

You Are Here!

Playful Mapping and a Cartography of Layers

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Abstract. *This paper departs from Media- and Performance Studies in a theoretical reflection on the performativity and deixis of digital mapping practices and the use of mobile interfaces for navigation and play.*

Playful mapping practices and the shift from the map as form of representation to the map as interactive, if not ludic, interface for navigation point towards the performativity of our engagement with the map as tool to *think* with, as well as tool to *do* with. In this contribution I will take up the proposals for considering playful mapping (Perkins 2009; Lammes 2013) and a ludification of culture (Raessens 2010) and extend on my argument about navigational interfaces and navigation as performative practice (Verhoeff 2012) and consider how, through the centrality of these practices, the map is the interface for a subject-centered, *deictic* and haptic engagement with space. Moreover, I will suggest how the digital map as interface for time-based ludic practices, provides a *layered* cartography of space.

Keywords: interface, navigation, performativity, play, index, deixis

Introduction

The quintessential phrase of “you are here” is used not only in maps to provide a deictic center (Pierce) for reading the map, by synchronizing the presence of the map-user in time and space with the virtual positioning of him/her “in” the map. The phrase also invokes the playful act of stating the presence of the player in spatial games like hide and seek, or digital equivalents in location-based games. It is a statement that relays relative (spatio-temporal) positing as well as its inclusive potential for both going and doing: the knot of *presence* and *performativity* so central in both navigation and play. Elsewhere, I have begun to conceptualize the temporality of deixis

in cartographic interfaces of augmented reality and location-based gaming (Verhoeff 2012). Here, I will zoom in on the consequences of our consideration of a time-based notion of the cartographic interface, the deictic essence of play, and the performative impulse that characterizes the map as a tool for navigation. November, Camacho-Hubner and Latour (2010) evaluate digital cartography as what they call a navigational definition of the map, which includes anticipation, participation, reflexivity and feedback. This yields a differentiation between a navigational versus mimetic, interpretation of the map as representation, as well as a ludic and performative understanding of navigation. Following this ludic and navigational definition of the map, and by foregrounding the nature of performativity, the object of my approach in this paper is to conceptualize the way in which ludic practices of navigation (co-)construct a cartography of layers.

Performativity

I propose to take a closer look at the specifics of performativity (Austin 1955; Bal 2002; Dixon 2007) as pertaining to performative cartography (Crampton 2009), within what we may call a *dispositif of navigation*. Taken as a performative engagement with cartographic, screen-based technologies, I wish to emphasize how this comprises a combination of agency and the resulting experience of screenspace, so exemplary of the mobile screen as interface for navigation. *Performativity takes, or –literally - makes place in the paradoxical space between the affordances and constraints of technology (including possibilities for interaction) and the experience of individual agency*. I call this cultural form or dispositif a visual regime of navigation. It is, precisely, this dialectic of “doing” or “making”, and “experiencing” – which characterizes navigation as a specifically haptic and, simultaneously, explorative and (literally) creative – and, as I would argue, essentially playful - mode of spect-actorship, to borrow a term from the history of the theater and performance theory for the specific spectator-subject constructed in participatory interactivity rather than based on a traditional immersive subject position (Boal 1979; 2002; Frasca 2004; Wardrip-Fruin and Montfort 2003).

Departing from the centrality of the screen-navigator, I explore the layeredness of the navigational dispositif of the mobile screen as multi-directional: a pointing towards past, present, possible or emergent future, or “destination”. I argue for a shift in thinking about images as fixating movement into representation (the “image” on screen), towards a conception of the screen/image as “presentational” reference for performativity: for movement, experimentation, and possibility (the “navigational”). This

entails an approach to the layeredness of the screen/image best understood in terms of a spatiotemporal cartographic and archeological logic, and one that is in its essence *performative*. And, specifically relevant here: *playful*.

In my recent book on screens and mobility (2012) I have analyzed principles of the *visual regime of navigation* and performative cartography. Taking augmented reality browsing on smartphones as my prime example, I have argued for a reconsideration of the index (Pierce) as either pointing to the past (the trace) or the present (deixis), by arguing how, in navigation with the mobile screen, the index as *tag* encapsulates the future-oriented thrust of destination.



