# **Examining Geocaching Practices through a Mobilities Lens**

Minhao Zeng University of Alberta mzeng2@ulberta.ca

This paper examines Geocaching from a mobility perspective and highlights three mobility features of this worldwide popular GPS-enabled treasure hunting game against the backdrop of the mushrooming of locative media. The first of these features involves journeys between virtual and material worlds. This section of the paper aims to further the scholarly conversation about the embodiment of cyberspatial mobility. The second mobility feature of Geocaching involves the spatialization of a totalized space. It will be shown how people on the grass-roots level work to transform a technocratic-reductionist space into an existential space and multiply spatial opportunities within a given spatial order. The third feature involves migration between user and doer. It will be argued that people participating in Geocaching are active creators of their own experience, and that the traditional vocabularies of consumer and producer used by scholars in describing participatory locative media experience are inadequate in understanding Geocaching practices.

#### Introduction

EOCACHING is a GPS-enabled modern treasure hunting game. It was first initiated in the spring of 2000 by an Oregon man, who hid a box of toys among the woods, posted its geographic latitude and longitude on a website, and called on those interested to find it. Today, with a decade passed, the game is played by people of all ages with over a million "treasure" boxes hidden worldwide and has become one of the most prominent applications of locative media on a day-to-day level. For all Geocaching's popularity, however, serious research on the game is nearly non-existent. Besides some short, snappy journalistic articles and lengthy books for beginners on how to get started in the game, I've only found three writings positioning Geocaching as their research subject. The present paper aims to expand the breadth of these preliminary studies and provide a fuller investigation of Geocaching practices against the backdrop of the recent mushrooming of locative media.

This paper will analyze Geocaching from a mobility perspective. With the advent of new transportation and communication technologies, contemporary society is experiencing an unprecedented scale of movement. Various practical issues concerning movement and related theoretical pursuits have ushered in what Urry (2007) sees as "a mobility turn" (p. 6). The mobility turn rejects the Enlightenment tradition of privileging mind over body and postulates that the "powers of 'humans' are always augmented by various material worlds" (Urry, 2007, p. 45). Considering it too narrow to link mobility exclusively with corpore-al travel and to ignore its diverse forms, Urry (2007) defines it broadly as "the movement of people, ideas, objects and information [...] in social life" (p. 6). In his new "mobilities paradigm," he classifies mobilities under five rubrics: the corporeal travel of people, the physical movement of objects including presents and souvenirs, the imaginative travel effected through print and visual media, virtual travel transcending geographical distance, and the communicative travel through person-to-person messages (Urry, 2007, p. 47). These five mobilities, Urry (2007) suggests, are not separate, but are interdependent in a complex networks. Within this illuminating theoretical framework, the present paper will detail three features of mobility practices in Geocaching.

The first of these features involves journeys between virtual and material space. This part of the paper aims to further the scholarly conversation about the embodiment of cyberspatial mobility. It will be pointed out in what ways Geocaching can be considered as an embodied activity and how it stands out among other locative media applications with its high degree of connectedness to the material world. The

second mobility feature of Geocaching involves the spatialization of a totalizing physical space. This section will examine how people on a grass-roots level challenge the top-down administration by trying to transform a technocratic-reductionist space into an existential space and multiply spatial opportunities within a given spatial order. The third feature involves migration between user and doer. It will be argued that people participating in Geocaching are not merely passive users of high-tech products, but also active creators of their own experience. It will also be pointed out in this section that the traditional vocabularies of consumer and producer used by scholars in describing participatory locative media experience are inadequate in understanding Geocaching practices. By examining how Geocaching enables people to voyage between virtual and material worlds, move in actual physical space, and shift identity between user and doer, this paper hopes to contribute to current scholarly discussions about the social and cultural implications of locative media and life in a technology-mediated environment.

