maps as somehow fixed in their meaning. And yet, the very act of consumption through the performance of maps offers productive possibilities, particularly through the emergence of constitutive spaces at/in the "gaps and fissures" of the mapping processes. And, yet, there is no deep underlying structure that somehow organizes this overall process.

Thus, investigating cartographic collaboration may involve, as Harvey (2001, 30) notes, studying "the traces of relationships between people, institutions, and artifacts [as they are] connected by agreements and exchanges." Working through actor-network theory, Harvey emphasizes that there is nothing "natural" (ibid., 31) about the separations between map producers and users, representations and practices, or the technologies and artifacts that mediate the relationships between the various "nodes" in any given network of social actors. As Harvey (ibid., 30) further explains, actor-network theory has real methodological potential for breaking down the boundaries between production and consumption, author and reader, map and space because "[t]echnical artifacts [such as maps] are much more than surrogates for certain humans; they are actors who bundle multiple intentions and act in ways that complement and extend humans." In actor-network theory, we are interested not in some deep relationship between structures and agency; rather, attention is paid to the "traces" between networks and actors (Mol and Law, 1994 as cited in Harvey, 2001, 30). These traces, discursive and material residuals left by the reiterative process, are part of actor-network processes that produce,

temporarily perhaps, a "common ground" (ibid, 31) among actors in the network. They do not, however, point to any original moment, but rather constitute a complex and spiraling web of socio-spatial relations informed by a myriad number of discourses and practices. Following Harvey's theorization, we are closer, perhaps, to critiquing the binary logic of production and consumption in critical cartography that typically privileges the production context over the mundane uses of maps and mappings.

Poststructuralist actor-network theories parallel, in some regard, the work of Matthew Sparke (1995) who suggests that "Following Derrida . . . enables us to demythologize while being more wary, and less romantic, about uncovering 'true' places and constructing 'true' maps." (1995, 4). Ultimately, he hopes that deconstruction "urges us to go back and look for other ways in which the map, and what is supposed to lie outside of it – power relations, interpretations of the 'real' world, etc. – might actually be still more complexly interrelated" (ibid). In both cases, maps are not theorized as closed off objects nor are their meanings and uses fixed by either production or by academic critique. Instead, maps are conceptualized as working because they are practiced – reading, like authoring, is a practice – and performed in various socio-cultural and political-economic contexts.

These poststructuralist turns in critical cartographic and GIS analysis pose interesting challenges to the traditional binary logic of re-presentational - as opposed to representational – theories of map communication and production. As Dixon and Jones (2004, 88) argue "[p]oststructuralists take note of and critique forms of thought that distinguish between the 'real' world and its 'mere' representation in communication, whether conceived in terms of language, sensory perceptions, or electronic media." Poststructuralists are interested in not only challenging the binary logic of "real" and "re-presented," they are also interested in deconstructing the tensions that are part and parcel of all binaries. As in actornetwork theory, poststructuralist representational theories are not interested in how we communicate truth or reality. Rather, there is "no signifier [that] can be presumed to stand in a one-to-one relationship with a real-world referent" (Dixon and Jones, 2004, 88). As such, representations, such as maps, "work" because social actors use them in ways that may reify dominant ideologies. At the same time, maps "work" as social actors perform the very mundane act of using maps and mappings in everyday interactions in ways that open up productive moments of resistance (cf., Foucault, 1997). Such a theorization suggests that we might turn our attention toward how maps and mappings are practiced beyond the productive moments of making a map or constructing various mappings. Some have suggested that non-representational theories might open up the possibility for rethinking how maps as objects are tied to various practiced contexts (Perkins, 2004). We, therefore, want to briefly turn to non-representational theories of practice and ask if they help us move from maps as products to maps as practices.

## On a Non-Non-Representational Geography of Maps and Mappings<sup>4</sup>

Perkins (2004, 381) recently noted that "nonrepresentational theory that is at once critical but also concerned with culture and politics" now informs the growing study of "map use and mapping practices" (following Thrift, 1996). It seems to us rather odd, however, that the uses and practices of mapping might be framed by theories that purport to be nonrepresentational. What we want to suggest is that it is not necessary to conflate all theories of practice and performance with nonrepresentational theory. And, in the case of maps and mappings, it may be somewhat counterproductive to do so because it may reinscribe the binary logic of representation and practice that limits our theoretical possibilities.