Figure 1. Image from an advertisement for Navman navigation systems, using geotagged photographs

This destination should be understood as a shifting referent, rather than an end-point. This entails a different thinking about the screen/image no longer to be seen as a result, a fixed and visual representation, but rather as a temporally layered and dynamic product of, and tool for, a performative engagement with space and time.

This semiotic starting point for considering the image as somewhere between *tool* and *object* is useful for reconsidering the status of the (post-cinematic) image. Here, I will elaborate on my argument about navigation, for a take on the layeredness of the image. In the post-cinematic regime of navigation temporal layers are added through agency, performativity, and procedurality. I propose a theoretical understanding of the layeredness in

time and space within which the navigator moves, by using *cartography* and *archeology* as conceptual metaphors for the mobile dispositif of navigational screen practices.

Navigation: Where is the Eye/I?

So let's return to the index – once the uncontested hallmark of analogue, photochemical ontology. This semiotic concept as defined by Charles Sanders Peirce refers to the intersection of time, place, and subject in their relative *relationality*:

I call such a sign an index, a pointing finger being the type of the class. The index asserts nothing; it only says "There!" It takes hold of our eyes, as it were, and forcibly directs them to a particular object, and there it stops. Demonstrative and relative pronouns are nearly pure indices, because they denote things without describing them [...] (Peirce 1885: 181)

This, I think, offers a theoretical grasp on the structural aspects of navigation, particularly helpful for understanding the layering of space and time on our mobile screens. Moreover, it provides an analytical perspective on the way subjectivity is constructed in the engagement with the map interface. This is at the heart of the performativity of playful practices.

In a special issue on indexicality and the moving image, film theorist Mary Ann Doane (2007) traces the discussion of authenticity and indexicality in light of the "crisis of legitimation" of authenticity in digital media. She points out the often-overlooked yet important distinction between the index that comes to us from the *past* – a trace of things long gone (the "footprint in the sand") and the index in the *present* – the pointing of a finger. Doane brings together the two very different characteristics of the index that we can discern in Peirce's writing: the temporality and directionality of the index.

In linguistic terms the index in the present is called *deixis*. This term refers to the here-and-now, the "situation" which established a subject as *deictic center*. What I call "there", "then" and "now" is relative to *my* position in time and space. I propose to add to these two temporalities of past and present a third indexicality that is brought about by navigation. Possibility and future-oriented, we can speak of a *destination* index – an index of emergence if you will. The mobile and hybrid interface of smartphones allows for

a connection between these layers: the here-and-now in the present, its traces in the past, and the future toward which the subject moves – a connection, which emerges and evolves in the process of navigation. As such, navigation involves a layered temporality, establishing the subject as the mobile, deictic center. The interface serves to make this spatio-temporal logic operable; or what Zoltán Dragon calls the techno-logic of performative cartography as one that, in his words, simultaneously “gives birth to both space and subject.” (Dragon 2013: 10)

This interfacing takes place within a mobile dispositif, or screening situation that encompasses both the perceptual positioning of the (mobile) user, and the physical, interactive interfacing with the screen. This screening arrangement-in-motion establishes a *mobile sphere*: a hybrid (De Lange 2009; De Souza e Silva 2006) private/public space that is marked by individual mobility and networked connectivity, a “personalized” space constructed within the mobile arrangement of user, location, and device. In a marked difference to the analogue map on the one hand, and the (classic) cinematic and televisual screen on the other, the mobile screen enables a navigation of both the interface itself and the geo-physical space surrounding its user, layering and mobilizing the dispositif. A haptic and visceral interface, it encapsulates the user and the machine within a mobile dispositif of navigation. Hence, it positions the navigator within a mobile sphere implying a performative *ambulant and haptic locatedness*. This puts the user at the center of a deictic network.

The close connection between screens and maps and the pertinence of *deixis* in a performative conception of cartography becomes clear in Tom Conley’s discussion of the analogy between the cinema screen and cartography as “locational imaginings.” Conley points out that cartographic media locate subjects *within* the places they represent. Deictic meaning cannot be understood without taking into account the situation of utterance or the image itself. This leads to the key phrase “you are here” that defines the cartographic act (Conley 2007: 2).

