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Walk this Way Mobile Narrative as Composed Experience

Information technologies as a pervasive environment [are] badly in need of the sensitivity traditionally associated with art. – Jack Burnham, "Notes on Art and Information Processing"

Berlin, June 2005: Join the Resistance (Art Project). Go to a Ringbahn platform. SMS the first 6 letters of the station name . . . Wait on the platform for instructions (SMS "stop" to stop playing at any time). This is your mission. Should you choose to accept it, you will be participating in a mobile, location-aware, SMS-based narrative on the Ringbahn train in central Berlin: Hundekopf. You will have seen the flier inviting you to play in the mode of an alternate reality game (ARG), whereby you receive a set of instructions that direct your activities: here, you go to the nearest Ringbahn station, text in the name of that station, and wait to see what you are asked to do next. Mixing game play, politics, and narrative, this art project invited participants to experience, and re-experience, the city of Berlin while riding the Ringbahn or "Hundekopf" train, so named because the route as it is rendered on a map of the transportation network resembles a dog's head. Once the participant identified her initial location and boarded the train, she received messages as she passed individual stations along the route. Both instructive and descriptive, one set of messages began, "The Resistance is," and completed the sentence by defining the Resistance in terms of location (near, close, with you); action (watching, waiting); physical properties (small, large, metallic); and concept (repetition, liberty, money). There were also commands particular to each station, for example, "Decode the numbers on the building." Communication was primarily unidirectional, although replies to the text messages were of course possible and at times even encouraged. In this sense, the messages were designed to puncture the participant's engagement with the immediately present material world but also to articulate that material world as a narrative environment. Rather than creating a full-scale immersive fictional world, then, Hundekopf preserved and in fact emerged from the interplay between the physical space of the city and the transmitted fictional text.

Performed during the Loving Berlin festival in June 2005, Knifeandfork's Hundekopf was at once poetic and narratological, mobile and sited. The artdesign team Knifeandfork is comprised of Susan Huang and Brian House, who was himself a co-creator of Yellow Arrow, also an SMS-based project with messages indexed to particular places. While Yellow Arrow functions in the mode of geo-annotation, with a cartographic archive comprised of usercreated annotations of physical space, it has the same basic structure-spatial annotations distributed through a telecommunications network-as Hundekopf. There are of course crucial limitations to this comparison because authorship in Hundekopf is centralized, which affords more narratological possibilities; it is sited on the Ringbahn and thus "about" a particular place (there are multiple versions of Yellow Arrow in cities around the world and the content is not controlled); and it is location-aware, which means the messages are predominantly pushed to rather than pulled by the participant. While Yellow Arrow is constructive, Hundekopf is exploratory. Yet the comparison is instructive in that it places Hundekopf in the context of a diverse set of artistic practices now grouped together as "locative media." The term "locative media" announces a difference between strictly functional and aesthetic applications of location-aware devices. Named by

Karlis Kalninis during the Karosta Locative Media Workshop (2003), the category of locative media is expansive enough to accommodate a wide range of artistic uses of functional location data and location-aware networked mobile devices. Locative media is an instance of "unframed" media practice, unframed in the sense of unbound from the desktop, detached from the singular screen and thus a fixed spectatorial perspective, dependent on signals rather than cords for data transfer in one's immediate vicinity. The broad context here is ubiquitous computing, the incorporation of information and communication technologies (ICT) into nearly all aspects of our environment, the presence of computing devices "everyware." But the more fundamental transformation has arguably been-and will continue to be-the displacement of the desktop computer as the central networked device by the mobile phone. Mobile phone use was calculated to be 2.7 billion worldwide in 2007, a dramatic increase from the 11 million users in 1990, which means the mobile has numerically surpassed the television as well (eTForecasts). Even with old data, the scale of the shift clearly authorizes the claim that the rise of mobile telephony has been a "revolution" on par with the graphic Web, all the more so as the mobile phone shifts in function and technological capability to become instead a mobile device with video and picture camera, location services, and Internet access. Given the particularly exuberant literary experimentation that has historically accompanied new computing platforms, it makes perfect sense that electronic literature would itself develop "beyond the screen," as the present volume suggests. What are the literary and disciplinary implications of this development? What happens to narrative when one departs from the structures, conventions, and framing techniques of the page and screen? How should we think about reading mobile narrative-my concern in this essay-when "reading" itself cannot account for the different modes of engagement it encourages? In many ways this last question traverses familiar ground for the field of electronic literature. Certainly Espen Aarseth's cybertext concept, with its basic focus on the materially significant activities of the reader, has complicated our understanding of reading. So, too, has it fostered the association of "reading" with performing, particularly in the notion that "trying to know a cybertext is an investment of personal improvisation that can result in either intimacy or failure" (4). Literary texts that require physical exertion, particularly those that require bodily engagement, clearly lend themselves to metaphors of performance and play, so we can in this sense say that mobile narratives summon "participants" rather than "readers." In that literary uses of mobile and locative technologies present an implicit challenge to the culture of technicity and the instrumental use of location-based services, we might also say that mobile narratives summon "participants" rather than "users."