## Voyaging between Virtual and Physical Worlds

OBILITY in cyberspace used to be considered as divested of corporeal existence. For some, cyberspatial mobility is an updated version of the structural displacement tendency of the Western Enlightenment project: a greater emancipation of the mind from the bondage of the body and a further realization of the free will. For others, the metamorphosis of the interactive movement between fully-fleshed real-world people into the transference of codified data needed in a virtual environment detaches individuals from their immediate surroundings and larger networks of meaning on several scales. Leaving aside the question whether cyberspatial mobility is a blessing or a curse to humanity, the basic assumption itself that cyberspace is a disembodied presence has already come under siege from all sides. Kaplan (2002), for instance, remarks that mobility in cyberspace is in fact not as incorporeal as generally assumed: "Cyberspace may appear to be the ultimate vacation from the Puritan work ethic and from grounded industries of liberal modernity, but a closer look reveals location and materiality in the mobility and disembodied discursive practices of new information technology" (p. 34). The hidden fleshliness of cyberspatial mobility can be discerned from a number of angles. Before all else, there is the synthetic digestion of onrushing data in cyberspace. In her article, Kaplan (2002) expresses agreement with Julian Stallabrass's idea that dematerialized online data are rendered meaningful to human beings only when they are animated through sensorial forms. The meaning occurs not merely through images and sounds, but also through the unrepresented senses as well, i.e. touch, smell, and taste. So what cyberspace offers is a highly sensuous experience. The concealed materiality of cyberspatial mobility can be uncovered at a still deeper level. Kaplan (2002) has noted that factories supporting virtual reality are all concretely located in specific sites. Graham (2004) has made several trenchant observations about the material infrastructures of cyberspaces in large cities in particular. He reveals how web server providers compete with each other to build their "telecom hotels" - anonymous windowless and highly fortified buildings that house the telecommunications equipment – in the most economical way (Graham, 2004). Data about New York City, for example, show that by 2010 these telecom hotels had already taken up over 3,200,000 square feet of the urban area. In addition, the apparently unbounded flow in cyberspace is also entangled with the mobility of labor and capital on the translocal and transnational markets. Investment and intellectual resources never stop travelling in search of ideal sites of production and consumption of cyberspace.

As to Geocaching, in what way can it be considered as an embodied activity? How does it link virtual with real space? Like other cyberspatial mobility practices, Geocaching is never independent from the material world. But what distinguishes it from the former is that its connection with the actual world is not merely implicit but essentially explicit in its practice. As an application of locative media, Geocaching shares the common goal of seeking new ways of "combining the emerging ubiquitous nature of digital technologies with the significant qualities of physical environment" (Chorianopoulos, 2008, p. 231). Sensitivity to geographical locations is the defining feature of locative media in their making use of such technologies as the Global Positioning System (GPS), wireless networks, and mobile computing and has been much discussed by scholars. Rizopoulos, et.al. (2008) suggest that locative media afford an oppor-

tunity of a hybrid experience, in which online information space is mapped onto physical space. They also suggest understanding locative media within the framework of Castells's discussion of space. In Castells's opinion (2004), we are now caught between two different logics: the "space of flows," or the global networks in which physically separate locations are connected by information and communication technologies; and the "space of places," or the confines of locality where day-to-day activities occur. Locative media, Rizopoulos, et.al. (2008) argue, have the potential of enabling people to carry flows of information and move across places. Some examples of locative media may serve to illustrate this point. [murmur] is a documentary oral history project launched in twelve cities across five countries (Canada, the US, the UK, Ireland, and Australia). The staff team record stories about places from people who contact them or from people they find through community networks, and make the recordings accessible via mobile phones technology. In each location which has a story, a [murmur] sign is installed with a telephone number on it; people can call to listen to that story while standing in the exact spot where the story took place. In Geocaching, people acquire coordinates for treasure boxes from Geocaching websites, plug these coordinates into GPS receivers, and head out to find caches in the real world. O'Hara (2008), from his diary study and interviews with Geocachers, finds out that two of the key reasons for people to do Geocaching are to find an opportunity to get out and to explore places. Geocaching gives walking a sense of purpose and motivates people to engage in physical activities; and by virtue of tracking down caches, Geocachers discover new place they have never had a chance to visit or novel features of an old place they have never set their eves on.

