The Mobile Distinction: Economies of Intimacy in the Field of Location Based Marketing

by

Harrison D. Smith

A thesis submitted in conformity with the requirements for the degree of Doctor of Philosophy

Faculty of Information

University of Toronto

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2017

Abstract

This thesis examines the cultural and economic significance of location data in the field of location based marketing using Pierre Bourdieu’s conceptual framework of habitus, capital, and field. I argue that location data signifies a new kind of capital that marketers exploit to inform new epistemologies of habitus and distinction in mobile digital culture. However, the capacity to leverage location data as capital depends on how marketers can structure new kinds of intimacies of consent with consumers to participate in the production and disclosure of location. This creates complex power dynamics of interactivity between consumers and marketers, in effect creating a new field of location based marketing where the goal is to intensify the proxemics between marketers and consumers by successfully exploiting location data as capital.

A major finding of this thesis is that location data is informing new models of consumer clustering and segmentation. These in some respects mimic the logic of geodemographics, but are unique in that they are constructed by new theoretical and cultural beliefs about the
significance of mobility and fluidity. Therefore, marketers are increasingly exploiting new kinds of mobile and location based technologies to surveil urban environments in order to construct these new segmentation models. This is done primarily by extracting location data from smartphones, but increasingly invisible methods are being tested, such as passive RF sensing. This suggests that the economies of intimacy desired by marketers must negotiate several key risks concerning the extent to which consumers perceive and consent to this kind of surveillance.

This thesis draws on semi-structured qualitative interviews with key participants in the North American mobile and location based marketing industry, participant observation in several marketing events, and discourse analysis of marketing white papers to produce a small-scale exploratory investigation into an emerging field of marketing. It contributes to several fields of academic research, including consumer surveillance, urban geography, and mobile media, in order to stimulate new research directions in mobile digital culture that depart from user-centric studies.
Acknowledgments

"No man is an Island!" my supervisor David Phillips once cried out many years ago in a seminar, in reference to John Donne's 1624 poem, challenging us to rethink the ontological and epistemological aspects of privacy. This was one of my first memories at the iSchool, and here it is just as relevant because this dissertation too is no island, and could not exist without the support of many people.

First, David, I want to thank you for your invaluable help supervising me from start to completion of this project. I have always valued your approach to supervision, and I will miss having tea at your house to discuss my progress (or sometimes lack thereof).

Second, I want to thank Leslie Shade for her unique approach to mentoring and guidance, and for her endless dedication to the field of doctoral studies. Leslie you have been an inspiration to myself and countless others for your tenacity and confidence.

Finally, I want to thank my third committee member, Rhonda McEwen, whom arguably introduced me to the topic of this dissertation, and who was vital at helping me get this project off the ground.

I want to acknowledge and thank all the support of my colleagues at the iSchool and friends. There really are too many to list here, but you know who you are. Similarly, I want to also acknowledge and thank all the students I've had the pleasure of teaching over the years at UTM, and how meaningful you made the past few years for me.

Finally, to my family. I dedicate this dissertation you because it could not have been possible without a lifetime of love.
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Chapter 1 - Introduction

1.1 - Objective, Contribution, and Significance

This is a dissertation about location data and its effects on marketing. This is of course an oversimplification, but nonetheless a necessary entry point for understanding how location data is embedded in larger institutional shifts in how marketers know and influence audiences. I am not claiming that location data is itself the exclusive cause of larger organizational changes in the structure and logic of marketing, nor am I trying to suggest it is possible to use location data as merely an instrument that can seamlessly create particular kinds of social, cultural, and economic relationships and practices. It is necessary to remain skeptical about how location data is assumed to maximize techniques of audience acquisition and conversion. However, it is important to consider and appreciate how and why location data has become increasingly prevalent in contemporary marketing, and how such data can be exploited in the endless pursuit of efficiency, calculability, typification, and segmentation.

The scope and depth of this dissertation is premised largely on interrogating how and why marketers perceive and appreciate location data in terms of its ability to enable and unlock new kinds of relations of production and accumulation. I will explore and unpack what marketers think location data can do to enhance their ability to target, segment, and influence audiences. There are good reasons to consider how location data represents a very special kind of epistemology about consumer lifestyles, practices, and cultures, and how marketers see it as offering the promise of realizing new kinds of truth and authority over their ability to know and influence audiences to appreciate content, to visit locations, and to buy goods under specific
conditions that have been algorithmically calculated through location data. I will explore the beliefs, the philosophies, and the values that sustain the production, accumulation, and analysis of location data by marketers, and critically explain what makes location data an important variable that structures, but does not necessarily determine an emerging field of marketing logic and practice. This in many respects constitutes a key foundation of the political economy of communication (Mosco 2009) in that I will critically examine the structuration of marketing through the introduction of new methods of data collection and analysis.

I will explore two primary themes with respect to location data and marketing. First, I will examine what marketers think location data tells us about people, and how such beliefs inform a larger set of judgments and practices about knowing and influencing consumers within mobile digital culture. In order to understand this, I will need to unpack what I call the mobile distinction. Here, I will explain what mobile engagement looks like for marketers interested in targeting consumers through mobile media such as smartphones, and how they see location data as a key to unlocking this new infrastructure defined by cultural values of intimacy and authenticity. It is about, in other words, how marketers are trying to exploit location data in order to create new kinds of cultural and economic distinctions about mobile lifestyles and tastes, and how this production of distinction is embedded in and mediated by particular spatio-temporal dynamics of intimacy and affect.

The second theme that I will explore pertains to the economies of intimacy in the field of location based marketing. I build on the mobile distinction by exploring the underlying structural logics and practices of location based marketing, and by paying special attention to how location data is captured, accumulated, and analyzed by marketers with respect to its cultural, economic, and epistemological significance. I thus examine the political economies and the cultural politics
that guide the production and exchange of location data between marketers and consumers within a new field of location based marketing. A major focus of this section critically examines the politics of consent, and the underlying rules that govern how location data is used to enhance the ability for marketers to target and influence populations. This includes how marketers try to speak on behalf of consumer lifestyles and tastes, and how they perceive the field in terms of rules, expectations, norms, and problems that must be negotiated in order to gain consumer consent and trust to disclose or participate in their own surveillance and commodification through location data. Thus, I will examine how the production of data is embedded in a larger structural field of economic and cultural power relationships between marketers and consumers, including the kinds of relations of production, accumulation, and exchange, and how marketers negotiate consent, trust, and interactivity with consumers in mobile digital culture, and new kinds of “smart” urban infrastructures of “real time” smart cities (Kitchin, 2014a; 2014b; Graham and Marvin, 2001).

This dissertation offers a significant contribution to several key bodies of research, both with respect to its empirical findings and its theoretical insights. First, I frame the production and analysis of location data as a method of consumer surveillance and audience production. This method of production extends the analytical power of digital marketing and social sorting by embedding it in new cultural conventions of mobility. It therefore intensifies the algorithmic production of classificatory knowledge about consumer lifestyles in mobile digital culture, and in particular the power of location data produced through mobile media infrastructures and practices (Lyon, 2003; Phillips and Curry, 2003; Andrejevic, 2005; 2007). Second, I position location data and location based marketing as an important contribution to mobile media studies and research into locative media—particularly with respect to how we understand the ways
locative media can produce new kinds of intimacies and cultural narratives about place and identity (e.g. de Souza e Silva and Frith, 2010; Goggin, 2009; Humphreys, 2007). It therefore builds upon existing research into how mobile and location based media can create new narratives of intimacy between people, places, and software. Finally, I position the analytical power of location data within a larger infrastructure of cartography and interactive mapping known as the geo-spatial web (the geoweb), in order to understand how new mapping practices can be understood as techniques of power by institutional authorities to know and manage populations through the distribution of social and material resources, and the capacity to enact new kinds of distinctions of consumer lifestyles and tastes. This is important because of how mobile and interactive mapping software is redefining the methods and epistemological dynamics of cartography, particularly by extending the institutions of “knowing capitalism” (Thrift, 2005), as well as the intensification of neoliberal urban infrastructures (Graham and Marvin, 2001; Dodge and Kitchin, 2005; Kitchin, 2011; Kitchin and Dodge 2011).

1.2 - The Mobile Distinction and Location Based Marketing

The mobile distinction is an inquiry into how it is possible to create new kinds of affective relationships between marketers and consumers through location data by intensifying how marketers conceptualize and measure consumer behaviours through classificatory knowledge about lifestyles and tastes. This distinction requires that location data is successfully produced and accumulated in particular ways and under specific circumstances that satisfy both cultural and economic expectations of value and consent. There are a wide range of techniques for producing and accumulating location data that marketers have begun to develop; collectively,
I argue that these methods constitute a new field of marketing practice known as location based marketing. There are at least three primary processes that define how location based marketing operates: analytics and classification, targeting and acquisition, and finally, dynamic content production. These three processes mutually reinforce the field of location based marketing, and function to intensify the power dynamics of the mobile distinction.

The first process concerns how consumers are produced and classified into knowable types, and extends existing research in geodemographic segmentation and social sorting (Burrows and Gane 2006; Lyon 2003). Methods can include, but are not limited to, the collection of location data through WiFi, Radio Frequency, and GPS infrastructures to understand consumer lifestyles as they are revealed through mobile location analytics. Here, we can begin to see how new techniques of segmentation and classification are informed by the collection and analysis of location data—by knowing and analyzing, in other words, specific patterns and rituals about where people go, at what times, and for how long they are observed in specific locations. Mobile location analytics therefore augments and extends existing modes of consumer classification and geodemographics (Burrows and Gane, 2006), but signifies a unique departure in that the construction of these classifications is based more on the algorithmic calculation and analysis of location signals extracted from smartphones rather than targeting people through residential address codes. Thus, location data can permit for the construction of new methods for spatial segmentation by constructing analytical knowledge of lifestyles by calculating their frequency and duration in particular locations.

In addition to mobile location analytics, the second key process concerns how consumers are targeted in specific locations and contexts through location data, and how they can be influenced in specific locations such as retail environments. This in many respects builds upon
existing research in consumer surveillance with regards to how digital databases can enhance and intensify economic and cultural relations between marketers and consumers, such as through consumer loyalty, rewards programs, branded urban environments, and reflexive marketing (Pridmore, 2010; Zurawski, 2011; Murakami Wood and Ball, 2013). Here, the development of geofencing, beacon technology, and push notifications can all be situated in this vein whereby the identification of consumers in a specific location will trigger events, such as pushing a promotional coupon to a smartphone that is directly relevant to that location, or conversely, to lure consumers away from one location to another. For example, a shoe retailer in Guatemala utilized location data in order to identify when a shopper entered their competitor’s location inside a shopping mall, then immediately triggered a push notification: a time-sensitive coupon whereby the discount offered was calculated based on how fast they left the store and entered their own, effectively enticing and “pulling” shoppers away from one location to another (Ads of the World, 2012). These methods re-define how marketers can target and segment consumers in highly specific locations in order to augment their ability to deliver contextually relevant promotions or advertisements, and thus intensify the capacity to influence behaviour in specific spatio-temporal moments revealed by location data.

The third way we can understand location based marketing is by understanding the spatial dynamics of content production, particularly with respect to how location data extends the algorithmic production of digital media content (Beer, 2009; 2010; Beer and Burrows, 2013). Here we see the development of new kinds of sensors that are installed in existing media inventory such as digital billboards that can monitor the frequency and intensity of audience acquisition and conversion. However, this data can also be used to dynamically change the content of media using location data. For example, this could mean developing a billboard for a
clothing company where the clothing advertised (the content) changes in accordance to the time of day, the weather, or most recently, based on measuring audience engagement (Still, 2015). Similarly, it is now possible to develop algorithmically mediated content where the billboard’s content can change as more people see it. In terms of using this technology for conversion rates, it could be possible to push a notification to someone passing a billboard that advertises a nearby retailer, and analyzing whether or not they are later observed visiting that specific retailer. Finally, technologies such as beacons are being tested by retailers in order to target consumers not simply within a retailer, but with finer granularity such as by knowing what section or department of the store they are in. This process of using location data for consumer acquisition and conversion rates therefore signifies an intensification of the methods by which marketers calculate the efficacies of media campaigns and purchases. It allows them, in other words, to know with increasing precision how effective a particular advertisement was in influencing behaviour.

This dissertation therefore focuses on situating location based marketing within a broader framework of Location Based Services (LBS) whereby location data increasingly mediates content production and delivery through mobile smartphones and interactive mapping (e.g. de Souza e Silva and Frith 2010). Here rather than focusing on how users experience, understand, or navigate urban environments or new forms of sociality through LBS, I will focus instead on understanding how marketers seek to attach themselves to these new kinds of mobile digital practices by extracting value from location data that can be used for a variety of marketing applications, such as dynamic geo-segmentation or push notifications. This represents an important contribution because it allows for an understanding of how contemporary digital marketing is increasingly embedding itself into "hybrid" spaces and networks (de Souza e Silva
In turn, we begin to see new kinds of approaches to marketing and new skill sets being prioritized in the field; this dissertation explores some of these new roles and methods and considers how they all in one way or another coalesce around new philosophies of the relationship between class, media, and location.