One might initially think that "mobile narratives" refers to the phenomenon of keitai shosetsu, or cell phone novels, in Japan, the circulation and sales figures for which are nothing short of astounding, particularly when considered alongside print markets for books in English.1 The first keitai shosetsu in print was Yoshi's Deep Love (2002), the story of the trials and tribulations of a teenage prostitute that sold over 2.5 million copies and quickly became a discourse network including manga, a television series, and a film. The central structural feature of the genre-interactivity-is captured in a South African fiction writer's account of his experience composing short stories for the keitai shosetsu market. Drawing on the minimalist tradition of Raymond Carver, Barry Yourgrau wrote 78 stories under 350 words, all of which were eventually published in print as "I-Mode Stories." The stories were embedded in Japanese culture stylistically and referentially with connections to manga and J-pop, but they treated the screen as a static page and did not facilitate engagement between author and readers and were thus not as successful as most in their genre. Television fandom, with the number of sites devoted to interpretative commentary and suggestions for future episodes,

might be a roughly equivalent phenomenon of audience engagement in the U.S., but there is as yet no comparable market for mobile fiction.2 I raise the issue of *keitai shosetsu* so as to stress the difference between the use of mobile devices to read texts that would be meaningful in other media, especially print, and "native" mobile narratives, composed and delivered via SMS and meaningful in a full sense only on that platform.3 This essay analyzes the latter, mobile texts that are sited and situational, and that are narratological both at the level of the work and its effects. "Mobile," here, is not limited to a particular hardware architecture but rather encompasses a range of handhelds, from basic phones to a tablet PC to the iPAQ (a GPS-enabled smartphone). While the recent proliferation of scholarship on the material specificities of hardware and software is crucial for the discipline of media studies, an expansive and transmedial concept of "mobile" allows me to focus on a distinct literary-arts practice and the motifs and modes of engagement shared by multiple platforms.4

My particular province is experimental narrative with a mobile and locative component: narrative that emphasizes the exploration of place and locality but is not strictly annotative, as is Yellow Arrow. Sited narrative in and of itself is not a new phenomenon. Indeed, the Catholic ritual of navigating the Stations of the Cross, the paintings or sculptures that depict the passage of Jesus from death sentence to burial, would be an instance of site-specific narrative in the general sense. However, Janet Cardiff's The Missing Voice (Case Study B) (1999) makes for a more obvious comparison in that it uses mobile audio to guide the participant through the East End of London. So here one must ask what makes GPS- and SMS-enabled mobile narratives distinctive, apart from technological platform. There are clearly practical differences in delivery media between Cardiff's audio tour and Hundekopf; for example, the former is stand-alone and the latter networked. But it cannot simply be the use of networked and location-aware devices that distinguishes mobile narrative as I am calling it.5 In other words, it is not simply the instrument but the mode of engagement. The real difference, then, is not ontological but experiential: with a mobile narrative, content responds dynamically to the place of the reader/participant. Audio recordings can be timed so that text is keyed to place but there are obvious technological limitations on the delivery of content. In this sense we experience mobile narrative differently and the experiential is sufficient to claim the distinctive and the transformative. The premise of such a claim is that when the participant uses her mobile device to summon a set of instructions, or walks to "hot spots" on the map to trigger an audio track, then we must necessarily think in terms of different reading practices-an experiential rather than an ontological difference.