As such, the mobile screen is in essence a *cartographic interface* for the simultaneous navigation of both on-screen and off-screen space. Indeed, navigation as orientation entails constantly registering presence (where am I?). But rather than focusing on the trace of the past, navigation is geared towards deciding where to go next. For this, that the navigator decodes the (imaginary) phrase “*you are here*” (signified by an arrow or another icon) on the screen/map, into “*I am here*.” The map is only usable once the subject knows where the *I* exactly is positioned. The act of establishing a deictic center is at the heart of navigation.

I contend that performativity – particularly in this context, but more generally speaking as well – requires an *activation of deixis*: positioning a deictic center within a visual, spatial field is a primary result of performativity. Interactive navigation with the smartphone visualizes this situation in two ways. The screen visualized the user’s position as focalizer (Bal 2009) of the map. It also reflects back what the user *does*, what itinerary the user creates and simultaneously travels. In short, what space she makes. That is where the eye/I is.

Hence, in navigation destination (where will I go?) becomes the new center of indexicality. Space is constructed in this indexical reading of space where these three temporalities merge.

A Logic of Layers: Cartographic-Archeology of the “ARhive”

Augmented reality applications for smartphones exemplify the way in which the layered interface of the device can be used to visualize and access location-specific information. AR browsing entails a new way of engaging with a hybrid geospatial screenspace by effacing the map representation and using direct camera feed with a superimposed layer of (archival) data. Here I see an intersection of the cartographic and the archeological. The screen-based interface for navigation makes the “temporality of the landscape”, to cite Tim Ingold (2010) a site for cartographic-archeology.



Figure 2. StreetMuseum.nl app for smartphones is a Dutch version of the successful StreetMuseum of London app, also using archival photographs for a seamless “stitching” together of the past and the present in augmented reality.

By distributing the digital archive – the collection of data or images – and making it accessible “on location”, the process of finding, retrieving, making visible this information is an archeological project of recovery, contextualization, “reading”, and analysis of the object. Moreover, archeological interpretation is very much based on the analysis of deictic relationality: of constructing a relationship between the object and the spatial and historical “presence” of the subject. (Preucel 2010)

AR browsers visualize, and make archival data layered on, or stitched together with “reality” directly “browse-able” on the screen. The camera on the device registers (rather than “captures”, or “imprints” as a trace) physical objects on location, and transmits these images in real time onto the screen, where the image is combined with different layers of data in image or text. Stitched to deictic present, the archive becomes navigable.

This demonstrates a cartographic-archeological logic. Navigation constructs a temporal texture to space by bringing together past and present in destination. It transposes the archive to a live stream of deictic experience – an experience of an intersection of past, present and future in a triple deixis.

As such these new moving-image technologies are used to not simply overcome inherent (spatiotemporal) distance – but to explore the relationship *between* the different temporal and spatial domains of the image-object and the image-subject, and in this process, to put the subject back *in touch* with the object.

Following a psychoanalytical approach, once dominant in visual culture studies, we could argue how deictic address of the image both gives and takes: providing voyeuristic pleasures, yet at the cost of enslavement in the passive acceptance of the limitations of the pre-structured gaze that the dispositif arranges for us. Yet, from a phenomenological perspective we can see deixis as opening up a dialogic and haptic engagement with the image in movement, in performativity. This conception follows earlier theories of the moving image. Vivian Sobchack (1992) has developed this perspective on haptic perception of the cinematic screen in her use of Maurice Merleau-Ponty's phenomenology for a theory of cinematic spectatorship with the ambition to bridge the theorized gap between viewer and screen, put forward in the psychoanalytical film theory of, most notably, Christian Metz and Jean-Louis Baudry. This theory of visuality gives the spectator a passive position, written into the dispositif of classical cinema. From a phenomenological perspective, Laura U Marks (2002) also makes a claim for haptic visuality as a way of looking within a more intimate and dialogic relationship between image on the one hand, and the spectator on the other. In her view, haptic perception is less based on mastery than optical visuality, allowing for a more intimate form of criticism. This is considered a direct consequence of spatial difference: the proximity of touch is considered more intimate and less controlling than the distancing gaze. I want to caution for thinking too much in stark oppositions, though: touch can also be construed as invasive, and distance not only as controlling but also as modesty. But indeed distinguishing different modes of "contact" and in some cases ambivalence between different dispositifs, or visual regimes makes clear how complex the relationship between visual subject and object can be.