1.3 - Methodology and Research Questions

This dissertation is an inquiry into the political and cultural economies of location data, and so the focus is on understanding location data from a larger institutional context. In order to unpack these two themes, this dissertation asks the following research questions: first, what are the underlying beliefs, values, and philosophies about location data, particularly with regards to how it can provide marketers with new insights and methods for knowing and influencing consumers within specific spatio-temporal contexts? This question seeks to critically situate the discourses of location data that marketers enact in the field of location based marketing in order to understand how they imagine consumer lifestyles and tastes in mobile digital culture. Furthermore, it examines how mobile devices such as smartphones and wearable media that can target consumers through location data are changing how marketers engage and influence consumer practices such as shopping, information seeking, and loyalty to particular brands and retailers. In this respect, it seeks to understand the underlying affective and cultural epistemologies between marketers and consumers through location data, or what, in other words, makes location data so special in terms of its cultural, economic, and epistemological authority in mobile digital culture.

The second research question examines the larger structural relationships between marketers and consumers, and asks: what is the political economy of location data? Here, I will
focus on the underlying structural rules and logics that govern how location data is produced, accumulated, and exchanged between marketers and consumers in the field of location based marketing. I thus examine the production of new kinds of cultural and economic value, the rules that govern mobile engagement strategies, the kinds of problems or challenges marketers must negotiate in the field to earn consumer consent and trust, and how power and authority is interpreted or challenged between marketers and mobile audiences. Here, I conceptualize consent as a key objective of the field because of how marketers must carefully negotiate how consumers understand the field of production, particularly as the collection of location data might be interpreted as an invasive form of surveillance and social sorting, let alone an interference with routine or vernacular practices of consumer culture.

To answer these questions, I gathered my data in three primary phases: first, I analyzed industry white papers and publications produced by companies and marketing associations with a financial interest in commodifying location data. Second, I conducted qualitative semi-structured interviews with marketers, or people employed in one capacity or another in marketing or technology companies. My participants were primarily situated in North America, and span a broad range of positions in the field, such as CEOs, data scientists, market researchers, telecommunications experts, marketing gurus, and so on. Finally, I attended several industry conferences in North America as a participant observer to learn about the field of location based marketing and better comprehend the kinds of discussions and discourses marketers have amongst each other within more informal and social gatherings. As such, this dissertation provides an insight into the industry side of location based marketing by examining the kinds of beliefs, values, and philosophies that sustain a field of consumer surveillance. Because of this, it is therefore unique in terms of its empirical contribution and is thus a significant departure from
existing research into mobile and locative media defined by user-centric research (e.g. de Souza e Silva and Frith, 2010; Humphreys, 2007; 2010; 2011).

1.4 - Structure of the Dissertation

I structure this dissertation as follows. In chapter two, I will provide an overview of existing literature in surveillance studies, digital culture, mobile and locative media, cartography, and the geospatial web. The literature review will also provide an overview of Pierre Bourdieu’s theoretical and conceptual framework of habitus, capital, and field. Throughout this dissertation, I draw on Bourdieu to help inform my epistemological, methodological, and theoretical framework. This is not to say that my analysis is exclusively rooted in a Bourdieusian analysis; however, as I will explain, there are strong arguments for demonstrating the value of his approach, particularly as it helps us understand, in non-reductionist ways, the structural dynamics of the field of location based marketing, the cultural and economic value of location data, and the ways in which marketers understand the predispositions and propensities of consumer practices as they can be segmented into discrete lifestyles and tastes (i.e. their habitus).

Chapter three provides a detailed explanation of my methodological framework. Here, I will explain the kinds of epistemological commitments I make, particularly around how I conceptualize location data as socially constructed and embedded in specific cultural, economic, and social contexts. I will then explain how I undertook my data collection and analysis, including the specific methods, instruments, and rationales used, as well as the kinds of difficulties and problems I faced and negotiated.
Chapter four provides an explanation of what I call the mobile distinction. Here, I will present my findings about how marketers understand consumers within mobile digital culture, and how they seek to develop new kinds of intimacies of mobile engagement. I will largely focus on how location data is redefining the spatio-temporal epistemologies of consumer lifestyles and tastes, and why marketers are shifting their epistemological focus away from existing methods of consumer targeting, segmentation, and acquisition rooted in geodemographic knowledge towards a focus on exploiting specific “micro moments” that target the right kind of person at the right time and place using location data.

Chapter five examines how location data can be produced across several different methods of mobile geo-sensing. The purpose of this chapter is largely to explore the underlying infrastructural socio-technical configurations of location data in order to understand how location data is produced and at varying degrees of audience consent and labour. I will specifically examine the production of location data through Mobile Location Analytics (MLA); the extraction of location data in routine smartphone media advertising requests; and finally, through new approaches to audience measurement that ubiquitously monitor consenting audiences in exchange for material or immaterial rewards. The purpose of this chapter is not to provide a comprehensive account of all the different ways location data can be extracted from smartphones (as indeed there are many) but instead to highlight three key ways this is routinely done within the contemporary mobile ecosystem.

Chapter six explores the field of location based marketing where I explain the specific logics, rules, and structural conventions that inform the production, accumulation, and exchange of location data between marketers and consumers. Here, I will focus on how marketers seek to develop new economies of intimacy through techniques of segmentation, targeting, and content
production. Furthermore, I will explain some of the dominant challenges and problems marketers are facing, particularly with respect to making sense of location data, and earning consumer consent and trust to participate and share their location data. Finally, I will unpack how the private sector is seeking to develop self-regulatory policies and tools to govern the industry and reinforce specific claims of audience consent and trust.

Chapter seven will provide a conclusion of the dissertation where I will recap some of my major findings and further analyze their significance with respect to how they contribute to existing research in consumer surveillance, digital culture, mobile and locative media, and digital cartography studies. I will also speculate on future directions of research, as well as the limitations of this study. I now turn to chapter two, which provides an overview of key areas of academic literature that help inform this dissertation.
Chapter 2 - Literature Review

2.1 - Introduction

This chapter provides the necessary groundwork for understanding the implications of location data and location based marketing in mobile digital culture. The purpose is to unpack how location data is understood across several key bodies of literature, and how it influences the production of people, places, and media through emerging infrastructures of surveillance in smart cities. First, I will explore existing research in consumer surveillance and digital culture in order to explain how surveillance informs contemporary marketing and media practices. Second, I will discuss the cultural significance of mobile and locative media with respect to its capacity for producing new cultural narratives of place, identity, and intimacy. Finally, I will discuss the significance of new cartographic practices in critical geography studies in order to situate how new kinds of data (including location data) are imbricated within new epistemologies of global capitalism. I wish to demonstrate in this literature review that there are new cultural and economic implications of location data that are beginning to redefine the structural relationships between institutional forces such as marketing with vernacular digital and mobile practices. Following these three sections, I will outline the theoretical framework I am using to situate how I will frame location data and location based marketing using Pierre Bourdieu's conceptual framework of habitus, capital, and field.

2.2 - Situating Location Data In Consumer Surveillance and Digital Culture Studies
To begin situating the significance of location data within new fields of marketing, it is first necessary to situate this collection and analysis of location data within a larger domain of consumer surveillance and digital cultural studies because both these domains of research have become increasingly focused on the routine monitoring of various kinds of consumer behaviours and practices. Moreover, it is increasingly the case that our digital practices are automatically recorded and tracked by service providers, or what Dodge and Kitchin (2005; Kitchin and Dodge 2011) term “logjects”: media that monitors its own consumption. Furthermore, a major trend in both areas of research has been to consider the significance of algorithms which function to sort and deliver particular kinds of content or resources (Beer 2009). This has begun to stimulate new discussions around the extent to which institutions of surveillance are passively embedded as necessary components of emerging media, particularly wearable and ubiquitous forms of sensing that are attached to the body in everyday life and "always on" (Andrejevic and Burdon 2014). Thus there are important overlaps between surveillance studies and digital cultural studies that need to be unpacked.

The collection, storage, and analysis of personal information by the private sector has become a focal point of interest in surveillance studies, and has arguably been informed by the intensification of surveillance through digital databases which have the capacity to “socially sort” populations into specific categories of worth, and in turn inform a myriad of institutional decision making processes and rationales concerning the distribution of social and material resources (Lyon 2003). In particular, marketers have capitalized on the capacity for digital surveillance to develop new modes of consumer identification and segmentation, and over a few decades have dramatically transformed the relationship between consumers and marketing (Turow 2011). Surveillance is a key technique by which particular institutional powers reproduce
specific kinds of distinctions between populations because of its capacity to organize and sort populations into discrete categories and continuums of power and authority, such as the distinction between normal and abnormal subjects as it is known by institutions of police and medicine (Foucault 1977). Rather than simply understanding surveillance with respect to how it functions and conflicts with historically contingent notions of liberal subjectivity and privacy, here I wish to instead offer a more nuanced understanding of surveillance based on how the systematic observation of populations is instrumental for the capacity to classify populations into discrete cohorts of worth. A complete history of surveillance as it is used by institutional authorities to enact specific regimes of production and discipline is well beyond the scope of this dissertation. However, it is important to explain how the underlying political and economic rationales of surveillance as a mode of population management has been increasingly appropriated by the private sector—in particular by institutions of marketing and digital media—in order to enact new market arrangements that intensify the modes and social relations of production, accumulation, and consumption between consumers and capital. This is necessary to appreciate the significance of location data as it is embedded in new infrastructures of digital, mobile, and geolocative surveillance.

Consumer surveillance by the private sector is governed by a logic of intensifying surplus extraction because of how surveillance can inform an understanding of lifestyles, tastes, beliefs, and preferences, and thereby enact and exploit particular strategies of consumer targeting, acquisition, and conversion by marketers, brands, retailers, and other institutions of commerce, capitalism and consumption. There has been significant discussions concerning the extent to which surveillance is shifting from a domain previously monopolized by the nation state, and employed for specific purposes of discipline and population management, towards new
institutional regimes of consumer surveillance by institutions of capitalism because of how the knowledge produced by systematic behavioural observation can be exploited to inform new strategies and techniques of segmentation, typification, and influence. Gandy’s (1993) thesis of the “panoptic sort,” for example, examines how the private sector has increasingly become the primary producer of analytical knowledge about populations in order to enact new regimes of segmentation through the classification of consumer behaviours:

The panoptic sort victimizes people because it decontextualizes. Status is divorced from circumstance. The circumstance cannot be recaptured; an assessment will always be incomplete. However, the ways in which context is misrepresented are not randomly distributed but reflect an institutional bias; a bias established by race, gender, age, class, culture, and consciousness (Gandy 1993, p. 18).

The interest in researching consumer surveillance by the private sector has since become a focal point of academic interest by surveillance scholars. The major focus has been to understand how it is possible to theorize surveillance beyond the disciplinary confines of the state to coerce populations into particular spatial enclosures or confinements that govern behaviour. As Boyne (2000) notes, there has been a recurring theme in social theory advocating for the abandonment of panoptic models of surveillance in favour of understanding how panopticism is being displaced by new models such as mechanisms of seduction and pleasure (e.g. McGrath 2004). Surveillance is increasingly seen as a productive mechanism that encourages populations to participate, interact, and consent with commercial infrastructures of surveillance, typically in exchange for particular kinds of cultural or economic distinction, such
as through loyalty programs that encourage consumers to disclose their purchase histories with retailers and brands in order to accumulate particular kinds of cultural capital that can be exchanged for specific kinds of advantages, discounts, or distinctions (Pridmore 2010).

This has created significant interest in understanding how the private sector has become the dominant player in surveillance, particularly in global capitalist economies. Lyon (2003; 2007) argues that we are now living in a ‘surveillance society’ because of the sheer intensification of information collection, exchange, and analysis on our everyday lives by both the state and the private sector. In effect this means that the primary function of surveillance is to “socially sort” populations in particular cohorts or segments in order to maximize their productive capacities:

Surveillance today sorts people into categories, assigning worth or risk, in ways that have real effects on their life-chances. Deep discrimination occurs, thus making surveillance not merely a matter of personal privacy but of social justice (Lyon 2003, p. 1).

Surveillance is thus understood as employing systemic observation in order to assign populations into discrete cohorts of cultural and economic value such that institutions of capital can maximize their capacity to efficiently differentiate and target populations according to socially constructed typologies. Surveillance as a technique of social sorting is thus more about encouraging the production of visibility rather than confining subjects into architectural models of discipline such as Foucault’s analysis of the panopticon as a metaphorical and architectural arrangement of power (Foucault 1978). Thus, the significance for understanding the sheer intensification of the production of personal information about our habits, our behaviours, and
our lifestyles becomes instrumental for understanding the political economies of surveillance that are routinely exploited by the private sector in order to enact particular distinctions of sorting and exclusion; such processes necessarily make a difference in the way that individuals comprehend and act in everyday life:

In everyday life our life-chances are continually checked or enabled and our choices are channeled using various means of surveillance. The so-called digital divide is not merely a matter of access to information. Information itself can be the means of creating divisions (Lyon, 2003, p. 2).