Identifying categorical specificity, however, always introduces certain problems that we might address by making the question part of a speculative inquiry. In this sense, "how and in what terms to read, engage, and participate in mobile narrative" is best considered as a question rather than as a fixed prescription. That said, it is possible to speculate upon the critical vocabulary suited to-and generated by-the mediated experience particular to these emergent narrative forms. In this essay, I will do precisely that by outlining a critical approach to the study of mobile narrative that also serves to outline mobile narrative as a genre and mode of new media writing. Implicit in my taxonomy of mobile narrative is what I see as the three key terms of GPS- and SMS-based narratological practice: experience, movement, and environment. These terms are at once themes, structural features, and modes of engagement that consciously suggest a range of humanistic disciplinary practices. To "read" mobile narrative in these terms is to recognize that critical engagement requires a range of cognitive and bodily activities, only one of which is reading in the sense of the visual processing of linguistic signs. That is, reading in the physical environment particular to mobile media quite often also involves seeing,

moving, listening, touching. Participating in a mobile narrative is then precisely that-physical participation that is also understandable as performance. Just as Marshall McLuhan saw electronic media as a "total media environment" and therefore a challenge to the hegemony of vision, we might come to understand literary practices with mobile and locative media as, paradoxically, a challenge to the hegemony of words. Though literary studies has an archive of critical terms to account for all varieties of linguistic experimentation with mobile media, then, we need to borrow from performance studies to think about embodied interaction; art to think about location and site specificity; and pervasive and mixed reality gaming (and even theme parks) to think about environmental storytelling. That said, the mobile narratives that concern me are fundamentally textual, discursive, and literary. My selection of works is representative but not comprehensive: Knifeandfork's Hundekopf; Teri Rueb's Itinerant (2005), a "patchwork narrative" and interactive sound work sited in downtown Boston; Kate Armstrong's PING (2003), a psychogeographical narrative walk guided by telephone menu; and Jeff Knowlton, Naomi Spellman and Jeremy Hight's 34 North 118 West (2002), a locative narrative situated in the post-industrial rail yards of downtown Los Angeles. What I hope to analyze in this essay, then, is how it is that the elements of experience. movement, and environment are artistically fused to enable these works to form a compositional experience?

In sum, these works perfectly preserve the balance between script and improvisation, between structure and toolbox, between artistic direction and reader response. To understand the full significance of this claim, it is necessary to recall Myron Krueger's early writing about responsive environments in an essay that described his Videoplace (1975), a pivotal entry into (and indeed part of the foundation of) the field of virtual and artificial reality research. While expressing some frustration about the "restricted dialogue" about the nature and potential of interactive art, Krueger outlined a system in which both the environment and the participant could be said to be responsive: "If, on the other hand, the participant maintained an active curiosity about how the maze would thwart him next, the experience was entertaining. Such poetic composition of experience is one of the most promising lines of development to be pursued with the environments" (483). As Krueger explains, the essence of interactive art is real-time engagement between people and machines. The computer perceives and responds to the participant's actions; in turn, the participant regards the maze as a problem to be solved, and interacts with and responds to the simulated and conceptual environment. That environment, though, is not amorphous but rather ordered, however loosely, such that the participant has a structure and set of rules to negotiate. The participant's affective experience, her enjoyment, is thus "poetically composed" for her. However, Krueger stresses, she "does not simply admire the work of the artist; [but rather] shares in its creation" (483). Her position is clearly not spectatorial but neither is it that of the merely receptive audience. Instead, she helps to produce her own experience, one that is "unique to [her] movements and may go beyond the intentions of the artist or his understanding of the possibilities of the piece" (483). A responsive environment, then, is one that is scripted and composed but allows for, even necessitates, improvisation and play. It is in these terms that I wish to read mobile narratives, as works that exploit the gap between program and execution-between a map, a user's guide, a set of instructions on the one hand and the execution of those instructions on the other. To adapt a phrase from Ted Nelson, we need to understand the participant in a mobile narrative as one who "branches [read: navigates, moves] or performs on request" (314). It is not a stretch to conceive of both a set of instructions and a map with hot spots as a request; both after all suggest rules and limits. Neither is it idealization or romanticization to suggest that there is tremendous affective, literary, and political potential in the interpretation of that request.