I have pointed out how digital navigation can be understood as a cultural trope which makes our sense of presence centrally deictic, determining one's current position, with a forward-slanted orientation towards possibility and destination. This performative, and as we may argue, inherently playful trope builds on a logic of layers, breaking with the regime of *fixed framing* in representation. Moreover, a deictic approach and a reconsideration of its materiality opens up an understanding of a thickening of time and space in the engagement with the image. This is where the direct connection between on-screen and off-screen presence in augmented reality on the mobile screen, as a result of the responsive and location-awareness of

the layered interface, diverges from the tangibility *effect* as experiential property of classical representation. The visual regime of navigation entails process, mutability, and mobility. This makes the assumption of stability implied in the concept of *representation* less adequate to account for the relationship between the *performativity* of navigation and its cartography. Instead of foregrounding the preposition “re” of repetition, or reproduction, in representation, I suggest conceptualize the “pre” of *presentation*. This is not only the pre- of making present (as in “present-ation”) but also in the temporal dimension of the processes *before*, or “pre”-presentation: the process of becoming in which both the image and subjective presence come into being.

Conclusion

After having explored the kaleidoscopic as a model for understanding early cinema (Verhoeff 2006), and tracing the visual regime of navigation both diachronically and synchronically in my study of mobile and urban screens (Verhoeff 2012), in my current project I aim to explore the many different ways we can recognize the logic of layers at work in our contemporary culture, and, perhaps more fundamentally, in the way we navigate, engage with, and understand the spatio-temporal world. In essence, I take layeredness as the intersection of the cartographic, the archeological, and philosophical. As such, its logic is underlying what Manovich (2001) has called cultural interfaces – interfaces that construct a model of the world.

We use different terms or metaphors to invoke the complexity of layeredness: in cartographic, archeological, or archival terms; in forms of augmentation, complexity, hybridity, fragmentation; in geography, history, and anatomy; in extension or remediation; and in formations such as text, hypertext, or texture. It operated as metaphor, or as metonym. It is thought in polyphony of arrangements and compositions. And we think within the framework of different conceptualizations of layers: temporal, spatial, conceptual; in planes, slices, levels or stages, dimensions; in synchronic or diachronic, or vertical and horizontal organizations. As a wider cultural trope can recognize a logic of layers in domains such as cartography, science, philosophy, architecture, arts and design, music, choreography, theater and performance, photography, cinema, and (digital) animation. What is perhaps most intriguing, is how layeredness in visualization and design is often very much about how we think: how we think about space and time, in relation to ourselves as a subject of both perception and of active, performative engagement, surrounded by the contours of invisibility and silence, incompetency, and incomprehensibility.

But is this all reason to cheer? In a review of my book, art historian Svetlana Alpers (2012) has suggested that immersing ourselves in navigation, performative engagement entails a loss: a loss of ourselves as viewing subject. The visual regime of navigation may, perhaps, entail a loss of a distance in looking. But rather than focusing loss only, we can ask how looking, including performative looking in navigation, intersects with *complexity* and *ambivalence*. The process of exploration and the navigation of layers seems to entail both gain and loss.

We tend to see layers as an augmentation of complexity on the one hand, and a limitation in overview as well as fragmentation on the other. How we evaluate this game of loss and gain depends on our desires. Today much of our desire is about gaining access: access to what was already there but was never possible to become present. We find our desire in the creative, playful and experiential process of discovery (or recovery) reconstruction, and interpretation. Limitations in “access” – physical or epistemological – can make us experience perhaps not so much its fulfillment, but that desire itself.

So when we ask the question of why are we so intrigued by layers, the answers may be that it is in the process of navigation that we experience the inherent limitation of access, of overview, and full understanding. And that may very well be exactly the attraction of fragmentation and the intersection of access and limitation: it gives us the chance to *experience* our *desire* for navigation. And as usual, desire is best experienced in the face of obstacles, in the process and not fulfillment. To use Emerson’s famous dictum: the performativity of navigation, is perhaps indeed, “a journey, not a destination.”

The research leading to these results has received funding from the European Research Council under the European Community's Seventh Framework Programme (FP7/2007-2013) / ERC Grant agreement n° 283464.

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