While Geocaching participates in a collective effort to link the space of flows with the space of places, it stands out among various locative media applications with its high degree of connectedness to the material world. For many locative media projects, though their contents are place-oriented, the content carriers are not bound by specific places, which means that their original promises to involve people in the interaction with the physical world may fall short of expectation in real practice. For example, in [murmur], audio recordings are available on the website, and people can listen to the sound files at home without being physically present in the places where they are supposed to be. In another kind of locative media application, webcams, or digital cameras, grab images from real-time and real-place situations and feed them onto the Internet. Webcams are supposed to bridge the gap between cyberspace and the physical world and to generate genuine interest in real places; but as they can't satisfy a more rigorous definition of "being in and of the world" (Zeltzer qtd. in Campanella, 2004), they often transform places into objects of pictorial consumption, to be appreciated only visually but not to be experienced physically. Geocaching, by contrast, guarantees the rich robustness of being physically present in places. For Geocachers, the online websites are merely a repertoire of treasure information and a forum for exchanging caching experiences; their real playgrounds are offline in the real world. Caches are located in all kinds of locations, in cities and in nature. Geocachers are supposed to go outside and to be physically present in cache locations. Some caches are easy to find and need only a few hours' walking or less. Other caches – for example, hidden in mountains and deserts – may require extended efforts. As a proof of their physical presence, people will have to sign the logbook placed inside each cache. Only with a physical signature can the online claim about having found the treasure acquire validity. Back in the days when the Internet was a rarity, virtual travel was an enviable luxury. But now as virtual travel has become the most widespread travel pattern, to be physically present in places has gradually grown into a nostalgic desire. Geocaching provides an opportunity to satisfy this desire; this possibility of rich co-presence of people and real places can, to a large extent, explain Geocaching's worldwide popularity. One of the most exhilarating moments in Geocaching is, certainly, finding the cache. The discovery of a carefully hidden cache can generate immense joy. The cache itself, usually, does not have much monetary value in itself; nor do the items placed inside it. But the point is that people will never know what they will find – it is the unexpectedness that heightens the attraction of the game. In Virginia Woolf's short story "Solid Object," a man on the beach bumps into a piece of sand glass and is entirely gripped by it. He goes into a wild imagination of its origin and examines it in different directions: "It pleased him; it puzzled him; it was so hard, so concentrated, so definitive an object compared with the vague sea and the hazy shore" (Woolf, 1984, p. 4). Brown (2004), in his thing theory, adequates explained how "things assert their presence and power"

with chance, sometimes momentary, interruptions of "circuits of production and distribution, consumption and exhibition" (p. 4). Taking out small toys, tools, or local area souvenirs from discovered caches and holding them at hand, Geocachers will get a sense of amazement in finding them in places where they are not usually supposed to be, confront with the thingness, or physicality of objects, and will suddenly get a glimpse of the peculiarity of the quotidian life.