A discussion of instructions and requests might necessarily seem to concern alternate reality games, which leads me to explain why they lie outside the scope of my analysis. The purpose of this essay is not to police discursive borders, so what might be understood as a categorical exclusion is not based on an identification of the "properly" narratological. It seems fruitless to engage in a debate about whether the text messages of Hundekopf are any more or less literary than those of, for example, Blast Theory's Uncle Roy All Around You. It would be equally fruitless to try to differentiate play from non-play. But we can draw a basic distinction between mobile narratives and alternate reality games on the basis of modes of participation. While mobile narratives typically engage a single participant, typical ARGs are multi-player and collaborative. Even in those instances when a small group is invited to perform a narrative walk, as in the case of 34 North 118 West, which I discuss below, the data stream is still single channel, with the participants together using one GPS enabled device. ARGs, on the other hand, involve collective intelligence and, to an increasing extent, social networking. The difference, then, is scalar: a single individual as opposed to an aggregated mass. Perhaps this difference does suggest that "reading" is an inherently solitary activity, even with all of the social networking tools designed for the sharing of reading experiences (e.g. LibraryThing and the Goodreads Facebook application). However, as I will suggest, mobile narrative makes, or strives to make, relationality axiomatic rather than additive or ancillary.

To begin such an analysis, I return to Hundekopf and its engagement of "the public," specifically through their use of public transportation, public WiFi connections, and publicly available railway data. In that the artists used open wireless networks in public cafes during the programming of the project and extracted public transportation data from the transit authority's website, the project self-consciously explored and manipulated public technology and public space. But what conception of the "public" is at work here? To what extent is "the public" in this context an idealized and phantasmatic category? Does it necessarily suggest some sort of autonomous agency, a mass of volitional subjects whose desires are expressed-made manifest-in their participation? Or does it suggest rather an entity, a mass, a group of volitional subjects whose agency and affect is constructed retroactively, as an effect of the participatory activity? In my view, "the public" operative in Hundekopf is one that is produced as an effect. In other words, "the public" is enacted in the very activity of repurposing public transportation, communication networks, and data for the purposes of art. This is not a naively idealized public that has organic unity but a notion of a public based on shared use.

Because the Berlin transit authority makes real-time information about the movement of individual trains available on its website, a rider's location en route can be determined as soon as she provides the name of the station where she boarded the train. Such is the operative structure of Hundekopf: the participant is directed to the nearest station, the name of which she sends by text, and, with her location identified, she can receive messages linked to each individual station through which she travels, all without the use of locative technology. Though Hundekopf is not technically locative, it is site specific in that it engages the participant with her immediate environment (some messages were internal to the train but most were external, e.g. "You are at the tip of the dog's nose). It is also site specific in that it commented upon the very telecommunications and transportation networks through which it functioned. Moreover, the narrative structure was mapped onto the physical structure of the transportation network, the Ringbahn. In their artistic statement about the project, Knifeandfork adapt the geological metaphor from the opening of Jerome Bruner's Acts of Meaning such that it becomes a description of their narrative rather than a description of a discourse network: "Stories . . . are like mountain tops jutting out of the sea. Self-contained islands

though they may seem, they are upthrusts of an underlying geography that is at once local and, for all that, a part of a universal pattern" (Knifeandfork, "Press Release"). These "self-contained islands" are the messages indexed to individual stations, the lexia, which persists as a compositional unit for electronic literature. As with the Ringbahn itself, the narrative has no beginning and no clear resolution but it is organized around a central architectural element. The TV tower in the center of Berlin is both the visual and conceptual anchor for the piece; indeed, one of the messages reads, "The Resistance is central. Look at the TV tower at every stop." Both in its narrative structure-a "hub narrative" anchored by the television tower in the centerand in its pursuit of environmental storytelling, Hundekopf invites participants to consider narrative spatially rather than sequentially. But this does not necessarily mean that it is overly or reductively episodic with poor sequencing. In his defense of environmental storytelling against charges such as these, Henry Jenkins argues that spatial stories "respond to alternative aesthetic principles, privileging spatial exploration over plot development" ("Narrative Spaces" 58). More than that, environmental storytelling conceives of plot in both temporal and spatial terms. Plot is not simply the ordering of events in time but movement, directions, paths, and routes. In this sense, Hundekopf articulates the urban environment as a narrative space, with hidden layers to be discovered and explored.