This is important because it allows us to consider particular notions of power and authority, and how it circulates within specific political economies of personal information, and how the political and economic nature of subjectivity (i.e. the internalization of structural epistemologies by individuals) is changing from notions of citizenship towards institutional definitions of political power as it is expressed through consumer culture and digital media. This means that the scope and logic of this reconfiguration of surveillance has multiple implications for the surveillance of bodies and subjectivities, particularly the ways in which subjectivities translate into new kinds of capital. Here, we see a distinct trend in surveillance literature which considers how our identities are increasingly multiplied and fluid across various infrastructures of surveillance and capital, in turn placing new kinds of demands on individuals to enact particular kinds of subjectivities that are compatible with the institutional modes of production and visibility. As Bogard (2006) explains:
Today, the global system of capital and control demands fluid, flexible, and heterogeneous subjects—subjects that are not moulded once and for all, but capable of finely graded modulations, like partial frequencies that can be isolated and adjusted to fit a multiplicity of acoustic environments. Adaptability is the key criterion for hybrid subjects (p. 106).

The shift from surveillance as a disciplinary political arrangement towards its capacity to be embedded in the production of economic and cultural lifestyles therefore depends on how surveillance can be used to successfully inculcate populations into internalizing new subjectivities of consumption that are largely governed by institutions of capitalism and experienced by individuals through their engagements with media and consumer culture. In particular, the intensification of consumer surveillance and the production of personal information as a commodity which can be used or exchanged by institutions of capitalism are largely contingent upon successfully embedding individuals in various media infrastructures that commodify our interactivity with digital culture. Haggerty and Ericson (2000) refer to the new commodification of identity as the “data double” (p. 611). Data doubles are important because they entail new means of converging systems of surveillance together through new practices of standardization and new pragmatic imperatives of typification and differentiation:

While such doubles ostensibly refer back to particular individuals, they transcend a purely representational idiom. Rather than being accurate or inaccurate portrayals of real individuals, they are a form of pragmatics: differentiated according to how useful they are in allowing institutions to make discriminations among populations. Hence, while the
surveillant assemblage is directed toward a particular cyborg flesh/technology amalgamation, it is productive of a new type of individual, one comprised of pure information (p. 611).

Understanding the relationship between surveillance, control, and identities has engendered important discussions concerning how identities are created and normalized through digital surveillance. Haggerty and Ericson (2000) argue that new digital techniques of surveillance must be reconceptualized away from Foucauldian and Orwellian models of disciplinary power, because of how previously discrete surveillance systems are increasingly converging to create a surveillant assemblage. Here we can observe a dramatic shift from a Foucauldian model of surveillance as a technique of discipline towards a more complex understanding which theorizes how surveillance is embedded in modular rhizomatic structures for producing difference and control through infrastructures of fluidity and heterogeneity. The underlying purpose of surveillance is therefore not so much concerned with homogenizing differences in order to exact a regime of population management, but to produce differences, heterogeneities, and abstractions of identity in order to maximize the commodification of consumer subjectivities within a larger nexus of media and marketing. Haggerty and Ericson identify this as the surveillant assemblage, which acknowledges the multiplicity of visibility as a source of producing analytical knowledge of subjectivities as they are embedded in and produced through cultural and economic flows:

This assemblage operates by abstracting human bodies from their territorial settings and separating them into a series of discrete flows. These flows are then reassembled into
distinct ‘data doubles’ which can be scrutinized and targeted for intervention. In the process, we are witnessing a rhizomatic leveling of the hierarchy of surveillance, such that groups which were previously exempt from routine surveillance are now increasingly being monitored (Haggerty and Ericson 2000, p. 606).

The surveillant assemblage highlights how surveillance is increasingly de-territorialized from any one specific field of state or corporate power and operates instead on a multiplicity of networks and flows. This in effect means that surveillance operates less at the level of individual nation states and more through global cultural and economic circuits. Lyon (2004) and Murakami Wood (2013) for example argue that contemporary institutions of surveillance once perhaps strictly the domain of geographically specific milieus, institutions, and nation states, now take on a much broader global cultural significance.

This production of identities through digital surveillance, and its effects on the cultural and economic differentiation of consumer segments is perhaps nowhere more evident than in the marketing and advertising industry. Turow (2011) argues that consumer profiling through digital surveillance has taken on an entirely new significance not only because of the sheer ubiquity in which consumers are routinely tracked and traced for segmentation purposes, nor simply because now editorial content is tailored to customized lifestyles and tastes as they are known by marketers, but also because it is “performing a highly controversial form of social profiling and discrimination by customizing our media content on the basis of marketing reputations we don’t even know we have” (Turow 2011, p. 2). This means that advertisers are now increasingly placing emphasis on the methods and systems of audience commodification and delivery, where
it is no longer that advertisers simply expect to deliver audiences to their clients, but more so to deliver particular kinds of individuals based on highly specific distinctions, lifestyle segments and tastes. In turn, this means that marketers have become eager to invest in new methods to “fingerprint” individuals as they move through various digital and physical flows, such as through cookies on web browsers, or, of particular interest, through identifiers on mobile devices such as location data. With this is the emergence of a new industry of consumer analytics through surveillance that guides advertising purchasing; Turow highlights in particular the rise of Real Time Bidding (RTB) advertising exchanges that make instantaneous media purchasing decisions to deliver targeted advertising to digital audiences through algorithmic auctioning of digital inventory (Turow, 2011, p. 79).

Scholars have begun to critically reflect on the ways that the intensification of consumer surveillance is creating new kinds of capital and distinction. Pridmore (2010) argues that a key aspect of consumer surveillance is the use of loyalty and rewards programs that utilize databases as tools to track and monitor consumer purchasing behaviours (see also Zwick and Knott 2009; Pridmore and Zwick 2011). Through this mode of tracking it is possible to develop new incentive programs to instill new kinds of consumer retention, as well as build affective relationships between retailers, brands, and consumers. Thus, loyalty programs enact a “cultural circuit” of soft capitalism (Thrift 1997) whereby consumers internalize new roles and expectations that guide the path to purchase. As Pridmore sees is, this cultural circuit of loyalty sustains a larger institution of reflexive marketing that mediates consumer subjectivities and experiences. Zurawski (2011) has extended this argument to suggest that consumer monitoring through loyalty programs has become the most widespread practice of surveillance today, spanning a multi-billion dollar industry of personal data exchange. Thus, the significance of
consumer surveillance is important because it reveals how specific practices of surveillance are situated in new epistemologies of identity that function to reproduce economic hierarchies of global capital. An entire industry of digital marketing has emerged which directs its attention towards the intensification of consumer tracking in all forms in order to mediate the production of consumer subjectivities and the ways in which consumers perceive these relations of surveillance through particular practices of production and exchange. Thus, new discussions around the relationship between surveillance and power begin to surface that question how the production of cultural and economic capital increasingly depends on making consumers visible within specific kinds of exchanges between marketers and consumers.

Such new forms of power depend on the continued production of data for epistemological authority. Beer and Burrows (2013) draw attention to how the new social life of data represents a shift away from transactional data towards new kinds of data that are produced within the cultural sphere, and presents numerous opportunities of discussion around the sorts of changing institutional imperatives for theory, epistemology, and the jurisdictional forms of sociology and expertise (see also Savage and Burrows 2007; 2009). Beer and Burrows (2013) highlight four component features of social data produced through cultural archives: the profile as a key node of data accumulation on the subject; data linkages and intersectionalities produced through new assemblages of nodes and interactions; the capacity to classify and sort social data through metadata; and finally, the role of play as it is imbricated within a larger cultural circuit of contemporary capitalism, or what Thrift (2005) calls “knowing capitalism,” that renders the production and consumption of social data a fun aspect of everyday life, and that intersects with larger institutions of consumer and popular culture. This is arguably the most crucial distinction between how we can conceptualize and theorize location data away from a transactional
epistemology of surveillance, and instead embed it within a larger cultural circuit of social data because it shifts the focus towards an understanding of the kinds of cultural affects and socio-cultural relations of information production and interactivity. Similarly, van Dijck (2014) argues that the widespread collection and sharing of metadata by the state and private sector means that our metadata has become a new kind of currency that citizens exchange to access communication resources. This functions within a larger ‘datafication’ as a new paradigm of science and society, and puts institutions of trust and belief as central to the machinery of datafication.

The connection between the algorithmic power and mobile media is perhaps most evident in Beer’s (2010) analysis of music consumption through mobile media. Beer draws out important connections between our music consumption practices and the creation of systems of classification and ordering of consumer lifestyles and tastes, but furthermore argues that it is increasingly possible that our musical tastes will begin to learn to ‘find us’ as we move through everyday life, in effect showing the extent to which Thrift and French’s (2002) “technological unconscious” has developed and penetrated into everyday life. Thus, new and interesting connections begin to surface between how our digital and mobile media practices are produced through complex assemblages of surveillance and algorithmic production, and allow us to theorize how the production of lifestyles and tastes is both rooted in the classification of lifestyles and tastes, but also produced from the observation of our digital media practices.

The intensification of web 2.0 principles of algorithmically mediated content production, and ubiquitous surveillance are a major point of discussion within mobile and wearable media. As Featherstone (2009) argues, the ubiquity of media means that they are increasingly embedded in bodies, clothing, environments, objects, cultures, and societies. This shift in media also is characterized by the increasing interconnection of devices, peoples, objects, and environments,

as well as the production of new kinds of data about our media interactivities and mobilities. Andrejevic (2003; 2005; 2007) has devoted significant attention to theorizing the nature of surveillance in consumer culture with respect to how monitored mobilities influence the production and mediation of identity, particularly as media content itself is increasingly embedded in institutions of contextual relevancy, customizable interactivity, mobility, and the economic desire to exploit increasingly specific niche markets, lifestyles, and tastes:

Thanks to portable, interactive devices, one can leave one’s home without leaving the flexible, interactive, and customized world of cyberspace. To the extent that the elastic boundaries of cyberspace stretch beyond the confines of the home or office to contain the physical motion of the mobile consumer, this motion becomes the real-world, physical analog of “surfing the Web.” The promise of wireless networked technology, from the standpoint of m-commerce, is thus to inscribe the productive spiral of spatial dispersion into the interactive economy (Andrejevic 2003, p. 134).

This monitored mobility thus directly influences the production of economic and cultural value, meaning that the ability to know and measure how things travel or where they are at any given point in time and space can be seen as the necessary capital for enabling particular kinds of market relationships and consumer practices. This in turn means that we increasingly see digital practices and objects becoming geocoded with location information such as longitude and latitude co-ordinates, or simply with vernacular addresses, thus creating new practices of visibility and spatial perception through mobile and ubiquitous infrastructures (Wilson 2012; 2011). Hardey (2007) argues that the rise of user-generated spatial data through web 2.0 and
mobile infrastructures will have the potential to re-map the city into a “new cartography” that allows for highly individualized maps to be produced using new targeting and positioning systems such as GPS. From here, it becomes possible to situate the growth of mobile and locative media as embedded in a larger shift in digital media and cultural production, particularly the rise of web 2.0 folksonomies and platforms, which have the potential to create new kinds of algorithmically mediated relations of content production and consumption, and increasingly “sinking into” and “sorting out” the fabric of everyday life (Beer 2009). This algorithmic production and mediation of everyday life is becoming an inescapable part of the information order and represents a new kind of “post-hegemonic” power that engenders new discussions around how we understand notions of empowerment through digital media as is typically assumed within the vernacular of everyday life. Lash (2002; 2007) argues that whereas hegemony classically refers to domination through consent and the cultural and symbolic logic of reproduction, the post-hegemonic order is defined by “chronic production of economic, social, and political relations” (Lash 2007, p. 56). Lash understands this as a shift from ‘extensive politics’ to a politics of intensity characterized by an internal regime of epistemological power that is more concerned with the production of order through ‘facticity’ rather than appeals to tacit social norms. In this way, data become a core resource for sustaining this information order. Andrejevic (2005) examines the relations of production and consumption in the emerging mobile and ubiquitous computing field in order to critique the political economies of interactivity as it is mediated by surveillance. As production and consumption become increasingly blurred, so too does interactivity become far less active for the users. In short, soon we will no longer be using but wearing such technology, particularly as wearables mutually reinforce the rise of new urban infrastructures of smart cities, and neoliberal subjectivities (Klauser and Albrechtslund, 2014;
Moore and Robinson, 2015; Nafus and Sherman, 2014). The consequences of wearing devices which surveil and augment our capacity for ubiquitous consumption of media therefore change the everyday norms and cultural practices of consumption, but also the production of consumer agencies and identities by embedding them in highly controlled spaces that regulate the production and distribution of information access and interactivity:

The digital enclosure is a virtual enclosure that enables not just the universalization of the space of consumption—allowing one to consume anywhere—but a technology for rendering this space increasingly productive through the ongoing generation of information commodities about consumer behaviour (Andrejevic 2005, p. 109).