The appropriation of Thrift's (1996) nonrepresentational theory by cultural geographers tends to presuppose an ontology of real emotions, experiences, and senses that somehow make representations less real. As Nash (2000, 655) argues, "nonrepresentational theory moves away from a concern with representation and especially text since, Thrift argues, text only inadequately commemorates ordinary lives since it values what is written or spoken over multisensual practices and experiences." In this way, Nash suggests that Thrift is suturing representations to texts theoretically. And, indeed, Thrift does critique the textual turn in cultural geography for its focus on the textual and visual at the detriment of the other senses. Deconstruction is thus a limited methodological framework for Thrift because of its focus on textuality (Nash, 2000, 656). Nash argues that Thrift's appropriation of performance theory is potentially limiting, however, because he positions one end of the binary over the other, practices are more experiential than representations. We tend to agree: "a dichotomy between representation and nonrepresentation, while perhaps a valuable heuristic, does little to forward our thinking about how place is performed. Rather, we argue that representations are material practices and are intertextually constructed through the daily actions" of various social actors (Hanna et al., 2004, 462). Moreover, Thrift's nonrepresentational theory detaches representations from the spaces they claim to represent. Following Smith (2003, 76)<sup>5</sup>, however, "it is no longer the case of

<sup>&</sup>lt;sup>4</sup> This play on words is taken from Geertz's (1984) article "Anti-Anti-Relativism."

<sup>&</sup>lt;sup>5</sup> Here smith is suggesting that we *can* move toward a non-representational theory. But, that theory, following the work of Baudrillard, is very different than Thrift's, which Smith suggests is actually "anti-representational" (2003, 68). By nonrepresentational, therefore, Smith means that the world of representations no longer represents anything, i.e., "simulation is the situation created by any system of signs when it becomes sophisticated enough, autonomous enough, to abolish its own referent and to replace it with itself" (Baudrillard, 1991a as cited in Smith 2003). Pushing these even further, Smith argues, again working through Baudrillard's theories, that we are now working through a "fractal stage of value – our current scheme is that of the *pure simulacrum*, where there is no point of reference and no law of value" (ibid., 71, his emphasis). We are much more sympathetic to this reading of nonrepresentational theory.

having either maps [e.g., representations] or territories [e.g., spaces] because the distinction between the two has vanished." Instead, it is better to theoretically consider maps and spaces are co-constitutive. Methodologically, Thrift's approach thus marginalizes the value of deconstruction, which we want to argue usefully teases out the constitutive and relational nature of discourses and practices, social and material experiences, and representations and spaces.

If we follow Thrift's logic, maps are merely textual and not spatial objects. They are constituted through the production of visual representations of space and not through mundane spatial practices. It is our contention, however, that if we turn to the performance theory of Butler, as Nash does, and work through identity theory (c.f., Natter and Jones, 1997), we come to a different rendering of the mapspace relationship - one which collapses the binary logic of text and space and experience and representation around which Thrift's non-representational theory is centered. These theories of performance and identity are also important to understanding the emergence of what we call map spaces. We use this term to denote the theoretical impossibility of disentangling representations from performances. Map spaces are always partial and incomplete, contested sites where the collisions of various identity and subject positions blur the boundaries of center and margin. "While maps draw meaning from and help to define the spaces and identities...they contain uncertainties and traces of excluded others that introduce potential ambiguities in their relationships with space and identity" (Del Casino and Hanna, 2000, 24). Those ambiguities are performed through various bodily actions that often push the meaning the map beyond its intended use even in a participatory context (Curran, 2003; DeLyser, 2003; Shields, 2003). We can, however, deconstruct the ways in which these ambiguities become temporarily sutured to various spaces and identities through the performative and repetitive practices of social actors.

Thinking about map spaces in this way means neither the production nor the consumption of maps is separable from space in the most mundane of settings. Maps that people simultaneously make and use mediate their experiences of space. People's bodily practices of walking, driving, touching, smelling, and gazing, as well as their understandings of landscapes and places can be guided and informed by maps and by the innumerable intertextual and experiential references always present in any map. At the same time, spaces mediate people's experiences of maps. For example, the physicality of a monument and the emotions it brings forth lends meaning to its symbol on a map (Dwyer, 2000, 2003). The everyday movements and distractions always present in spaces interrupt and interfere with both the reading and making of maps. When driving we must pull over and stop to look at a map or risk a traffic accident. Our theorization, therefore, does not prioritize writing over reading or production over consumption in the constant recreation of the map space. Nor do we wish to argue that map spaces as representation are separable from map spaces as practiced, worked, or performed.