As the artists note, then, the physical and narrative elements produce an "extremely vital" storytelling environment: "Hundekopf invites us to experience the city as verbs, not nouns. A feature of the cityscape, though it might be objectified and cataloged by postcards, understood by a caption or label or expectation, is in fact an invitation to act and imagine" (Knifeandfork, "Press Release"). With the suggestion that the city is to be experienced as a verb rather than noun, as dynamic movement rather than static image, Hundekopf is very much in line with the recent discourse on the city as temporal process rather than spatial entity. Verbs suggest activity, changes in landscape; processes of decay and development. A "vital" storytelling environment is one that is animate, a textual city that is in some sense alive (or has life). But an invitation to experience the city as verb rather than noun also clearly summons the participant to activity as well. To invite a participant in a mobile narrative to "act and imagine" is to ask her to perform and to activate her literary imagination. An invitation, then, is also implicitly an instruction. In this sense, Hundekopf opens and exploits a space between instructions and performance, the space of improvisation and experimentation.

In descriptive accounts of the project, Knifeandfork allude to experiential and navigational tactics that allow participants to see the city differently-in other words, to tactics of defamiliarization. The notion that a mobile narrative might enable one to see differently extends Ben Russell's vision of the role that locative media might play with regard to our sensoria in his Headmap Manifesto. In his musings on the social, cultural, and political implications of locationaware devices, Russell speculates that "location aware devices will remove the inertia, the objective reality claim, and the stabilizing influence of the build environment.... Seeing the space differently may lead to radical social and political upheaval" (5). For both, the means or technique used to defamiliarize, to counter the automation of perception, seems as important as the effect. But with Hundekopf history itself becomes a means by which to re-see and reexperience one's immediate environment: "location-embedded narrative acknowledges history as an active thing, a persistent framework for reexperience. The artistic and even soteriological goal is to let the actively creative mode of consciousness inspired by the context of the piece drift permanently into our everyday motions through the city" (Knifeandfork, "Press Release"). The "benefit" or "payoff" is not surrender or the recognition that the "human" as such is merely one part of a larger technological and

urban system—the networked city—but in fact a reassertion and even reclamation of human experience. This is the production and support of an "actively creative" critical consciousness, such that we who participate in the narrative learn to navigate and inhabit the city in a better way. The consciousness of the subject is at stake but so too is the human organism, "soteriological" here gesturing to a notion of health that encompasses body and mind and thus brings together sensation and reason, the experiential and the analytic.

But there is even more to be done with the socio-political investments of Hundekopf. It is not for nothing that the fliers distributed around Berlin drew participants to the project by inviting them to participate in a resistance movement and that many of the text messages began with the syntactic formulation, "The Resistance is . . ." As Knifeandfork explain, "the theme of resistance was central to the piece, a resistance against de facto modes of inhabiting public space. The messages sent to the participant outlined a Situationist-inspired manifesto, tactics for experiencing the environment within and without of the train in a novel and provocative light" (Hundekopf). Here the artists self-consciously position themselves as "tactical" media practitioners working within a tradition of experimental cartography and protest against the organizational rationality of urban design. This is not a naïve idealizing of resistance, but resistance situated at the level of the ordinary and the experiential. Instructing a train passenger in Berlin to "look at the person next to you" almost inevitably summons up Georg Simmel's commentary on the affective overload produced by life in the modern metropolis. In Simmel's analysis, the modern city is so full of strangers that urban dwellers have to in a sense turn off, to dissociate, to adopt a "cold and uncongenial" manner so as to avoid becoming overwhelmed about the multiple possibilities of affective and emotional connections (331). That the networked city should also produce such a manner is suggested in the notion that the person proximate must necessarily be a stranger, one who would provoke a conscious awareness of oneself in relation to others. There is not enough here to authorize a reading of the Hundekopf script as a manifesto but it is literally a library of descriptors. We might at the very least productively consider the aesthetic and political commitments of *Hundekopf* in relation to Ted Nelson's investment in hypertext as oppositional, counter-cultural, and anti-establishment: "No More Teachers' Dirty Looks" indeed. What Hundekopf offers then is resistance with a small "r," which perhaps suggests more potential than actuality, but is no less compelling for doing such.