The digital enclosure is significant because it allows us to understand how interactivity and access are increasingly governed by new spatio-economic relations of surveillance. For Andrejevic (2007) the intensification of surveillance onto digital practices is significant because of the underlying political and economic forces which re-structure the social and contractual norms of access and interactivity in ways that produce new kinds of digital enclosures based on surveillance and control over content distribution, such that information no longer really wants to be free but measured. More importantly, Andrejevic makes direct connections between new institutions of capitalist control over digital information practices with new geographic processes of reconfiguring space:
Enclosure is to be understood not simply as a metaphor but as a geographic process involving the reconfiguration of physical space in ways that structure relations of control over access to information of all kinds (Andrejevic 2007, p. 307).

Indeed, the potential for mobile and locative forms of surveillance to enact new social and geographical relations of control and access have become an emerging priority for future research, to the point where, as Shilton (2010) has argued, mobile phones themselves could have the potential to become the largest surveillance infrastructure on the planet. This could affect virtually all facets of everyday life. As Crang and Graham (2007) note, the rise of mobile and locative media signifies an intensification of the desire to develop more seamless or frictionless forms of consumption, particularly through locative media that can organize spaces, people, and information seeking, meaning that “location starts to organize the interaction” (p. 795). However, there are still many important considerations for how mobile and locative media manifest themselves in everyday life, and how they are perceived, appreciated, and understood by mobile consumers. As such, the following section therefore situates location data within mobile media studies in order to further explore the dynamics of mobile and locative media with respect to the production of cultural and economic institutions.

2.3 - Situating Location Data In Mobile Media Studies

In this section I will examine the significance of location data with mobile media studies and mobile digital culture more broadly, a recent point of discussion in mobile media studies, particularly because of how location aware mobile media can imbue location and place with new semantic and emotional significance (Wilken 2014). Although the literature here typically does
not address location data itself, there are major discussions around how mobile and locative media are changing our understandings and social interactions with people and locations. I will therefore focus largely on the rise of locative media and location based services, but I will also provide some explanation as to how and why the mobile phone is theorized and appreciated with respect for its capacity to produce particular kinds of identities, social relations, and affective notions of intimacy (Ling 2014). This is important because it helps further contextualize the cultural and economic significance of location data by embedding it within a larger discussion of mobile digital cultures and practices. As Shove and Pantzar (2005) argue, the importance of understanding cultural practices is that it permits for a re-theorizing of agents such that they are not merely passive users of resources, but instead active agents in the creation of particular practices that are situated in specific fields. The culturalist theory of practice highlights the underlying unconscious and symbolic layers of meaning which produce particular symbolic orders and, of particular interest, aesthetic distinctions that reflect particular configurations of social, cultural, and economic capital in various fields of production (Bourdieu 1984).

Although existing research in social networking and social media sites such as Facebook have revealed how they produce new understandings of intimacy and friendship (Lambert 2013), I will focus my analysis here exclusively on mobile and geolocative media in order to explore how such media produce new kinds of understandings of ourselves, of others, and of spaces. This in many respects largely follows an understanding of the social construction of location from a de Certeauian (1984) approach by describing how urban locations are in some respects like a medium for which stories and meanings can be told through particular kinds of practices. Moreover, I wish to build on existing research into the emotional identities of mobile devices which has emerged as a core research agenda for mobile media studies (Vincent and Fortunati...
This furthermore reinforces a larger theoretical discourse in media studies that looks at media as practice concerned with the analysis of regularity and action (Couldry 2012), and can include the ways in which people create specific stories and narratives about social phenomena through regular media practices. This overall approach becomes a primary focal point of scholarly attention in mobile and locative media (Farman 2014) because it reveals the complex intersectionalities of location, mobile media, and identity, within a larger cultural and political economy of media. Thus, our understanding of location data here refers to the kinds of data we produce about particular places through mobile and locative media as a means of producing cultural and economic value about locations which can be shared with others.

This section will therefore extend our understanding of consumer surveillance and digital culture by examining how this process is increasingly done over mobile media, such as through smartphone mobile applications and wearable devices. Research into mobile media has paid particular attention to the importance of wireless telecommunications devices as they are used to produce particular conceptions of identity and sociality with others across networked environments, and how in turn it is possible to theorize how the mobile phone has modified many key aspects of interpersonal and institutional relationships because of how the mobile phone might change our conceptions of space and time (Fortunati 2001; 2002). For Licoppe (2004) mobile telephones signify a complex reconfiguration of the ways in which people engage in a connected management of relationships with others who are not necessarily physically present by making oneself present or visible across a range of channels such as voice, text, or (now) mobile media into a seamless web of co-presence, in effect blurring the distinction between absence and presence. For some, the mobile phone is a technological manifestation of larger socio-cultural norms of information societies, particularly for its highly individualized
social character and its possibilities for “hyper-coordination” amongst users (Ling and Yttri 2002). At the same time, others have suggested the possibility of a decline in the assumed stability of identity, which in turn poses important questions around the extent to which individuals must adopt increasingly reflexive attitudes and roles in everyday life. Gergen (2002), for example, has argued that mobile devices are leading to a decline in notions of personhood and community; the inherent mobility of the device therefore entails a destabilizing of fixed narratives of the self and social belonging, such that “the scaffolding for a recognizable self is eroded” (2002, p. 234). At the same time, mobile phones have also been theorized with respect to how they help reinforce notions of identity and belonging, particularly with respect to understanding forms of participation and empowerment (Gergen 2008; Campbell and Kwak 2011).

This interest in how mobile devices can stimulate social belonging is likewise indicative of larger cultural research into the norms of digital interactive cultures. However, the interest in social participation, as well as new phenomenologies of inter-personal communication through mobile devices, have been highly influenced by the uses and gratification framework—most notably in the theoretical contributions of Katz and Aakhus’ (2002) thesis of apparatgeist, which conceptualizes technological use as a means-end instrumentalist relationship primarily through an ontological foundation of rational choice theory. Apparatgeist seeks to establish a transcendental framework for understanding the design and subsequent use of the mobile phone. Technological limitations thus determine the possibilities of use, embedding different meanings into the technology by users, non-users and anti-users. The apparatgeist is the spirit of the technology which consequently beseeches a set of methodological premises centered around an interest in conceptualizing individuals and groups as mere users of technology, and as such an
interest in looking at what kinds of meanings are assigned to technology by specific populations (Katz and Sugiyama 2006). Concerns of technological determinism are, for Katz and Aakhus, side-stepped by an emphasis on the transcendental nature of social behaviour informed by an assumption that all cultures, societies, groups, and individuals, irrespective of differences, all strive towards “pure communication” despite the particular limitations of communication technology. Thus the reason why people use mobile phones is explained as emerging from an idealization of communication as the sharing of minds, and the creation of new kinds of intimacies through mobile telecommunication.

Smartphones become important in this regard for several key reasons as it concerns an understanding of the cultural value of networked communication in the production of identity and intimacy. There has been a distinct trend in which the smartphone has increasingly shifted the phone from merely an instrument of telecommunication towards one of cultural production and consumption. As Goggin (2009) notes in his analysis of the Apple iPhone, the smartphone represents an instance of cultural adaptation because of how it is understood as an “intervention into the styles and genre of contemporary culture” including mobile phone and digital culture, and therefore in some respects helps set the stage for the introduction of new metamorphoses in digital content (p. 231). In effect, this is important because it shows how the mobile phone is being adapted to position itself as a central part of everyday internet culture, particularly through the introduction of mobile software applications (apps), as well as posing important questions around how we can theorize the relationship between mobile media and the production of various epistemologies of identity.

There is indeed a long history of mobile phone research that explores its connections with various kinds of cultural production and identity, such as its underlying cultural significance as
an object of fashion, or as an emotional artifact (Fortunati 2013). However, beyond just the devices themselves as socio-cultural artifacts which can convey particular notions of belonging, identity, and distinction, we can also understand this from the analysis of the kinds of software embedded in mobile smartphones. For Goggin (2011), apps represent a significant instance in which media content is produced through smartphones, and is increasingly invested in producing content around and about our physical and digital identities. In effect this perhaps further annihilates any such distinction because of how apps produce and distribute information about identity across various digital platforms, and how this cultural production renders identities increasingly visible, calculable, and subject to new relations of power and governance.

Many aspects of mobile media are increasingly framed within epistemologies of location and location awareness, such as the production and consumption of news media, the intensification of social media platforms such as Facebook, and the emergence of new kinds of phenomenological understandings with space and place (Goggin and Dwyer 2014; Goggin 2014; Evans 2015). Goggin (2012) argues that locative media has shifted from a niche practice to a mainstream fascination, making it, as Gordon and de Souza e Silva (2011) suggest, one of the fastest growing sectors of digital media (see also Wilken 2012). This is perhaps because of the multiple kinds of intersectionalities and convergences we can situate within locative media. For Lemos (2010), locative media is significant because of how it necessarily intersects with a new media framework that centers around the city, mobility, urbanity, and therefore representing a profound shift towards post-mass media.

Crawford and Goggin (2009) propose that the rise of geo-locative media, particularly its capacity to produce information about space and place, is embedded in a larger trend of the geospatial web, and thus in the mobile sphere it can be understood as the “geomobile web” to
denote how mobile locative media is invested in producing particular kinds of information about physical places. The geomobile web builds on several important trends in geography and mobile media research, including an overall theoretical framework that situates geography within an understanding of how space and place is experienced and lived through collections of narratives, memories, and stories (see Tuan 1977; Lefebvre 1991; Pickles 2004). Furthermore, the geomobile web echoes emerging trends in social cartography around the rise of the geospatial web (the geoweb) which emphasizes the production of geographic knowledge through non-expert cartographic software and interactive web 2.0 mapping technologies (e.g. Haklay, Singleton, and Parker 2008). Crawford and Goggin (2009) argued that there has been little scholarship that has sought to understand the mobile geoweb or its significance given that it represents the intersection of numerous platforms and infrastructures, but also that the geomobile web has demonstrated strong growth and adoption by users in their everyday mobile practices such as for navigation.

The rise of location based services is a testament to the rapid proliferation of the geomobile web and the overall ways in which notions of place become socially constructed through geomobile information practices. Gazzard (2011) argues that one such key practice is of geotagging social media content, including textual and photographic content that users produce about particular places. The rise of mobile geotagging has likewise been discussed by Humphreys and Liao (2011) to examine how geotagging gives users a sense of familiarity with urban environments and a way to share particular stories about places with a wider community. Put another way, it provides a method for giving a sense of intimacy and distinction because of how it intensifies the social relations between people and places through the production of media content and narratives. Similarly, Hjorth (2012) argues that twenty-first century media practices
are defined along three key trends: mobile, locative, and social. For Hjorth, the rise of location based media from a first generation niche culture to a second generation mainstream practice signifies the rise of multimodal media that create new kinds of co-presence between people and places. In turn this creates new paradoxical relations around identity, personalization, and place, particularly because of how such media poses interesting questions concerning the extent to which it depends on new modes of surveillance and visibility, as well as the commodification of place by private commercial interests. Thus, the significance of location based media is in many respects a discussion around the extent to which institutions become blurred, such as the distinction between public and private spaces and identities, and the extent to which these new applications produce new social and emotional experiences and emotional intimacies between the self, others, and places:

By overlaying the socioemotional with the geographic and electronic, locative media suggest the value in reconceptualizing theories that are concerned with the interactions and intersections between co-presence, place and intimacy… Given the realities that LBS have implications for notions of privacy, identity and place-making, we need to locate them historically as well as socioculturally (Hjorth 2012, p. 246).

Thus, the shift of location based media from the fringe towards a mainstream sociocultural practice is important because of the ways we see multiple processes of identity and spatial production converge at the cultural and affective register, particularly because of the ways that such media permit the construction of cultural and personal narratives around places that can be shared with others for public or private consumption. This places important questions around
how we can understand the social construction of place and identity, and in turn how it reconfigures particular understandings of the relationship between place and intimacy (Hjorth 2013).

The significance of locative media has also been considered as a field of cultural production that is regulated by particular social forces and reproduces a larger social order. Zeffiro (2012) offers a genealogy of locative media, tracing it from its origins as a form of artistic exploration towards its now largely commercial applications that are rooted in theoretical discourses of psychogeography and flâneurism. This means that the widespread popularization creates new possibilities for the social construction of identities that is mediated by the ways the self is rendered visible in space, and produced through these new infrastructures of spatial, social, and mobile media. Schwartz and Halegoua (2014) propose the “spatial self” to refer to the ways that users of mobile and digital media increasingly document their offline activities that are spatially located in particular places and spaces and displayed on digital platforms for others, such that our digital identities are no longer simply produced through textual and visual content, but also through “geocoded digital traces, geographical data visualizations, and maps of individual patterns of mobility” (p. 1644). In their review of locative media, Bilanzic and Foth (2012) further highlight the ways in which locative media renders previous invisible social relations visible by augmenting our physicality of place, changing how we perceive and appreciate particular environments, as well as the opportunities for engaging in social relations in these places.