## **Spatializing a Totalized Physical Space**

RAWING on Michel Foucault's Discipline and Punish, Deleuze (1990) argues that our society has shifted from a society of discipline to a society of control. A society of discipline is characterized by environments of enclosure, each being independent variables and having its own rules – the family, the school, the barracks, the factory.... A society of control has no such disciplinary institutions, but runs under a universal system of domination – the corporative spirit. This spirit, like gas, has permeated into every nook and cranny of society, and one is never finished with anything. While a disciplinary society is equipped with "machines involving energy, with the passive danger of entropy and the active danger of sabotage," a society of control operates with computers, "whose passive danger is jamming and whose active one is piracy and the introduction of virus" (Deleuze, 1990). In the latter form of society, there is no longer the polarity between the individual and the mass as in a disciplinary society; everything has been reduced to programmable information that can be tracked by computers. What matters are codes, or passwords, which mark access to information. GPS emerged as this era's demand to facilitate the ubiquitous control of individuals. It was originally developed by the U.S. Department of Defense as a satellite-based radio navigation system for the armed forces. With a network of satellites orbiting around the globe and collecting information, the latitude, longitude, and altitude of each point on Earth can be accurately determined. At first, GPS technology was kept as a military secret; a civilian version was available, but it was severely restricted through a government-monitored program called Selective Availability (SA) used intentionally to degrade civilian GPS accuracy. In 2000, the White House decided to remove SA, and much more accurate GPS signals for civilian use became possible. Now with an easily purchasable GPS receiver, everyone can get detailed information about position, velocity, and time. Holmes contends that once individuals begin to use GPS devices for self-positioning, they have grafted themselves onto a global imperial "architecture of surveillance and control." He views the worldwide communications technologies as a kind of imperial spatial infrastructure, whose imperial dimension is gained when the infrastructure of military origins is rendered accessible to broad sectors of civilian society. Such an outlook is reductionist as well as pessimistic, in that it ignores the innovative and rebellious power in the civilian appropriation of military technology, which can exceed every organized system and every fixed order of global space. As Deleuze (1990) points out in his discussion of disciplinary societies and societies of control, "There is no need to ask which is the toughest regime, for it's within each of them that liberating and enslaving forces confront one another."

In the particular case of Geocaching, its anti-systematic force against the totalizing ordering of space springs, first, from its grass-roots origins. Already there has been a wide range of locative media applications as creative re-appropriations of ubiquitous top-down positioning technologies in the form of bottom-up participation. However, most of these experiments are under a single supervision of a group of artists and technologists for a specific purpose. Geocaching, by contrast, was a completely grass-roots endeavor at its very start. When the Oregon man, a computer consultant, hid a cache among the woods, he had only one idea in his mind: to test the accuracy of GPS readings with SA being repealed. Then the idea of hiding and seeking stashes using GPS devices spread quickly among interested GPS users. Four months later, Geocaching.com – the largest Geocaching online meeting ground today – was created as a listing site to support this hobby. Though now this website is managed by a privately held company, which seeks partners interested in the potential of location-based technology to enhance outdoor recreation, the website itself tries to avoid the permeation of commercialism into Geocaching in many ways: for instance, the ever-growing cache list is reviewed and maintained by a group of volunteer Geocachers; the website will not publish the coordinates of caches which are deemed by the website staff and volunteer

Geocache reviewers as having been submitted to solicit customers or generate commercial gain. Additionally, besides providing the general information about the technical aspect of hiding caches, the website does not lay out any criteria as to the themes and contents of caches. In a word, the prosperity of Geocaching benefits less from top-down initiation or commercial push than genuine interest from the bottom up. Geocachers, to borrow Michel de Certeau's words in his discussion of urban pedestrians, can said to be anonymous characters enacting spatial practices on ground level: "There swaming mass is an innumerable collection of singularities. Their intertwined paths give their shape to spaces" (de Certeau, 1984, 97).