Since the physical movement of the participant in Hundekopf is somewhat circumscribed-certainly one could quit and exit the train at any station, but the narrative path is obviously limited to the train route-we might look to GPS- and SMS-enabled narrative walks to see further experimentation with mobility. Itinerant, PING, and 34 North 118 West all invite participants to traverse the space of the "text" with a relative degree of autonomy. They invite exploration not only of the "hot spots" (the trigger points on the guiding map) but also of the spaces in between. In GPS-guided walks in particular, the narrative is rendered in relation to the speed and movement of the participant, who may be following a map but can nonetheless decide upon pace and direction. As she moves through physical space, she experiences the acoustic, visual, and verbal landscape, detecting conversations, ambient noise, physical objects, and weather patterns such as fog or rain. However, when a participant walks through Boston Common, the public park in central Boston, with the GPS-enabled handheld used in Teri Rueb's Itinerant, she does not have a sensorial experience as if sensation were discrete, secure, and somehow consumable. Neither does *Itinerant* imagine sensorial experience in these terms. In fact, the relation between movement and sensation is more complicated than it might initially appear. To borrow from Erin Manning, the body of the

participant in *Itinerant* is a "sensing body in movement" (xiii). Sensing bodies are not static, stable, pre-articulated bodies that then experientially process sensations either as giver (to touch) or receiver (to be touched). They are not bodies that sense; rather, the senses emerge from and are "expressions of moving bodies" (xiii). The sensing body, then, is relational, prone not to equilibrium but metastability, to continual processes of emergence and mutation. *Itinerant*—along with Rueb's *Drift*, the installation on the Watten Sea—does not so much as explore as create the "sensing body in movement."

Itinerant is both interactive sound work and "patchwork" narrative ("On Itinerant"). The motif of patchwork partly derives from Mary Shelley's Frankenstein, excerpts of which are used in the work, but it also functions as a metaphor for the narrative structure in that the excerpts from Shelley's novel are interwoven with an untitled text written by Rueb. Both texts are delivered via audio files keyed to hot spots sited throughout the park. A narrative engagement with Frankenstein almost inevitably introduces questions about alienation and indeed Itinerant incorporates the mournful wail of the monster, "am I not alone, miserably alone?" (Rueb, "On Itinerant" n.p.). The monster's alienation becomes that of the participant, her inhabitation of a subjectivity not her own enforced both by the operation of the literary imagination ("I" is "me") and by the doubling of the first-person perspective. That is, the subject of Rueb's fictional text is herself alienated and alone, the monster's double: "I catch myself staring, like . . . that pitiful creature. . . I am haunted by the memory of this life born into solitary existence, wandering the globe in search of a name, an identity through progeny-a creature living outside the rhythm of biological time." That the text invites the participant to inhabit a position not her own is further evinced by the sound files that capture movement: footsteps on pavement, in water, on leaves and grass. The "I" is at once hers and not hers, the sounds of walking echoing and perhaps even doubling her own. To appropriate Anne Mangen's heuristic, the immersive experience offered by Itinerant is thus at once technological (produced by devices) and phenomenological (produced by the imagination) (406). But that immersive experience is also punctured by sounds present in the immediate environment. People-the crowds in the park and streets in downtown Boston-are represented through sound files of inaudible conversations, which are neither background nor foreground in relation to the "real" physical sounds of people in the city. Instead the sounds are layered, mixed in such a manner that the synthetic and the "real" might in certain circumstances appear to be interchangeable. Itinerant thus suggests relational matrices-of bodies, senses, texts-and presents relationality both as an effect and as our (the monster's) desire: "my heart yearned to be known and loved by these amiable creatures."

Itinerant asks participants to engage phenomenologically with their immediate environment not through image production-visual representation-but through sound. In this sense we can understand it to be part of the shift in media production and criticism away from the purely visual to the multi-sensorial. But this is not to suggest that it somehow brackets looking or the image; indeed, Rueb's fictional text plays with the voyeurism of Frankenstein's monster, echoing his account of watching a poor family through their cottage windows for months on end: "The brick facades and frozen sidewalks press against me as I pull myself along, wandering around residential neighborhoods: Back Bay, Beacon Hill, South End. The windows, their bright eyes gleaming, invite my furtive glance inside." That said, there is a sense in which location-aware projects that incorporate sound and tactility (by the incorporation of physical props or the invitation to touch physical objects) might arguably be countering the spectacularization of the city, the "world of images and signs" that constitutes networked urban life, the world that "exerts a fascination, skirts or submerges problems, and diverts attention from the 'real,' i.e. from the possible" (Henri Lefebvre 389). But, we might ask, to what

extent does such a gesture constitute a technological management of the sensorium?