Therefore, we want to illustrate, with a brief empirical example, how map spaces work in the daily lives of those who work and live in and through them.

#### **Possible Openings and Methodological Interventions**

In this section we want to suggest that there might be an alternative to thinking through the binaries of design and use, representation and practice, objectivity and subjectivity that undergirds much of the critical cartography literature by suggesting how map spaces as performed "work." We do this through a brief examination of the use of a tourism map of Fredericksburg, Virginia (Figure 1). In a previous work (Hanna et al., 2004), this map<sup>6</sup> was used as illustration to support an argument that tourism workers represented Fredericksburg as part of their everyday bodily labor. Here, we want to center our discussion on the map space, as written, read, performed, and consumed, and use it as a site through which to offer our methodological intervention.

This simple map can be used to explore "Historic Fredericksburg," the downtown section of a small city located halfway between Washington, DC, and Richmond, Virginia. Thirty-one numbers rest on a background of white streets against muted golds, greens, and blues. The numbers, which match those found on blue metal signs standing in front of historic homes, vistas, and monuments, are identified as points-of-interest in a blue column along the right edge map. The signs effectively staple the map to Fredericksburg's heritage tourism landscape. Whether given to a tourist by workers at Fredericksburg's Visitors Center or downloaded and printed off the Visitfred.com website, this map space – and the intertextual and experiential connections brought to it through use – invites people to explore Fredericksburg as a colonial port city, as the home of founding fathers, and as an urban Civil War battlefield.

Even if accessed online, this map is not designed for tourists to share in its production. Like any paper map, this PDF file has no links to a database or hyperlinks to other webpages describing the sites marked on the map. Map users cannot easily add their own points of interest to the map except perhaps in the old fashioned way – taking pen or pencil to a paper version. Therefore, in order to facilitate exploration and, thereby, to reproduce Fredericksburg as a heritage tourism space, the map must be *consumed*. This takes place in conjunction with other knowledges and texts, with interactions between tourists and tourism workers, and with bodily practices ranging from clicking around the City's website

<sup>&</sup>lt;sup>6</sup> This is an updated version of the map previously analyzed. The map shown here was downloaded from the "Fredericksburg: Timeless" website, which is located at the following URL: http://www.visitfred.com.



Figure 1: Tourism Map of Historic Fredericksburg

to walking or driving the route taken by Union soldiers as they launched futile assaults on Confederate positions above the town. In other words, the map space of Historic Fredericksburg is performed.

This performance may occur in a variety of contexts. Tourists who enjoy spending time planning out the details of their trips prior to leaving their homes can use the rest of the Visitors Center website and other textual or pictorial sources to imagine their visit to Fredericksburg. The visit itself, if it actually occurs, may then follow the model described by John Urry (Rojek and Urry, 1997; Urry, 1990, 1995). The tourist's gaze is directed, but not determined, by preconceived notions created by the map and the other representations the tourist brought into the map during consumption. Even in this context, however, it would be wrong to say that the map space of Fredericksburg is reproduced through "merely" representational acts. The tourist's hands and eyes work to connect numbered sites on a map with descriptions of places, histories of events, and biographies of people that stimulate her or his interest in this tourism space. Yet, such intertextual consumption is far from the only way the map space is performed.

Consider the tourist who begins her exploration of Fredericksburg at the Visitors Center. She will be greeted by one of Visitor Councilors who are trained to help tourists match their desires and interests to the right numbers on the map. As Bill, a Fredericksburg Visitor's Center Volunteer explains, "... I would suggest that they see our fourteen minute video that we show on Fredericksburg. It is much easier to draw a map and tell people about the map if they have some knowledge of what's it all about." At the conclusion of the film, the tourist may ask for directions or for suggestions about how to experience the town in a particular amount of time. In the words of a second Visitor's Councilor, such discussions usually take place over the map.

I tell them where they're located. Tell them that they don't have to go back out and put that parking permit on the car until they leave the building. And then I tell them where we are, and tell them this is Caroline St., which is the main street. And, I tell them this is the apothecary, the Rising Sun tavern, this is where George Washington's mother lived. His sister Betty lived here at Kenmore. This is where James Monroe practiced law . . . I tell them that this is the colonial history. That everything is within walking distance . . . and then I point out that about a mile south is the Civil War era. . . . This is the Fredericksburg Battlefield Visitor's Center, the stonewall on Sunken Road, and the battle of Marye's Heights.