Geocachers, as ordinary practitioners of the everyday world, challenge the technocraticreductionist space by trying to transform it into an existential space. A space defined by only longitudes, latitudes, and altitudes under the GPS surveillance technology is favored by top-down administration for organizational and operational convenience. The creation of such a space involves a process of repression and repudiation of "everything that is not capable of being dealt with" (de Certeau, 1984, p. 94). A telling example is naming streets with numbers and substituting numbers for historically or culturally specific names. A space managed in this manner runs the risk of being forgotten and becoming "the blind spot in a scientific and political technology" (de Certeau, 1984, p. 95). But Geocachers reject this top-down management of elimination and insert into the operational space of grids personal stories. De Certeau (1984) argues, "Every story is a travel story – a spatial practice" (p. 115). While spatial stories can serve to mark out boundaries (e.g. ritual practices in ancient Rome), they can also transgress boundaries in the name of delimitation. The story, as de Certeau (1984) puts it, "is a delinquency in reserve" (p. 130). Now let's take a look at how Geocaching is practiced in Edmonton. According to Geocaching.com, within a one-mile radius, there are over 60 caches hidden around the Alberta Legislature Building, over 40 around Canada Place, and nearly 50 around the World Trade Centre Edmonton. The Alberta Legislature Building serves as the seat of the Legislative Assembly of Alberta; Canada Place is where Federal Government offices are housed; and the World Trade Center Edmonton is home to the Edmonton Chamber of Commerce, Edmonton Economic Development Corporation, and Edmonton Tourism Information. It would astonish Edmonton government officials were they to how many Geocaches are placed around their office buildings. Caches hidden in government areas come in great variety, and they all have their own names: "The Wheels on the Bus," "Whose Trunk is this Anyway," "Jade's Jewelry Jar," "Birdman," "Shelby's Secret," and so on. Each name is accompanied with a unique story. For example, the owner of the Wheels on the Bus, 700 feet from the Legislature Building, reveals on the website that the cache was placed when she/he was taking solitary bus trips around the city at weekend; and the cache Camel Humps, about a little more than a mile away from the World Trade Center Edmonton, is secreted in a rather deserted area, where a brick factory in the early twentieth century used to be. Geocachers implant into what is supposed to be a functionalist space diverse meanings, which the top-down administration dislike. With personally constructed stories, the surface of the order created for management's sake will be "everywhere punched and torn open by ellipses, drifts, and leaks of meaning" (de Certeau, 1984, p. 107). These "ellipses, drifts, and leaks" make space dense and more inhabitable for humans, or epistemological beings, who highly value subjective relationships to the physical world. In Geocaching, to hide a cache is to bury a story, to insert into a univocal and transparent totalized space a possibility. De Certeau (1984) draws parallels between pedestrian movements and speech acts, and defines walking as "a space of enunciation" (98). One characteristic of pedestrian speech acts is that the walker can not only make the possibilities in a spatial order emerge, but also multiply them. De Certeau (1984) cites the example of Charlie Chaplin to illustrate this point. Using his cane, Chaplin makes a selection of the existing spatial possibilities (e.g., by choosing to go this way and not that way) and increases the number of them (e.g., by creating detours). According to O'Hara's (2008) study of Geocachers' behaviors, Geocaching is often used as "a form of social recommendation about places – a way to explore and discover" (p. 1180). Geocaching provides people with a platform to get off the beaten track and experience something new. A great number of Geocaches are hidden in places which are deemed worthy of attention but have often escaped people's notice. For example, the cache Thems the Brakes was hidden by the owner to invite people to visit a restored area of Edmonton; another cache named Oasis is hidden in a garden, which, in the owner's mind, is "one of the best-kept secrets in Edmonton." When a Geocacher hides a cache somewhere, she/he has either highlighted or added a spatial possibility; and every discovery of a cache is an actualization of one. While the top-down administration favors a transparent map and wants to minimize possibilities of trajectories, Geocachers do the exactly the opposite. They enhance spatial possibilities and blur an ordered spatial structure with layers and layers of trajectories embedded with meanings.

#### Shifting between User and Doer

CHOLARS have made several observations about the difference between the application of locative media and the traditional use of high technology. McCullough (2006), for example, cites John Thackara's ideas in "Articles of Association between Design, Technology, and the People Formerly Known as Users" to back up his own stance that locative media departs from the "push" mentality of consumerism. For locative media, McCullough (2006) argues, the content is not something one is given but something one does. Hudson and Zimmermann (2009) have noticed the open nature of locative media. They consider artist-led locative media projects as utopian sites, which involve collaborative participation and "collapse production, distribution, exhibition, and participation." Similarly, Chorianopoulos (2008) remarks that locative media have ushered in an age of "our media," which means "locative media are an open message and their users are user-doers, user-participants, active agents in the communication process" (p. 256). In what follows, it will be shown how this blurring of identity between user and doer is manifested in one of the most popular locative media application Geocaching. It will also be discussed how Geocachers as users are different from producers in the sense of commodity production, which makes Geocaching a kind of diversion from the logic of the commodity system.