Locative media intersects with a myriad of processes around the social and cultural production of place and identity. For some, this has led to new discussions around the ways for theorizing space as it converges with mobile and locative media. de Souza e Silva (2006) argues
that the layering of mobile media signifies the production of “hybrid spaces” that blur previous boundaries between physical and cyber communities. Here, new capacities for sustaining networked communications with virtual communities in physical spaces present important questions that challenge cultural conventions of media interactivity and access. de Souza e Silva and Frith (2010) explain how entirely new spatial logics are emerging from location based social networking, particularly when users are able to co-locate one another in physical spaces. This signifies a broader shift in the way individuals define and know themselves within larger phenomenologies of networks and spaces, leading towards:

a shift in the traditional meaning of networks: from spatial structures where the nodes overshadow the paths, as it was commonly believed when analyzing cell phones, to structures in which the paths indeed matter to the user, since the use of location-aware technologies encourages nodes (users) to pay attention to the paths (physical space) they take (p. 487).

de Souza e Silva and Frith (2014) argue that location based social networks produce new kinds of dynamic narrations of the city through a “presentation of location” that depends on the site-specific meanings attached to locations through location based media. This in effect allows us to theorize the significance of locative media as a dynamic co-constitution of users, places, and media infrastructures. This means that locations become embedded in new relational practices of digital cultural production such that the specific meanings of locations depends largely on the ways they connect with other locations, they ways they are perceived and
connected with each other, and the ways in which locations present themselves to users through urban narrative processes of meaning making that are read by mobile audiences.

For Frith (2012), this means that locative media effectively dismantles beliefs that trivialize the importance of geography and mobility. Instead they have in many respects become more important than ever in sustaining social ties and networks, but furthermore may present new challenges around re-conceptualizing the nature of social exclusion within hybrid spaces. Humphreys (2007) is among the earliest to research locative media through her case studies of Dodgeball users, an early example of a mobile geo-locative social media application that notified users when they were in close proximity to friends and interesting venues. Humphrey’s research not only resonates with de Souza e Silva’s interest in the spatial logics of urban space, but also more broadly sought to address the nature of interactions that develop around mobile locative networks, particularly as it concerns the performative nature of identity. Humphrey’s main argument is that Dodgeball facilitates a kind of “social molecularization” whereby users tend to connect with like-minded people and move through spaces that follow normative class structures. Humphreys (2011) has also considered the implications for locative media on perceptions of privacy, finding that the majority of users do not concern themselves with privacy, and largely see themselves as in control of their information practices and disclosures. This may suggest that mobile media ‘blurs’ the everyday assumptions of public and private spaces, identities, and media (Humphreys 2013).

The importance of situating the production of reflexive identities through mobile media has also been considered from its dramaturgical significance. This is important because it is increasingly necessary to consider how social norms and practices of using mobile media are embedded in larger institutions of surveillance and identity production wherein individuals
perform various roles and identities across numerous fields of media, and for a heterogeneity of imagined or actual audiences. Moreover, a dramaturgical model allows us to further situate cultural theories of practice within specific embodied practices in mobile digital culture, and thus, allow us to understand how habitus is revealed through particular acts of performance. Phillips (2003) argues that locational surveillance is sustained by a complex of emergency response, law, and marketing imperatives. The result of this interplay is the emergence of ubiquitous geo-tracking capabilities by wireless telecommunication providers which can be used or exploited by institutions of state and capital. Elsewhere, Phillips (2005a) argues that surveillance and institutional visibility in general are not necessarily detrimental to the subject, nor necessarily coercive by design. It is possible that the production of visible subjects through institutional classifications and techniques of surveillance can produce new subject formations and notions of selfhood that challenge institutional power structures. This is largely because, following Goffman’s (1959) dramaturgical model, Phillips (2005a) sees the process of self-formation to be the result of multiple fields of power that imbue notions of selfhood onto subjects through performative practices. Individuals are thus reflexive agents that internalize multiple fields of visibility and produce various identities across multiple contexts in order to gain particular kinds of acceptance and capital. In this respect, the significance of location based media demands a reconsideration of surveillance that focuses primarily on the ways in which surveillance functions to normalize specific kinds of practices and institutional relationships. The dramaturgical model likewise enables a more nuanced understanding of user-centric research, and rejects the belief in the universality of mobile information practices by embedding practices and performances in specific spatio-temporal networks of communication. In turn, it can allow for a more nuanced understanding of the significance of surveillance that transcends and in some
respects rejects its problematization as a question of privacy towards one that considers how surveillance normalizes institutional understandings of the self. Finally, this model for theorizing the rationales of use also complicates the uses and gratifications model by revealing how our performances of self through mobile media are part of a larger process of capital accumulation in which individuals self-manage their performances, and depend on their audiences to accept their presentation.

In this section, I outlined the importance of understanding location within mobile media studies by highlighting how mobile media practices are creating new ways for understanding the relationship between people, places, and media. Mobile media is thus particularly important because of how it is imbricated within the social construction of identity and place. In the final section, I examine the significance of location data within a larger backdrop of critical, human, and urban geography research that examines how new kinds of spatial data contribute to the production of new techniques of cartography, and how these new cartographic practices enable particular relations of power and governance.

2.4 - Situating Location Data In Critical Geography Studies

The final section of the literature review examines how location data has been researched within critical geography studies of cartography. I will focus on explaining the changing kinds of cartographic practices that are used to map and manage the distribution of particular social and material resources in urban environments using geospatial data and interactive maps. Thus, the focus is more about understanding what kinds of geographic infrastructures location data is embedded in, and produced through, in order to sustain particular kinds of spatial relations of power and governance. I will approach this largely through an analysis of the political economies
of such kinds of knowledge production and instrumental rationality with the intention of revealing how location data is becoming increasingly significant in terms of its capacity to reproduce particular economic arrangements and political structures. Thus, following a critical understanding of cartography, I will first show how maps are themselves not merely objective representations of space, but emerge from and reflect a larger set of social, political, cultural, and economic values. Second, I explore how such interactive software has been used to produce particular political and economic relationships by mapping the distribution of class and space into geodemographic information systems. Finally, I explore new cartographic processes, particularly the geospatial web (geoweb) to consider how interactive maps and new vernacular practices of spatial data production are reconfiguring key power dynamics and epistemological frameworks of cartography. Following Farman’s (2010) analysis of new geospatial tools such as Google Earth, I argue that location data represents a new kind of data point for mapping global economic and cultural arrangements that transcend territorial conventions of the nation state, and extend into new global cultural economies.

There is a long line of cultural and critical geographers that have sought to critique the epistemological and ontological status of maps as representing an objective representation of space, and instead posit how map making is necessarily an ongoing process that is embedded in specific historical contexts and social structures (Pinder 1996). As Pickles (2004) argues, maps are produced by institutional logics for the specific purpose of governance, and necessarily structures the ways in which space is perceived and understood:

The map does not let us see anything as such. Instead, it lets us see the world how others have seen it and how they want us to see it… The map points us to a world that we might
come to know provided we are willing to learn and accept -- to “buy into” -- this system of symbols and icons, a coded world in which particular meaning and information is presented (Pickles 2004, p. 61).

The origins for critiquing the epistemology of cartography is largely rooted in postmodern critiques of knowledge as embedded in and produced through particular arrangements of power for the purposes of reproducing particular techniques of state power. Harley (1989) provides one of the first and most seminal critiques of cartography by drawing on Foucault and Derrida to highlight the need to develop a postmodern deconstruction of cartography that critically situates cartography into an institutional discipline governed by particular discourses, rules, and bodies of power that administer its production into a scientific field. This social history, or genealogy as it is perhaps better described, of cartography since at least the eighteenth century constitutes a series of institutional developments such as the intensification and complexity of systems of classification to produce cartography as a scientific endeavour that provides a “mirror of reality” (Harley 1989, p. 4). However, as a technique of power, maps are firmly embedded in a larger process of hierarchical knowledge that privileges particular ways of seeing over others:

This hierarchicalization of space is not a conscious act of cartographic representation. Rather it is taken for granted in a society that the place of the king is more important than the place of a lesser baron, that a castle is more important than a peasant’s house, that the town of an archbishop is more important than that of a minor prelate, or that the estate of a landed gentleman is more worthy of emphasis than that of a plain farmer. Cartography
depl oy its vocabulary accordingly so that it embodies a systematic social inequality. The
distinctions of class and power are engineered, reified and legitimated in the map by
means of cartographic signs (Harley 1989, p. 6).

Maps are thus part of a larger system of political and economic machinery for producing
specific kinds of spatial knowledge in order to reproduce particular power relations and fields of
hierarchy, authority, and bureaucracy:

To catalogue the world is to appropriate it, so that all these technical processes represent
acts of control over its image which extend beyond the professed uses of cartography.
The world is disciplined. The world is normalized. We are prisoners in its spatial matrix
(ibid., p. 11).

There have since been many efforts to sustain a discussion around the development of
critical cartography studies, particularly as it is situated by a larger Foucauldian theoretical
framework (Crampton and Elden 2007). A major theme of these discussions concerns the extent
to which cartography and geographic information systems function to produce particular kinds of
governance, typically enacted by the state, in order to manage the distribution of power and
social resources across the body politic. For Elden (2007) the capacity for the state to calculate
various strategies of power and governance largely depend on how they are conceptualized as
territorial epistemes in which the deployment of particular techniques of power are informed by
spatial knowledge. This is arguably significant because it reveals how the field of critical
geography has sought to understand the performative nature of cartography as it is embedded in
particular power structures; however, this analysis has largely been restricted to understanding the relationship between cartography and the state. For example, Huxley (2008) examines the relationship between geography and governmentality (that is, the capacity for the state to produce particular kinds of economic and political subjectivities that are internalized by population in order to realize specific rationalities of production and control), and argues that processes of governmentality are inherently spatial because of how population management depends on the capacity of the state to classify, calculate, and manage spatial elements such as buildings, cities, neighbourhoods, institutions, and territories. Huxley’s genealogical analysis of geography as a technique of governmentality highlights the political economies of producing subjectivities within “individual-place-population-territory-environment” complex of dispositifs of power (2008, p. 1653). Likewise, Rutherford and Rutherford (2013) have built on this discussion about the political significance of geography with respect to its biopolitical implications for enacting particular relations of production and exchange.

This discussion has been since considered in light of the development of digital geospatial tools and interactive software—namely the development of Geographic Information Systems (GIS)—and how these new digital tools reflect changes in the political economies of cartography as a technique of governance, particularly because of how we can understand cartographic practices and rationalities as they are embedded in larger institutions of surveillance. For Crampton (2003), cartography represents an extension of governmental forms of surveillance that are deployed by the state to produce specific rationalities of power and discipline. Cartography functions as a key institutional mode of producing particular kinds of knowledge about the space, territory, and population that extend the gaze of the state, and in turn, their capacity to exact control over particular kinds of risks and threats to territorial sovereignty
and security. In effect, cartography is an instrumental technique of geo-surveillance for the state to secure, manage, and control institutional threats to the structural order that define the political and economic relationships of the state, territory, and population.

However, GIS has also been instrumental not just for the state as an instrument of security and governance, but also by institutions of commercial sociology (Savage and Burrows 2007), and what Thrift (2005) calls “knowing capitalism” to map out the spatial distribution of class into geodemographic constructs. Geodemographics have been understood as techniques of phenetic ordering that are historical contingent upon the development of larger geo-spatial classifications and cartographic rationalities of bureaucratic power through Geographic Information Systems (GIS). Burrows and Gane (2006) detail the social history of geodemographics with special attention to the use of software to further geo-demographic assessment. It is perhaps worth pointing out first that the interest sociologists, human geographers, and now increasingly surveillance theorists have taken to geodemographics is not only fairly recent, despite the fact that geodemographics originated in sociology, but secondly, that the interest in geodemographics is also rooted in contemporary debates around the privatization of classificatory knowledge—a domain once in some respects exclusive to empirical sociology but increasingly becoming dominated by new commercial sociological institutions (Savage and Burrows 2007; 2009; Burrows and Savage 2014).

The interest in geodemographics is not simply rooted in the desire to understand how institutions surveil and classify populations into spatial cohorts; it is rather a larger reflection on the commodification of knowledge produced through surveillance. For Burrows and Gane (2006), this is further complicated by the addition of software to automate this production, which poses serious questions around socio-economic divides and class structures. Uprichard, Burrows,
and Parker (2009) argue that the epistemological and methodological aspects of geodemographic classifications are directly related to a performative logic of capital. They work because they are designed to work; their construction is deliberately produced for the purposes to which they have been assigned by the classifiers (2009, p. 2828). Thus, the specific data that is selected or excluded, as well as the underlying rationales for coding space, influence the design of geodemographic systems. Geodemographics do not merely signify a representational epistemology based on the truism that there are demographic correlations between people and places, such that geodemographics describes patterns of self-organization; the underlying purpose of geodemographics is to create a classificatory system that can reify this truism to a particular degree of confidence by deliberately selecting data points to match a pre-existing belief about the fundamental nature of social organization.