In such an interaction, both tourism worker and tourist are consumers *and* producers. The Councilor needs the map to perform her job; she helps tourists explore Fredericksburg. A tourist uses the map to find attractions, but also to begin organizing her or his knowledge and imagination about the town's history. In this way, the bodily interactions between representation, reader, and the various spaces the representation claims to mark reproduce both Fredericksburg and the map as both a city and representation simultaneously.

Yet, the map space is not only performed verbally. The route of a privately run trolley tour, in large part, follows this map. Thus, visitors may trace out the map as trolley drivers offer insight into the city. In the following quotations, the owner of the trolley company, Butch Weimer, suggests how he 'mapped out' the city for tourists. I visited all of the attractions when I was putting together the route, and then on the way there were things to see and I researched those to see what their significance was, and I think that on the route that we run, it is about a six mile route to each tour, and I can't think of much that we leave out. All of the major points and a number of the minor points. There are some stone markers and steel markers around town and we explain their significance ...

Like the map, the physical act of driving the trolley from site to site while giving a narration helps visitors connect the dots represented by the stone and steel markers set into the landscape. And, to an extent, the tour and therefore the map space seem fixed. As Weimer continues,

It's that you can't change history. It's the same story. You know, what am I going to say different. I can't change it. I keep trying to pick up new stories to tell, things to put in. And people on board, they'll tell you a story, and sometimes you know you can use that. You can't change it. I thought about changing the route, let's go backwards one year. Just to be different. The streets are one way. I can't go but one way.

He does acknowledge, however, that the tour works, not because he and his drivers produce a narrated map, but because his riders must consume this map space in order to reproduce it. When asked if he and his drivers get tired of giving the tour, he stated that, "its not boring, because every tour is a new group of people." He elaborated further,

Look at the people in the back and you can see the ones that are laughing and you can see the ones that aren't and you just keep going and playing to them. You'll get groups on board that sit there like they've just paid their taxes, they're the most unhappy bunch that I've ever seen and you think "God, let me get through these seventy five minutes, get these bums off of here, and get some LIVE people" and they'll get off and they'll be the ones that come up and say, "man, that's the greatest tour I've ever been on," they're so involved, you think they're not paying attention, they are listening so intently and they tell you all this stuff and you think, "why don't you let your face know that you were having a good time." Because, looking in that mirror was like "aw get this over with, get these people off of here." And they'll be the people who put the most tips in the hat. Because they weren't there for the fun and games, they were there for the history.

Map consumption thus also involves the arrangement of bodies, as tourists move through the map space that is part and parcel of the trolley-based narrative.

This is a productive process. Tourists engage in the (re)production and consumption of this space simultaneously through the asking of questions, reading along on a paper mapped representation of the city, marking the map and making other notes. Alternatively, tourists may focus on creating their own map space of historic places and sites of interest as they listen to, or ignore, the directions of the trolley driver.

As in the work of the trolley tour operators, the Visitor's Councilors also participate in the map spaces of tourism: "we'll mark the map for them [tourists] and show them what we have to offer. [We'll] give 'em a parking permit, first of all, ask them where their parking and give them a parking permit and then they go in and see the movie and they come out and I mark the map." The organization of tourists by Visitor Center Staff echoes Shields' (2003, 9) argument: "Bodies are 'spaced': the performative carriage of the body, the gestures, actions, and rhythms of everyday routines deemed socially appropriate to a particular site, are etched onto place and into the somatic memory of individual inhabitants." As such, maps are intertextually performed, constitutive of multiple performances of identities and spaces.

These bodily interactions do not fix this map space for tourists. When they leave the Visitors Center, map in hand, they are free to explore the map space as they desire. To some, this means boarding the tourist trolley and experiencing the sites on the map, and many others, while gazing out the window and listening to the driver's narration. Others may choose to walk the route – a physical act which undoubtedly changes their experience. Still others may limit themselves to sites, homes, and monuments related to George Washington's life history, perhaps suturing this representation temporarily to a series of emotions including nationalism and patriotism.

For example, three tourists walked through downtown Fredericksburg in August 2005.<sup>7</sup> A woman held the tourism map and tried to tell her two male companions where they were and where they wanted to go. As she crossed a street and trudged up a hill, she looked only at the map. She seemed unaware of the historic buildings and shops lining the street. The two men were not focused on their present landscape either. The younger of the two questioned the woman's ability to read the map while the older one struggled to keep up. All in all, their performance of and in this map space suggests they were between sites of interest. Their interactions with the map all but erased the immediate surroundings from their senses. Their positions on the map, whether checked physically or mentally,

<sup>&</sup>lt;sup>7</sup> This experience was recorded as part of Stephen Hanna's ongoing research on tourism in Fredericksburg.

were confirmed by the numbered blue signs or, perhaps, by interactions with other tourists, residents, or tourism workers.