In Geocaching, such high-tech devices as GPS receivers, smart phones, and digital compasses and altimeters are necessary equipment, but they will not be given precedence in the game. Unlike the kind of locative media projects such as [murmur], in which high-tech devices will serve to provide part of the content for the whole location-based journey, in Geocaching they serve only navigation purposes during the entire cache seeking journey and are referred to only when necessary. What's more, GPS accuracy varies from device to device and is affected by a number of factors, such as noise in the radio signal and atmospheric conditions; an accuracy of ten feet is the best Geocachers can expect under ideal conditions. When GPS devices lead Geocachers to the cache area, they will have to rely on themselves to figure out where the cache is. As it is, in this game, the importance of high-tech devices really fades into the background. In a sense, Geocaching is less about the consumption of new technologies than about what people do without them. Geocaching takes the form of the ancient treasure hunting game and requires much less high-tech support than many other locative media applications. This is even more the case when we consider treasure hiding activities in Geocaching. This game involves two parts: using GPS to trace other people's caches with the location information published online; designing one's own caches and hiding them. In terms of the latter part, Geocaching can be said to be a highly conscious, creative, and intelligent endeavor. In the beginning, Geocachers will need to decide on the cache type. People use miscellaneous objects for treasure boxes: camouflaged boxes, film canisters, metal mints containers, discarded shoes, hollow tree trunks, hollow rocks... They can be both commercially made and homemade. In fact, some Geocachers take tremendous delight in making their own treasure boxes. The cache type is tied intrinsically to the intended hiding place. For a particular location, Geocachers will choose the kind of treasure box that they think will match best with the physical environment. Picking up a unique hiding location involves brainwork as well, especially in populated urban settings. Geocachers who have hidden their own caches are supposed to provide locational information about caches. Instead of directly giving out coordinates, sometimes cache owners will require cache seekers to solve some puzzles to get the coordinates, adding to Geocaching another intellectual dimension. Choosing cache hiding places is art as well as strategy. Geocachers hide caches not just for hiding's own sake; some of them hide their caches in a way to convey special messages. For example, my friends and I have designed a multi-cache, which means only the coordinates of the first cache will be published on www.geocaching.com. Inside the first cache are the coordinates for another cache, which will house the locational information for yet another. We have selected four locations in downtown Edmonton, which have some relations with Marshall McLuhan,

one of the most influential Edmonton-born intellectuals in the twentieth-century. In each of these locations, we have placed a cache, in which snippets of information are enclosed about McLuhan's life, his relationship to this particular place, and his quotations about media and communication. We have linked the four caches in a meaningful order and intended them to provide an educational multi-cache experience. With these creative do-it-yourself elements in Geocaching, participants shift their identity from passive users of high technologies to active creators of their own experience. O'Hara (2008) observes of this enthusiastic individual engagement in Geocaching that "people participate not just through the consumption of location-based experiences but also through the creation of these experiences for others" (p. 1177). Along the same line, Dale and Zimmermann (2009) suggest that locative media experience enable people to continuously shift identity between producer and consumer. While I agree with their opinions, I would also like to point out that the mere vocabularies of consumption and production might not be sufficient to the full understanding of Geocaching practices, because this game in some ways thwarts the logic of the commodity system.