Burrows and Ellison (2004) develop a theoretical discussion around the politics of neighbourhood informatization situated under a larger context of splintering urbanism (Graham and Marvin 2001), as well as Lash’s (2002) thesis of information zones as digital divides. This is informed by theoretical research that focuses on how digital technologies are profoundly reconfiguring spatial epistemologies, and categorizations of places, particularly around patterns of consumption (Burrows and Ellison 2004, p. 329). Beyond the implications for concerns of the rise of consumer citizenship in increasingly “individualized” and “liquid” social structures (Bauman 2001), a major concern is the fragmentation of social belonging and rights. For Burrows and Ellison, engagement as a form of citizenship—which they identify as the ability to choose patterns of consumption strategically, altering them where necessary—becomes subsumed under a larger aggregation of individual preferences which shape the nature of public space, and so by extension the public sphere. Citizenship is now contingent upon fulfilling
particular expectations of engagement; thus urban spaces become defined based on the aggregated decisions of privileged social actors within particular neighbourhoods (Burrows and Ellison 2004, p. 334).

The intensification of spatial data, combined with new infrastructures of surveillance, therefore pose new questions around how we can conceptualize the relationship between capital and agency. Barreneche (2012) argues that the massive proliferation of geocoding information, from automated geotracking to the embedding of geosensors in urban environments, requires a rethinking of the underlying politics of governmentality and user agency. Analyzing Google’s location platform Places (a platform that organizes web information about particular locations such as businesses and points of interest), Barreneche finds that the weighting system that assigns particular notions of value onto places through its PlaceRank georeferences mimics the logic of its PageRank score: the greater the number of citations or references tied to a specific place through non-cartographic data, the higher the score. Some of the variables that influence a PlaceRank score are computed from “sentiment”—opinions, attitudes, or affective data of users towards a particular place. Thus, a key component of governing the geocoding of place is often through the calculation of non-geographic data, particularly the statistical indexing of popular opinion and cultural beliefs around particular places. PlaceRank, like its search engine equivalent PageRank, is therefore a spatial epistemology, or way of seeing the world by indexing and “socially sorting” (Lyon 2003) places along cultural and economic values, and is increasingly part of the underlying processes by which software is mediating or otherwise “transducing” the social and material arrangements of everyday spaces (Dodge and Kitchin 2005). For Barraneche, this means that there is a specific geodemographic ontology that orders location based platforms
through the use of GIS, a database of consumer surveillance, and algorithms of cluster analysis to produce segmentation systems of people and places:

It sorts spatial entities according to the measurement of media-driven attention (attention capital): the quantity (e.g. number of georeferences) and quality (e.g. sentiment of reviews, authority, ratings and so on) of the online media presence of places. The major issue of concern is that the power law of information that gives shape to the asymmetrical and centralized topology of the internet, whereby the most heavily linked sources rule the network… could be reproduced (Barreneche 2012, p. 337).

This means that the potential of location platforms such as Google Places is that it can be understood as a form of real-time geodemographics whereby spaces are valued and sorted algorithmically through a heterogeneity of data sources, search queries, feedback protocols, and surveys. Unlike the static ontologies of traditional geodemographics, locative geodemographics are thus “ontogenetic” and always in a state of becoming (Barreneche 2012, p. 339).

Interestingly, Barraneche (2010) is not the only person to have considered the implications of mobile geo-locative media on geodemographic profiling. Earlier, Phillips and Curry (2003) argued that geo-demographic classifications are shifting towards developing new epistemologies of temporality and mobility, specifically identifying Location Based Services as having the potential to reshape conventional methods and epistemologies of geodemographics. Lifestyle marketing, as they see it, is ceding to a new mode of locational marketing based on the analysis of mobility patterns and the intersection of place and identity.
Cartography has undergone profound changes in recent decades with the introduction of web 2.0 principles into the production, interactivity, and sharing of maps through new geospatial tools and software known as the geoweb, although, as Crampton (2009) points out, there have been a myriad of names for this trend, such as the geospatial web, locative media, neogeography, and spatial crowdsourcing. In any case, the geoweb is defined by several key social and epistemological features that distinguish it from previous modes of cartographic production and rationality, therefore differentiating it from earlier political and economic structures. Much of this re-imagining of cartography is informed by new epistemological conventions that theorize the power of maps as a processual rather than representative science, meaning that the kinds of value and ontological status of maps emerge from the kinds of practices they are embedded in, rather than an appeal to a priori foundations (Kitchin and Dodge 2007).

The significance of the geoweb is not exclusively derived from its technological capacities for creating and sharing interactive maps by lay populations. It is instead the underlying social and cultural conventions and practices that structure the epistemological frameworks of spatial data that is of significance because it helps us understand how shifts in knowing capitalism (Thrift 2005) are being juxtaposed with new vernacular understandings of validity and authenticity, as well as the kind of social capacities new mapping technologies can enable with respect to social cohesion, empowerment, and praxis. The geoweb mobilizes a different set of rhetorics around the authority of maps that is not based on the traditional discourses of scientific realism and the regulatory institutions based in sovereign powers of the state (Crampton 2003). The geoweb is instead socially constructed around mobilizing the knowledge of locally situated and volunteered crowdsourced epistemologies of place (Elwood, Goodchild, and Sui 2012; Elwood 2008). This is significant because while many key aspects of
knowing capitalism revolve around harvesting transaction data from government and commercial databases, entirely different sets of data are likewise emerging with a unique social character concerning the interaction between processes of ‘prosumption’ and algorithmic data analytics for realizing cultural knowledge (Beer 2009; Beer and Burrows 2013; Ritzer and Jurgenson 2010).

The value of the geoweb derives from the diffusion of cartographic literacy and the layering of geo-spatial data onto everyday practices of digital media and includes a host of new cultural practices for producing geographic data through vernacular and crowdsourced techniques (Dodge and Kitchin 2013). Goodchild (2007) proposes the term “Volunteered Geographic Information” (VGI), to denote the production of geographic information by private citizens with little to no expertise in GIS or cartography. Goodchild focuses on websites and social media platforms that leverage interactive maps to allow individuals to label, name, or describe specific places, such as Wikimapia. Instrumental to this new “democratization” of GIS is the development of protocols and tools for georeferencing, such as the emergence of GPS that are now routinely embedded in many everyday new media devices such as smartphones and cameras, as well as new methods for “geocoding” and “geotagging” the Earth’s surface that leverage vernacular ‘folksonomies.’ For Goodchild, one of the most significant contributions VGI can make is its emphasis on producing knowledge about local places and activities that may go unnoticed by institutional authorities such as the state or the media. For Elwood et. al., (2012), the epistemological foundations of VGI derive their value from principles similar to user generated content crowdsourced principles of collective intelligence in that the knowledge is one that is asserted rather than authoritative. That is, the knowledge produced through volunteered practices contains no inherent guarantee of validity or reliability, but instead is valued for its underlying principles of social production that acknowledge the authenticity of perception and
experience by local populations whom volunteer their phenomenological knowledge into social production. The specific nature of volunteerism has been the cause of some disagreement in geoweb scholarship. Tulloch (2008) argues that VGI contains certain inherent similarities to earlier forms of social cartography such as Public Participatory GIS (PPGIS), and are in this respect not necessarily novel to new web-based cartographies, but instead have been an ongoing concern within various discussions of GIScience and critical epistemologies of GIS since the mid 1990s (see also Elwood 2008; Sieber 2006).

The Geoweb is also valued for its capacity to level critiques against the hierarchical privilege of institutional authority and expertise typical of cartography. The specific methodological and epistemological conventions of validity typically embodied in GIS through appeals to positivism and technological expertise are in effect rejected in favour of producing vernacular knowledge from local populations that directly experience space in the phenomenological register. This may in effect produce new capacities for knowledge production, but may also inculcate geoweb users into new social relations of spatial perception and production. For some, this means that the geoweb is imbricated with the rise of the “citizen sensor” whereby users of geospatial tools are embedded in regimes of geo-coding, such as through geo-referenced hashtagging, or through the routine disclosure of mobility patterns through mobile geo-locative media (de Souza e Silva 2006; Goodchild 2007; Wilson 2012;).

It is therefore possible to suggest that the changing constitution of maps has likewise been reflected in the social practices and epistemologies of perceiving spaces as cultural ontologies of everyday social life, including the underlying cultural conventions and interpretive frameworks of geosensing on notions of selfhood. Wilson (2011) has argued that new forms of citizen engagement with cartography are creating new geocoded subjects; a reconfiguration of
spatial awareness and perception towards instrumentalized rationales of spatial experience such as, for example, volunteer geocoding programs in urban slums that encourage users to assess and itemize various kinds of deviance, such as graffiti, overturned shopping carts, litter, and damaged public infrastructure. This effectively amounts to an inculcation of urban subjectivity that seeks to manage deviance by identifying specific sites of abnormal behaviour to inform biopolitical strategies of urban management.

Although such research is in its nascency, future work could be done to ascertain the extent to which the everyday analytical frameworks of spatial perception and understanding are becoming increasingly geocoded in accordance to specific institutional norms of neoliberal urbanization. This would suggest that the geoweb might in effect reinforce the normalizing gaze of surveillance for biopolitical governance that sanitizes space from the aesthetic differences inscribed by socio-economic neoliberalization, as noted extensively by critical urban geographers that have studied the reconfigured “splintering” of urban infrastructure (Graham and Marvin 2001, Graham and Wood 2003; Graham 2005). This process of splintering or redefining the economic relations of space is in large part contingent on the massive collection and analysis of data (or “big data” as it is typically called), and has become a major force in the rise of “programmable cities” and “smart urbanism” (Kitchin 2011; 2014b; Leszczynski 2016).

In addition to the inculcation of geoweb users towards new practices of spatial awareness, the geoweb is increasingly significant for its role in leveraging open data sources as an alternative to relying on commercial data streams. A key institutional challenge around geo-spatial forms of knowing space concerns the theoretical and material institutions of ownership and control over digital GIS information, and suggests that public institutions are no longer the primary producers of spatial data. Curry (1998, p. 88) argues that “we no longer own our own
location” as a means of highlighting how the replacement of institutional cartographic expertise with private-sector spatial epistemologies has resulted in shifting norms of ownership, particularly towards practices in which now information is increasingly “leased” out by the private sector to government and civil society, allowing for increasingly strict regimes of use and control over information, enabling the wholesale reconstruction of the internet towards regimes of privatization (Zook and Graham 2007). This places severe challenges for resolving socio-economic inequalities, particularly as institutions of property become part of the fabric of digital media, and has begun to stimulate new directions for reconceptualizing privacy within these geographical contexts (Elwood and Leszczynski 2011).

The political economy of the geoweb has only recently become a point of discussion for geoweb scholars. Leszczynski (2012) argues that the geoweb is historically contingent upon larger shifts towards the neoliberalization of the state and, more importantly, on the commodification of geospatial data and the liberalization of geo-spatial infrastructures such as GPS. For Leszczynski, new forms of cartographic knowledge production emphasize a crowdsourced user-driven content model of prosumption situated with a neoliberal nexus that stresses the primacy of local knowledges produced by local citizens, and the exploitation of free labour by large transnational corporations. For Leszczynski, the geoweb did not simply emerge out of web 2.0 trends, but follows a genealogy of market liberalization away from a strictly state-controlled domain towards the creation of geo-spatial media as a market for the private sector. Arguably, however, there is still much more work that needs to be done to appreciate how political economy can inform an understanding of the geoweb (Smith 2014).

2.5 - Situating Location Data In This Dissertation
So far, this chapter has provided an overview of how location data has been studied across several key bodies of scholarship, and how these discussions contain important overlapping arguments concerning the significance of location data in everyday life. I first examined existing research in consumer surveillance and digital culture in order to describe how location data has been understood as an extension of existing research into digital surveillance, and how it is embedded within larger political economies of consumer segmentation and content production. The purpose was to unpack how identities are produced and analyzed by digital databases, and how digital identities are increasingly circulating across a variety of commercial infrastructures that are sunken into the fabric of everyday life transactions such as shopping.

Second, I examined existing research in mobile and locative media in order to understand the deeper cultural and affective dynamics of mobile media in terms of how location based media intensifies the ways in which audiences construct particular narratives of place and intimacy. This reveals how many of our everyday experiences with new media, as well as the underlying techniques of collecting data about mobile users through software, are deeply rooted in the production of identity by embedding it in specific spatio-temporal epistemologies and cultural narratives of place.