A project that precisely plays with the management of the sensorium and affective experience is Kate Armstrong's PING (2003), a psychogeographical walk designed for PsyGeoConflux 2003 and directed by mobile-phone navigational commands. Participants called into the telephone system and were offered a menu of options structured like a conventional call service: "Press 1 if you are near a French tabac. Press 2 if you feel more like a flâneur today than you normally do. Press 3 if you find the neighborhood through which you are moving to be either sad or pleasant or if you are in view of a deep pit" (Armstrong) At once cartographic and narratological, PING was comprised of instructions that guided the participant's movement and invited her to explore not only her physical environment but also her own emotions. Prompted to engage her surroundings in psychogeographical terms, to study the conscious and unconscious effects of environment on her affective behavior, the participant was guided to see the connections between her own psyche and the city: "If you feel that the geographical form of automatism is an instructive pleasure, press 2" (Armstrong). As the title suggests, PING tested the presence, accessibility, and response of the caller, a series of pings situated under the rubric of Ping, a test of being itself: "First off, stop and look around you. Briefly note existing ambient zones. You must ask yourself a question. What is your relationship to your current surroundings? Do you exist? asks the phone. Press 1 to PING me" (Armstrong). In the broadest sense, then, PING tested the creative and imaginative capacity of the subject with a set of if/then instructions that emphasized basic choice at the level of the interface but in fact encouraged exploration at a much deeper level, the unconscious.

As is no doubt clear from these examples, mobile narratives engage not just physical, material space but also embodied, lived space. If we think about location in purely functional terms-time, position, speed-we risk overlooking its social and political aspects, its terms and conditions of use. Even as they read location with geographic coordinates, location-aware art works render space relative and relational. Space then is framed both by a coordinate system and by perspective, a way of seeing. As Martin Lefebvre reminds us in his study of Landscape and Film, landscape is always and fundamentally a view, "a particular gaze that requires a frame": "the view itself cannot be divorced from other experiential aspects that accompany it" (xv). In other words, a view cannot be separated from perspective, which is itself framed by subjective experience, memory, and history. In that its primary subject, the history of the railroad industry in downtown Los Angeles, is also its location, the GPS-based 34 North 118 West (hereafter 34N118W) engages exactly this tension between physical and lived space. It does so while mounting a serious challenge to the technicity of locative media, to the notion that coordinates the prima facie understanding of place. Its project, then, is "to locate poetry within this [GPS] system" (Knowlton et al.).

For 34N118W, which is commonly regarded as the first locative narrative, small groups of participants were equipped with a single GPS receiver and tablet PC map of the Santa Fe Railroad depot that formerly occupied the site, which, as one might expect from a post-industrial city, is now used by the Southern California Institute of Architecture. (As part of its challenge to technicity and the culture of use, 34N118W breaks the indexical relationship between map and territory by using a decades-old map for its interface.) Instructed to walk to hotspots that triggered narrative fragments spoken by voice actors, they explored the physical environment, which was content rather than background or stage set. Both the art practice and the mode of participation was framed as "narrative archaeology," the uncovering and ordering of the past within the frame of the present. Jeremy Hight, the author

of the fictional text, researched the history of the freight yard and discovered the surprising and macabre stories of the line watchers, workers who were on suicide watch and charged with cleaning human debris off the tracks.

35 years I cleared the tracks. Those men, along the rails, tired. Death by train we called it. They waited and wandered. Hoped . . . for the sound that comes too late To take them from this life. It was my job to assist . . . to help . . . kind words . . . or help clear the tracks after the impact . . . Such failures. My failures. Such small horrors. (Knowlton et al.)

As with other GPS-enabled mobile narratives, the narrative emerges in accordance with the route a participant takes, so if one navigational path elicits a story about a working clearing the tracks, another might elicit a story from the station clock inspector. The stories endeavored to reanimate the past, an appropriate metaphor given the figuration of the railyard workers and the traces of (paradoxically) material history as "ghosts." As Hight explains, "the artifacts experienced were not immediate, but were imagined and invisible, ghosts of what had been forgotten, shifted away from or erased" ("Views from Above" 3). Narrative archaeology is not then a project of strict historical recovery and preservation. To figure history and historical processes as ghosts is instead to imagine a past that does not stay past, that was once forgotten but now intrudes upon the present.