First, Geocaching can be considered as a diversion from the path of mechanical reproduction. Benjamin (1936), in his famous "The Work of Art in the Age of Mechanical Reproduction," reflects upon how the process of mechanical reproduction destroys the aura of the work of art. By aura, Benjamin means the uniqueness and authenticity of an object, which is associated with the nineteenth century artwork. He argues that the whole sphere of authenticity is outside mass-production and technological reproduction, and that the original holds all its authority. The quintessence of aura lies in "its presence in time and space, its unique existence at the place where it happens to be" (Benjamin, 1936); and to experience aura is to transpose a response characteristic of human relationships to the relationship between humans and inanimate or natural objects (Benjamin, 2003, p. 338). As I have mentioned earlier, the discovery of a carefully hidden cache can stimulate immense joy. A great part of this joy, I would like to suggest, arises from the experience of aura, because each cache is original in one way or another and has its unique existence in time and space. The cache location is often carefully chosen and is often off the beaten route; and there is no one spot that can house two caches. For example, www.geocacing.com requires that any new cache must be at least 161 meters from an existing cache, otherwise its locational information will not be published on the website. This cache saturation guideline on the one hand encourages people to seek out new places to hide caches and on the other guarantees that each cache occupies its own sphere of authority. Cache contents vary as greatly as cache types: CDs, paperback books, matchbox cars, toys, key chains, and so on. Geocachers choose treasures which fit their personality and interest or which help deliver special messages they have in mind. For example, some couples have hid their caches in the places where they first met and placed in the caches some of their photos. Objects interwoven with intimate accounts of individual experiences have further justified the uniqueness of each cache and increased the aura of authenticity, which is a rare but highly valued attribute in the age of mechanical reproduction. Geocaching challenges the prevailing commodity logic not only because they are not mechanical products in the purest sense but also because they are not intended for exchange on the market. A commodity is an object intended by its producer for exchange. It has two interrelated characteristics; use value, or the concrete ways in which the object satisfies human needs or desires; and exchange value, or the ratio in which one good exchanges for another. While Geocaches have their use value – such as to draw people out to the physical world and to fulfill the nostalgic longing for authenticity, they do not have exchange value themselves. Geocaching treasures are usually inexpensive, and sometimes can be very cheap. Experienced Geocachers Lambe and Johnson (2009), for example, on their website encourage people to be creative in choosing "treasures" but advise keeping the whole cache including the container under twenty dollars. Certainly, some caches contain trade items, small objects such as toys and key chains for Geocachers to trade with one another, but this practice of exchange is enacted not for profit or gain. When cache seekers take trade items away from caches, they keep them as souvenirs as "traces of authentic experience" (Stewart, 1993, p. 134), original and not open to technical reproduction. When they leave additional items in caches, they do so not out of the spirit of trade and commerce but out of thankfulness for cache owners. By leaving new items in other people's caches, they also leave their own personal touch and weave their personal narratives with those of others. In these two ways, Geocaching is a different species in the zone of commoditization, and the traditional vocabularies of consumer and producer used by scholars in understanding locative media prove inadequate.

### **Concluding Remarks**

HIS paper has examined Geocaching, a worldwide high-tech treasure hunting game, from a mobility perspective. By analyzing how Geocachers journey between virtual and material worlds, spatialize actual physical space, and migrate between user and doer, this paper has drawn parallels as well as define differences between Geocaching and many other day-to-day locative media applications. For example, though like the latter, Geocaching makes an explicit claim to link virtual with physical space, it distinguishes itself with its particularly high degree of connectedness to the actual world; Geocaching, since its very beginning, has a stronger grass-roots spirit; some features of Geocaching have thwarted the prevailing logic of the commodity system and proven inadequate the traditional vocabularies of consumer and producer used by scholars in discussing the participatory nature of locative media practices. Locative media only began to flourish in the last half decade. When they emerged, they proclaimed as their immediate concern how to "create experiences that take into account the geographic locale of interest" (Bleecker 2006). It is expected that Geocaching, one of the earliest and most popular locative media applications, can help investigate how this claim is being realized in concrete circumstances and what changes locative media have brought to our social and cultural experience. Meanwhile, we should also bear in mind that locative media are still a recent phenomenon; snew related technologies keep emerging, and therefore any assumption about the general nature of locative media today should be prepared to be challenged by the wealth of locative media practices.