Finally, I examined location data within new infrastructures of interactive cartographic software that exploits the labour of audiences to produce and exchange geo-spatial information, particularly location data, in order to realize new kinds of economic and cultural value. There are many potential consequences of these new infrastructural configurations between audiences, places, and mapping software that have largely stressed its potential for new kinds of citizenship, participation, and engagement. However, it has become increasingly important to acknowledge and understand its potential for producing new relations of labour and capital, particularly as
many of these new mapping tools are owned and controlled by the private sector, and how these new approaches to mobile media and digital mapping are likewise mediated by commercial interests and “smart” approaches to urbanism. Thus, its potential application for marketing is of particular significance, and will arguably help better understand the political economies of the geoweb with respect to how these new cartographic practices are structured by the extrapolation of surplus value through audience labour and commodification.

However, it is still necessary to properly construct a coherent theoretical framework to ground an analysis of location data in marketing. As such, this dissertation will focus on three key themes that tend to manifest across the domains of surveillance studies, digital and mobile media, and critical cartography with respect to how location data is conceptualized, theorized, and researched by marketers in terms of its commercial applications for producing analytical knowledge about consumer lifestyles, and how this knowledge can be used to develop new relationships of production and accumulation that are increasingly focused around intensifying distinctions between cohorts. As such, this dissertation draws on Pierre Bourdieu’s key theoretical and conceptual framework because there are several key overlapping themes that can bind his theoretical orientations with our understanding of location data in contemporary fields of marketing.

2.5.1 - Location Data, Habitus, and Distinction

There is a clear pattern in the literature that discusses how the intensification of data and software (such as location data and mobile geospatial media) is sustained by institutional endeavours to surveil and understand the propensities, dispositions, and lifestyles of consumers. This intensifies the application of surveillance in everyday life by commercial interests to better
target specific lifestyles and influence consumer engagement with media capital such as advertising campaigns. The literature surveyed consistently points towards the application of surveillance and new kinds of spatial knowledge to identify and predict consumer dispositions, aesthetic preferences, and the market worth. However, it is not entirely clear how exactly marketers see the value of location data in constructing new approaches to audience production, segmentation, and influence. This is particularly important in order to understand the cultural and economic significance of location data, both in mobile digital culture, but also in contemporary marketing practices of consumer surveillance, and how location data could offer the potential to inform marketers about the patterns, regularities, and propensities of mobile audiences. Here, the ways in which identity is produced and known as a set of dispositions of perception and practice, or what Bourdieu (1984) calls habitus, becomes a key factor to unpacking how identities are known as productive, but also structured by social relationships with other people, places, and media. Moreover, we can also see how this production of identity in turn functions to reproduce structural divisions of class and lifestyle between cohorts; thus, it is possible to understand how the reproduction of social differences is embedded in specific practices of identity construction.

Bourdieu sought to develop what he calls a “constructivist structuralism” and a “structuralist constructivism” approach to understanding the reproduction of social inequalities through dialectical relations between objective social facts and phenomenological mental states (Bourdieu 1998). Bourdieu’s structuralist constructivism argues that there are structural forces that exist in the social world (instead of the symbolic or discursive world) that externally impose, constrain, or enable practices and representations. This can also be understood as a “social genesis” of schemes of perception, appreciation, and disposition for action and representation of these social structures (what he calls habitus) (1998, p. 14). This means that his theoretical model
is based on understanding how agents comprehend their specific relationships towards others within specific fields, and subsequently use this knowledge to guide their actions. Bourdieu is therefore valuable for this dissertation because of how his theoretical and conceptual language enables us to understand how aesthetic practices and distinctions, such as the expression of consumer tastes and lifestyles, are embedded within larger fields of relationships and practices that are mediated by the kinds of capital agents possess to inform and guide their actions. Thus, discussions of, for example, the origins of personal preferences and tastes are understood as manifestations of how agents comprehend and internalize their relation towards others across various fields of cultural and economic production, and how these aesthetic preferences translate into systematic differences that reproduce social inequalities.

The purpose is to bridge the objectivist and subjectivist divides by understanding how “points of view are grasped as such and related to the positions they occupy in the structure of agents under consideration” (Bourdieu 1998, p. 15). This can also be applied to fields of cultural and economic production whereby perceptions of value are contingent upon how specific works exist within a larger field of cultural production (Bourdieu 1993). Wacquant (1992) considers Bourdieu’s extensive career of research as a substantial effort to resolve persistent sociological antinomies, including subjectivist and objectivist social theory, the divorce of theory and method, and between the symbolic and material, into a political economy of practice that integrates phenomenological and structuralist ontologies:

A total science of society must jettison both the mechanical structuralism which puts agents ‘on vacation’ and the teleological individualism which recognizes people only in the truncated form of an ‘oversocialized cultural dope’… Objectivism and subjectivism,
mechanicalism and finalism, structural necessity and individual agency are false antinomies. Each term of these paired opposites reinforces the other; all collude in obfuscating the anthropological truth of human practice (Wacquant 1992, p. 10).

Habitus is the key to understanding how Bourdieu resolves key antinomies between agency and social structure by situating our propensities for action and perception within larger fields that are mediated by specific kinds of capital agents possess. Bourdieu defines habitus as both a “structured structure” and “structuring structure” because of how habitus pertains to systems of objectively classifiable judgments, and perhaps more importantly, the internalization of such classifications by agents in the field for guiding propensities of perception and action. As Bourdieu explains elsewhere, habitus is “both a system of schemes of production of practices and a system of perception and appreciation of practices” where, in both these cases the schemes of production and faculties of appreciation express the social position it elaborates:

Habitus produces practices and representations which are available for classification, which are objectively differentiated; however, they are immediately perceived as such only by those agents who possess the code, the classificatory schemes necessary to understand their social meaning. Habitus thus implies a ‘sense of one’s place’ but also a ‘sense of the place of others’ (Bourdieu, 1998, p. 19).

Sometimes, habitus is informally described as the feel for the game that agents tacitly or explicitly know to be true, and functions as a kind of instinct that guides action. This means that habitus is both a mechanism to explain the propensities of observable regularities in behavior,
such as the kinds of aesthetic preferences and tastes of particular classes, as well as to provide a relatively coherent mental schema of perception and disposition which guide how actors understand and are able to comprehend their position and exploit their capital to act within specific fields. This makes habitus both generative and restrictive in that it produces particular propensities for action, but also limits the agent’s choices for action based on systems of classification and understanding of the objective social relations the agent finds himself or herself in. As Bourdieu explains, habitus is:

…both the principle of objectively classifiable judgments and the system of classification (principum divisionis) of these practices. It is in the relationship between the two capacities which define the habitus, the capacity to produce classifiable practices and works, and the capacity to differentiate and appreciate these practices and products (taste), that the represented social world, i.e., the space of life-styles is constituted (Bourdieu 1984, p. 165-6).

Bourdieu is seeking to unite structures with practices (i.e. social structure and individual action) whilst recognizing the need for a non-reductionist epistemology which acknowledges the reflexive nature of practices. This is why Bourdieu emphasizes habitus as an internalization of social structures which creates the propensity (sometimes he refers to this as a disposition) to shape individual action. He deliberately avoids employing any sort of language that would imply that action is structurally determined by objective class structures, as would perhaps be the case with Marx or Durkheim. Habitus sets structural limits for action, but at the same time “generates perceptions, aspirations and practices that correspond to the structuring properties of earlier
socialization” (Swartz 1997, p. 103). This engenders a nuanced understanding for the regulation of behaviour according to different class opportunities and processes of socialization crucial for the formation and maintenance of lifestyles and tastes. This helps explain why it can be understood as both a generative mechanism for patterns of behaviour, while simultaneously a constraining force which differentiates individuals based on access to social, economic and cultural capital. Habitus is thus the transformation of necessity into virtue (Bourdieu 1984, p. 171). Constraints therefore become internalized by agents as natural preferences which function to generate specific understandings of one’s position in relation to others. Bourdieu sees this most prominently in the collective formation of lifestyles as an internalization of economic constraints which produces, and reflects, a system of differences in propensity expressed through consumer tastes. Thus, the translation of necessity into virtue through patterns of behaviour, typically the consumption of cultural objects, functions to reproduce economic distinctions of class (Swartz 1997, p. 107). This means that habitus is both a generative mechanism, in the sense that it creates specific understandings, comprehensions, and appreciations that manifest into coherent schematisms of lifestyles and tastes; however, it is also at the same time a restrictive mechanism in the sense that habitus is structured by one’s access to capital in specific fields of production. Thus, habitus is both a structured structure, and structuring structure that generates dispositions, but also is structured by objective divisions of class.

2.5.2 - Location Data as Capital

The intensification of analytical knowledge about lifestyles and tastes (again, the dispositions of action and systems of aesthetic appreciation generated by habitus) likewise help understand how institutional forces such as marketers might comprehend habitus using location
data and spatial maps. This effectively means that it is possible to adapt Bourdieu’s concept of capital into an understanding of location data because of the ways location data can be understood to represent cultural and economic dispositions, and in turn how the accumulation of location data is increasingly seen a key strategy for measuring and managing mobile audiences, and in this way it is possible to understand how marketers appreciate location data as a unique kind of capital for anchoring specific kinds of media to mobile audiences. Put differently, location data possesses a unique kind of status in the field of location based marketing because of how it can be used to identify particular dispositions of audiences and therefore enact judgements about the kinds of capital audiences possess. Location data is thus a unique kind of capital to the field because it operates as a means for translating behaviours and practices into analytical knowledge of consumer lifestyles.

There is a clear pattern in the literature that reveals how the intensification of data in everyday life is serving to construct geodemographic segments by using software to map and differentiate populations across spatio-temporal lines, which in effect functions to reproduce particular social relations and structures. In this respect, it is possible to see how location data is valued as a unique source of capital for informing the construction of geodemographic segments because of how location data can be made to translate into cultural and economic insights about people’s routine dispositions of mobility through new cartographies of class and distinction. Geodemographic constructs tend to assume a particular quality of regularity in their reproduction because of how people and spaces are imagined by institutional epistemologies of class and distinction. The question then becomes a matter of understanding how new institutions of mobility and fluidity might be reconfiguring how people and places are produced, measured, calculated, and managed in order to maximize specific economic or political interests; how, in
other words, habitus can be rendered knowable into specific systems of classification in mobile digital culture.

To address this, it is necessary to investigate how location data is perceived as a source of capital by marketers; or put simply, how marketers believe location data could offer the potential to reveal fundamental truths about consumer lifestyles and tastes. Bourdieu’s concept of capital is important for his overall theoretical analysis of how agents perceive and understand themselves in specific fields, and how they reproduce particular social structures through specific practices of production and accumulation. The ways in which it is possible to understand how different agents internalize their position in the field and enact particular distinctions through habitus depend on the kinds of resources agents have at their disposal to comprehend and act within specific fields of production. Bourdieu identifies three primary kinds of capital that agents mobilize: cultural capital (such as one’s educational achievements), economic capital (typically one’s access to financial resources such as money), and social capital (that is, the kinds of networks and social relations an agent can exploit). The kinds of aesthetic preferences and distinctions made by individuals in the field are heavily contingent on the kinds of capital they possess (particularly, Bourdieu claims, their access to cultural capital), and are necessary for guiding how individuals choose, comprehend, and appreciate symbolic representations of material goods as a means of enacting particular kinds of distinctions. Bourdieu sought to understand the ways in which individuals manage their cultural adaptations and in turn comprehend the world in particular ways rather than explain it. Cultural capital thus becomes an instrumental resource in the production and mediation of taste, particularly for its ability to guide tastes into coherent systems of lifestyles and the production of distinction, or put another way, for informing how it is that social agents render social life comprehensible into particular
classifications. Thus, as Robbins (2005) highlights, Bourdieu’s analysis of cultural capital reveals how social and cultural differences are inseparable, which in turn helps explain why Bourdieu was primarily interested in approaching the study of culture as it is embedded in particular social fields through practices by individuals to achieve distinction.

It is possible to therefore position location data as signifying a particular kind of capital (or “meta-capital”) (Couldry 2003) that can be used by marketers to comprehend specific economic and cultural distinctions by accumulating location data about consumers in order to construct analytical profiles, such as geodemographic attributes. In turn, it is possible to see how location data as capital can be used by marketers to comprehend the habitus of specific individuals by allowing for an understanding of people’s tastes and lifestyles through an understanding of location frequencies and histories. As such, it is necessary to investigate the particular beliefs and values that marketers hold about location data in order to comprehend the extent to which they perceive its cultural and economic significance in the context of producing analytical knowledge of habitus.