The haunting effect of a disjunctive and surprise encounter with the past was also produced by the audioscape, which was composed of overlapping voices and so suggested a historical and temporal layering. In this respect, compressed layers functioned as both a design and a conceptual principle. The significance of this is twofold. On the one hand, such an archaeological metaphor as this suggests that past and present do not necessarily maintain distinct-or easily distinguishable-ontologies and spatialities. On the other hand, the metaphoricity of layers, which after all have a distinct meaning for augmented reality researchers, extends to the conception of the relation between concrete, physical space and the virtual, otherwise understood as the infoscape or the datascape. What are the implications of figuring the virtual as a layer that rests on top of the physical? In short, if we imagine the virtual to exist as a data cloud in the ether, as a separate entity the contours of which we might demarcate if provided with the proper mapping tool, then we prevent ourselves from seeing the many ways in which the virtual and the physical are coextensive with each other, to the point that they cannot be regarded as ontologically distinct. Recent research on the research consumption of data centers indicates that the virtual is deeply physical and, as Eric Kabisch argues, "the 'physical world' already exists as a hybrid stew of digital and embodied entities and practices" (223). Layers, then, might be a useful way to conceive of practical computing problems in augmented reality, but this rhetorical conceit runs the risk of naturalizing the notion that the virtual is a separate, freefloating, and detachable "window" that might be transported to another physical context without materially changing that context or the information itself. That might very well be the case pragmatically: mapping errors might put a virtual layer in the wrong place and misidentify a pharmacy as the coffee shop it borders. But perhaps the metaphors of "agitated" and compressed layers used by the artists behind 34N118W help us to begin to think about the ways in which the virtual is already a physical, lived space, and the physical is already encoded with information.

What are some of the broader implications of a genre study of mobile narrative for the field of electronic literature? Critics have long accepted the argument that traditional practices and rhetorics of textual analysis are insufficient tools with which to analyze works that have a significant interactive component and that incorporate sound, image, kineticism, and even time as signifying elements. Certainly Espen Aarseth and Katherine Hayles have articulated crucial critical frameworks for the study of reading as (and through) embodied activity. As I have suggested, though, a critical approach to the study of mobile narrative needs to account not only for the participant's relation to the work but also for her relation to the work-as-environment and the environment-as-work. Moreover, it needs to account for the "sensing body in movement," for sensorial experience not as it is manufactured by a stable body, but sense as it emerges in relation to a moving body. Marie-Laure Ryan has provocatively suggested that interactive narrative, if it is to develop beyond "the rather limited emotional repertory of games" and become truly literary, may in fact "have to limit user participation to a largely observatory role, rather than placing the user in the role of the experiencer" (125). My argument is quite the opposite. Interactive narrative, a broad category that encompasses everything from text-adventure games to mobile narratives, needs to situate the participant as an "experiencer" rather than a voyeur. Watching might facilitate identification-this, after all, would be an instance of phenomenological immersion or literary transport-but disidentification is itself quite powerful and productive. When the subject participating in a mobile narrative has her perception interrupted-by people entering the train or obstructing her path-that interruption necessarily punctures an immersive experience that is at once technological and phenomenological. The subject supposedly in control of her imaginative experience thus becomes compelled to regard her body as open and responsive to external influence. She also becomes compelled to consider the relations between text and environment. A composed experience is not a fully programmed experience. When a participant receives a text commanding her to look around, there is a sense in which that command is more open than closed, at least insofar as there is an interpretative gap between instruction and execution. That gap is the site of ambivalence, the uncertainty of meaning, and thus open to improvisation and experimentation.

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4 However, I am unwilling to go as far as Henry Jenkins and suggest that a whole field of inquiry such as the emergent "software studies" is prey to a "black box fallacy" (*Convergence Culture* 13). The different critical approaches are far from mutually exclusive.

5 Though there has been exciting work on mobile storytelling through photo and video sharing, I will limit my analysis to text-based works because of my underlying concern with language and the literary. One key difference—apart from the practical distinction between text and image— is that the artistic practices that I address here are less about sharing than they are about a composed aesthetic experience. This is also perhaps a difference between the popular and the professional.