#### References

- Bleecker, J. (2006). Locative media: A brief bibliography and taxonomy of GPS-enabled locative media. *Leonardo*, 14 (3). Retrieved from http://leoalmanac.org/journal/vol\_14/lea\_v14\_n03-04/jbleecker.html
- Benjamin, W. (1936). The work of art in the age of mechanical reproduction. *Marxist Literary Criticism*. Retrieved from http://www.marxists.org/reference/subject/philosophy/works/ge/benjamin.htm
- Benjamin, W. (2003). Walter Benjamin: Selected writings (Vol. 4). Cambridge, MA: Harvard University Press.
- Brown, B. (2004). Things. Chicago: University Of Chicago Press.
- Campanella, T. (2004). Webcameras and telepresent landscape. In S. Graham (Ed.), *The cybercities read-er* (pp. 56-63). London; New York: Routledge.
- Castells, M. (2004). Space of flows, space of places: Materials for a theory of urbanism in the information age. In S. Graham (Ed.), *The cybercities reader* (pp. 82-93). London; New York: Routledge.
- Chorianopoulos, K. (2008). Connecting remote educational spaces with mediated presence. In F. Eckardt et al. (Eds.), *Mediacity: situations, practices and encounters* (pp. 227-244). Berlin: Frank & Timme.
- Certeau, M. de. (1984). The practice of everyday life. Berkeley: University of California Press.
- Deleuze, G. (1990). Society of control. *Nadir*. Retrieved from http://www.nadir.org/nadir/archiv/netzkritik/societyofcontrol.html
- Farman, J. (2010). Locative life: Geocaching, mobile gaming, and embodiment. *Proceedings of the 2009 digital arts and culture*. eScholar. Retrieved from http://escholarship.org/uc/item/507938rr
- Holmes, B. (2004). Drifting through the grid: psychogeography and imperial infrastructure. *Springerin* 3. Retrieved from http://www.springerin.at/dyn/heft\_text.php?textid=1523&lang=en
- Hudson, D., & Zimmermann, P. R. (2009). Taking things apart: locative media, migratory archives, and micropublics. *Afterimage* 36 (4), 15-19.
- Kaplan, C. (2002). Transporting the subject: technologies of mobility and location in an era of globalization. *PMLA* 117 (1), 32-42.
- Kelley, M. A. (2005). *Local treasures: geocaching across America*. Chicago, IL: University of Chicago Press.
- GPS. (2011) In Encyclopedia britannica. Retrieved from http://www.britannica.com/EBchecked/topic/235395/GPS
- Graham, S. (2004). Excavating the material geographies of cybercities. In S. Graham (Ed.), *The cybercities reader* (pp. 138-142). London; New York: Routledge.
- Groundspeak.com. (n.d.). Geocaching: The official global GPS cache hunt site. Retrieved from http://www.geocaching.com/
- Lamb, A., & Johnson, L. (2009, March). Geocaching: mobile mavericks on the move. Retrieved from http://eduscapes.com/geocaching/
- McCullough, M. (2006). Media and the city: On the urbanism of locative media. Places 18 (2), 26-29.
- [murmur]. (n.d.). Retrieved from http://murmurtoronto.ca/
- O'Hara, K. (2008). Understanding geocaching practices and motivations. *CHI 2008 proceedings*, Italy, 1177-1186.
- Rizopoulos, C. et al. (2008). Towards a theoretical model of communication via locative media use. *IE 08* 4th International Conference on Intelligent Environments proceedings, USA, 1-8.
- Shepard, M. (n.d.). Tactical Sound Garden. Retrieved from http://www.tacticalsoundgarden.net/
- Sherman, E. B (2004). *Geocaching: hike and seek with your GPS*. Berkeley, CA; New York, NY: Springer-Verlag New York, Inc.
- Stewart, S. (1993). On longing: narratives of the miniature, the gigantic, the souvenir, the collection. Durham, NC: Duke University Press.
- Thackara, J. (2001). Articles of association between design, technology, and the people formerly known as users. *ACM Interactions* 8 (3), 46-52.

Tuters, M., & Varnelis, K. (2006). Beyond locative media: giving shape to the internet of things. *Leonar-do*, 39 (4), 357-363.

Urry, J. (2007). Mobilities. Cambridge, UK: Polity.

Woolf, V. (n.d.). Solid objects. Strong brain. Retrieved from <a href="http://www.strong-brain.com/Reading/Texts/woolf-solid-objects">http://www.strong-brain.com/Reading/Texts/woolf-solid-objects</a>