Through performances such as this one, tourists reproduce and alter the map space with their bodies and minds. They also employ other senses as they absorb the smells of foods from the restaurants or touch the antiques that are ubiquitously placed throughout the city's downtown shops. In some cases, the mapped representation in their hand becomes part and parcel of those experiences, a keepsake used to remember Fredericksburg as a place. Tourists may also assume positions of interest and respect while listening to a costumed guide describe Mary Washington's life in Fredericksburg and, perhaps, they imagine a version of the town's past informed by both the guide and their own experience and knowledge.

In other words, tourists may just do what they want, map in hand. As another Visitor's Center staffer described,

They usually have in mind what they want to do. Some of them may even just want to go out and walk. Some might look in the shops. Or, they are interested in just walking and looking for someone to go to eat. Depends on what they have on their minds. Well, like some things they've already decided you know they are not going to go to some of the places.

Thus, the mapped representation can always be exceeded and used in different ways as individual social actors mark the map with restaurants, antique shops, or new objects of their own personal historical interest. As such, maps are never fully complete nor are they ever completely inscribed with meaning through production. Rather, consumption is production. Map spaces are processes, fluid and contested, although they find themselves temporarily fixed through certain practices of consumption that (re)produce these objects in new and unique ways.

## Conclusion

I am suggesting an 'end of cartography as we knew it'<sup>8</sup> or that 'cartography is not what you think'. It is and perhaps has always been a multitude of practices ... lines of flight ... coded and recoded by forms of institutionalized power, but always with leakages. This decentering of hegemonic formalization of techno-scientific capitalism opens mapping to its own plurality of socio-spatial practices, to its own geographies, to its own conflicted and highly

<sup>&</sup>lt;sup>8</sup> Pickles is paraphrasing Gibson-Graham (1996) here.

contested nature, and to its many roles in inscribing lines and delimiting identities in the modern world (Pickles, 2004, 189).

If cartography has always already been a partial and contested set of practices and performances, then it makes sense that maps, such as the one discussed above, are also always in the process of production and consumption, authoring and reading. Methodologically, what this suggests is that ethnographic and other qualitative methodologies may be deployed to 'capture' the performed identities of map spaces. As Perkins (2004, 386) argues, "recent ethnographic approaches have investigated everyday social experiences of places and the role that mapping practices play in identity and knowledge construction...An ethnographic approach [thus] reorientates theory so that mapping becomes a social activity, rather than an individual response." But, what we want to further suggest is that ethnographic studies of maps and mapping need not work on the side of either production or consumption, representation or practice. Rather, the two sides of these binaries are constitutive. While we have suggested how maps "work" after a cartographer has designed a tourism map, we could examine how cartographers also consume objects, spaces, and representations in their reworkings of their own subjects. A critical cartography and/or GIS thus needs to further blur the boundaries of production and consumption, author and reader, subject and object if it is to truly become participatory and democratic.

This is a methodological concern because it is about that meso-level moment when we temporarily suture our own epistemological assumptions to the question of what are data and how we might go about collecting those data (Harding 1987). In our own epistemological view, to parody Barthes (1978), the author of the map is dead; reading produces and reproduces map spaces through the multiplicity of performances that social actors deploy in their mundane interactions with maps. This suggests that we might ask the question: to what extent do cartographers actually author space? In turning even further toward theories of performance in critical cartography and GIS, however, we want to caution that nonrepresentational theory as it is currently operationalized in geography might limit rather than expand the possibilities for breaking down the binaries that currently operate in the field. In so doing, we suggest deploying the theoretical concept of map space as opposed to studying maps and spaces as somehow ontologically separate sites of inquiry. Methodologically, this theoretical shift suggests that our objects of analyses are not simply maps but are instead the myriad interconnections that make the production and consumption of map spaces a process of both authoring and reading simultaneously. In offering this intervention, therefore, we suggest that that it is necessary to consider the epistemological and ontological assumptions that undergird notions of production and consumption in cartographic and GIS analysis as we think through our own methodological frameworks and, eventually, methods of analysis.

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