2.5.3 - Location Data and the Field of Location Based Marketing

Field is Bourdieu’s final signature concept, and is instrumental for understanding the conditions in which particular kinds of capital come to possess value for social agents, and how capital can be exploited to accumulate distinction and reproduce structural hierarchies such as divisions of labour and concentrations of power. There are strong indications that the co-constitution of location data, mobile media, and infrastructures of smart cities are creating new fields of surveillance that seek to normalize the routine production and accumulation of personal information, in this case of mobility patterns and location histories, that can be used to produce
new kinds of cultural and economic opportunities for marketers. However, this requires that marketers engage in specific kinds of cultural politics of intimacy and trust in order to legitimate the intensification of surveillance and social sorting. This means that it is important to consider how the technical affordances of infrastructures are perceived, appreciated, negotiated, and sometimes resisted by mobile audiences and marketers in new fields of cultural and economic production. Thus, the intensification of data in everyday life can engender new affective dynamics that directly influences how the routine surveillance of consumers is normalized in the cultural fabric of urban lifestyles. Here, we can begin to see how this can unfold into specific areas of tension between audiences and marketers, particularly around how institutions of trust, consent, interactivity, and intimacy are perceived and negotiated. In turn, this can function to produce specific kinds of agencies necessary for the field to successfully reproduce itself.

Fields can be understood as spaces that contain specific rules that guide agents in the pursuit of distinction. In this respect, field is the backdrop against which various kinds of capital can derive their specific value, and so any discussion of capital must also acknowledge its internal and external limits within the specific field it is situated in. Furthermore, Bourdieu typically understands fields as spaces of production (Bourdieu 1993), meaning that it is where agents mobilize their capital in order to reproduce the structures of distribution, or conversely to challenge its distribution in ways that might better favour that particular agent. This means that there is an instrumentalist logic to fields in that typically, if not always, agents are seeking to make specific moves or plays on the field that they perceive to advance their own interests. Agents rarely, if ever, would deliberately engage in practices that would jeopardize their possession of capital. Fields are thus occupied by agents positioned across various kinds of roles and positions, and are all engaged in competition for control over specific resources specific to
the field, and thus “under normal circumstances, no one enters the game to lose” (Johnson 1993, p. 8).

It is possible to conceptualize location based marketing as a field of economic and cultural production that is structured by the distribution of particular kinds of capital, and relationships between people, locations, and media that marketers can render knowable into specific intimacies and distinctions. Here we see how the semantic and emotional significance of location and locative media discussed in the literature review can also be translated into new opportunities for marketers to exploit these intimacies and affective relationships between mobile media users, locations, and consumer lifestyles. This means that a key objective of this research is to understand how marketers envision themselves in a field of production, and how they envision their role and relationship with mobile media users in their everyday practices of creating spatial narratives or using mobile media to make sense of places and themselves. In this respect, it can become possible to understand the kinds of intimacies marketers desire to establish with mobile audiences by exploiting the infrastructural affordances of location data.

2.6 - Conclusion

This chapter provided an overview of how location data is being theorized in this dissertation, as well as an examination into relevant bodies of research. To briefly recap, it is evident that location data is becoming increasingly prevalent in the mediation of everyday mobile media practices in terms of how it can intensify the production of narratives and intimacies with space. At the same time, we see how location data is itself imbricated in larger trends of surveillance and social sorting, and carries strong theoretical similarities to the production of geodemographic knowledge. Finally, there are new trends in interactive mapping
that point towards the application of digital maps in everyday life that can generate or extract cartographic data from users in order to construct new epistemologies that are based on principles of volunteerism, prosumption, and crowdsourcing.

How marketers have begun to capitalize on these trends in mobile and location based media are not entirely clear, particularly with respect to understanding the potential of location data to identity, sort, and influence mobile audiences. As such, I argue that Bourdieu's theoretical and conceptual frameworks can help address this gap in the literature. First, Bourdieu’s concept of habitus is important because of how it positions consumer practices within a larger set of objective social structures that produce and simultaneously constrain how agents perceive, appreciate, and act in everyday life. This in turn helps guide how lifestyles and tastes are produced and understood both by vernacular and institutional epistemologies, such as geodemographics.

Second, it is possible to see how location data can translate into an important source of capital that could inform how marketers produce analytical knowledge about lifestyles and tastes by identifying mobile audiences through specific locations and location histories. It is thus important to investigate the extent to which marketers perceive and appreciate the value of location data for informing new methods of audience production, and for understanding institutions of lifestyle in mobile digital culture.

Finally, the literature in mobile and locative media consistently highlights how cultural and affective discourses define how audiences construct intimate narratives of space because of how such media can intensify the proxemics of people and places, as well as allow audiences to enact specific cultural and aesthetic judgments about locations. Therefore, it is necessary to understand how marketers understand this cultural production of space, and how they might hope
to mediate this process by inserting themselves into new fields of production and normalize new kinds of intimacies with mobile audiences.

This concludes the literature review of the dissertation. The following chapter examines the methodology of the dissertation, where I will explain my specific research questions, methodological approach, and instrumentation.
Chapter 3 - Methodology

3.1 - Introduction

The conclusion of the literature review reflected on how contemporary discussions of surveillance, mobile media, and critical geography are culminating around key themes of audience production through digital media, its measurability and classification into geodemographic segments by institutional forces of knowing capitalism, and the cultural economies of intimacy that govern the production of location data across various fields, such as location based marketing. In this chapter I will outline how this dissertation approached the relationship between location data and marketing. First, I will explain the research questions that guided my data collection. Second, I will explain my epistemological commitments. Finally, I will explain the specific approach and instrumentation that define my methodology.

3.2 - Research Questions

First, this dissertation asks: what are the underlying beliefs, values, and philosophies that location based marketing industry actors hold about location data, particularly with regards to how it can provide marketers with new insights and methods for knowing and influencing consumers within specific spatio-temporal contexts? This question seeks to critically situate the discourses of location data that marketers enact in the field of location based marketing in order to understand how they imagine consumer lifestyles and tastes in mobile digital culture.
The second research question examines the larger structural relationships between marketers and consumers, and asks: what is the political economy of location data? Here, I will focus on the underlying structural rules and logics that govern how location data is produced, accumulated, and exchanged between marketers and consumers in the field of location based marketing. I thus examine the production of new kinds of cultural and economic value, the rules that govern mobile engagement strategies, the kinds of problems or challenges marketers must negotiate in the field to earn consumer consent and trust, and how power and authority is interpreted or challenged between marketers and mobile audiences. Here, I conceptualize consent as a key objective of the field because of how marketers must carefully negotiate how consumers understand the field of production, particularly as the collection of location data might be interpreted as an invasive form of surveillance and social sorting, let alone an interference with routine or vernacular practices of consumer culture.

Together, these two core research questions help to understand the significance of location data as it is informing a new field of location based marketing. This is important because it will further scholarly discussions around the changing nature, scope, and intensity of the private sector to produce analytical knowledge about consumer lifestyles through new kinds of location based surveillance. Furthermore, it allows us to better comprehend the power dynamics that structure the institutional relations between marketers and audiences in the field, particularly by critically examining how notions of empowerment and authority are informing mobile media practices, including how consumers choose, or are encouraged, to engage with marketing infrastructures. It thus examines the underlying logics and practices of how marketers conceptualize, measure, and influence mobile audiences, and how marketers understand the distribution of power, influence, and authority in the field of location based marketing.
These research questions are both oriented around comprehending how location data is believed to reveal new cultural insights about consumer lifestyles and tastes, and how marketers must make particular claims about habitus, particularly in order to successfully embed consumers in a field of reproduction and capital accumulation. This allows us to critically examine the kinds of beliefs, meanings, assumptions, and epistemologies that marketers leverage in order to successfully reproduce their capital in the field, by focusing on how marketers try to assert specific cultural, economic, and affective correspondences between their own habitus and those of mobile audiences. Furthermore, this helps reveal how the field of location based marketing invests specific meanings and values into particular kinds of social, cultural, economic capital.

3.3 - Epistemological Framework and Commitments

This dissertation can be broadly situated within an social constructionist and interpretivist epistemological tradition (e.g. Berger and Luckman 1966) where we examine how particular kinds of meaning and knowledge are socially constructed by agents embedded in a field of cultural and economic production. As such, this dissertation employs a qualitative epistemological and methodological framework in order to make new explanatory insights into the specific beliefs, values, and assumptions of a new field of production. I do this using qualitative interviewing, document analysis, and participant observation as my three key pillars to the data collection. Before explaining the actual mechanics of my instruments, a few brief points about my epistemological commitments are necessary.
Throughout this project I assume that all knowledge, including scientific knowledge that stakes claims about the natural world, are necessarily embedded in particular social structures and relationships. Knowledge is therefore an ongoing social construction that is embedded in particular social contexts and orders (Berger and Luckman 1966). This carries a number of key considerations. First, it assumes that knowledge is historically contingent, mutable, and subject to interpretation by a heterogeneity of social forces. Knowledge is situated within shared socio-linguistic relationships between individuals and does not exist independently of them. Second, it assumes that knowledge does not merely describe a pre-existing reality, but instead enacts particular ontologies through specific relationships between humans and non-humans such as scientific and technological instruments that do exert certain kinds of agencies over the production of knowledge (Latour 2005). Finally, it assumes that technologies themselves are subject to various kinds of cultural and economic investments of meaning and knowledge which play critical roles into mediating the discursive and material practices of digital culture (Pinch and Bijker 1984; Hand 2008). However, that said, following Bourdieu’s epistemological approach, I acknowledge that the existence of objective social structures and social facts exert pressure on the ways that agents understand or limit their position in the field and engage in particular kinds of social practices. Put differently, I assume that not all action is guided exclusively by culturally contingent discourses, nor will they necessarily correspond in a linear fashion, because the capacity for discourse and action is guided by how agents comprehend their position in various structural fields of social relations, and how these relations are internalized as objective social structures that structure, influence, or coerce our ability to act.
This thesis approaches the process of social science research through the ethnographic principle of allowing actors to speak for themselves, and situates the researcher as not necessarily an authority over the epistemological orientations of participants, but more as an outsider seeking to penetrate and understand particular fields of knowledge and practice (Luker 2010). Spradley’s (1979) ethnographic approach to the interview is a key methodological framework for situating participant as an informer, arguing that an ethnographic interview is a particular kind of speech event wherein rules and practices govern the ways in which an interviewer probes an informant. The emphasis on participants as informants is a key methodological insight Spradley identifies as it positions the subject as having privileged information based on their cultural context. Theoretically, Spradley argues for a symbolic interactionist approach to understanding the role of language in the constitution of cultural forms and identities. The ethnographic approach stressed here identifies the objective of research as not so much the testing of empirically verifiable hypotheses or formal theories, but instead on understanding the complexities of behaviour and meaning within a particular cultural group or repertoire of practices.

Following Bourdieu and Waquant (1992), one of the objectives is to develop a reflexive approach to sociological research by situating specific claims to knowledge within the social structures they emerged from, and to adopt a particular attitude towards the researcher’s subject of inquiry that enables both knowledge and critique. As Costa and Murphy (2015) argue, Bourdieu’s reflexive sociology is achieved through critical reflections of the social world by both the researcher and the researched, with the ultimate aim to produce an awareness of the understandings and practices which are typically tacit or unconsciously felt. There are some who question the value of reflexivity, or even the extent to which it exists as an ontological
possibility, and instead posit that it might be more a fashion of qualitative sociology. Some scholars have also led the charge against epistemological relativisms and reflexivities as leading to a game of “epistemological chicken” (Collins and Yearley, 1992). Many possible definitions to reflexivity could be formulated, and from a certain point of view, one can point out that it is impossible to not be reflexive in methodological design (Lynch 2000). As such, reflexivity is understood as an important methodological priority for this research, but ultimately not a standard benchmark of validity.

3.4 - Data Collection and Instrumentation

The data collection is divided into three core phases which largely progressed concurrently over the course of about one year, beginning in January, 2015. The first phase consisted of tracing out an overview of the field of location based marketing, and was primarily concerned with creating an inventory of key companies, products, and technologies. I gathered this data using two primary methods. First, I assembled literature from mobile, digital, and location based marketing companies, media, and industry associations. These documents are typically called “white papers” in the industry in that they bear strong resemblances to policy papers, however, the white papers are typically written for potential clients by technology vendors. This usually consists of an explanation of how the field is changing, usually because of a new technology or a new practice by mobile consumers (for example, “showrooming” describes when a consumer compares prices on a product using their mobile phone while inside a retailer that sells that product), what kinds of new risks this has engendered, and finally, how their particular product or service can remedy the perceived or manufactured problems. Although
these reports are described as white papers, they are usually well disguised advertisements that often follow a generic discourse around how shopping and information seeking have changed dramatically because of mobile and location based technology, and how the vendor’s particular service or product will help realize key institutional objectives such as unlocking the analytical power of location data or stimulating consumer engagement. The solution is typically proposed through a socio-technical framework whereby marketers must endow consumers with new kinds of agencies, and leverage a new technology as a solution to mediate these assumed agencies.

The second approach to this phase of data collection sought to produce an inventory of the key companies that are embedded in the field of location based marketing. I did this by following a weekly audio podcast produced by the Location Based Marketing Association (LBMA) that discussed industry trends, events, stories, and new companies. The LBMA (2016) describes itself as:

The Location Based Marketing Association is a international group dedicated to fostering research, education and collaborative innovation at the intersection of people, places and media. Our goal is to educate, share best practices, establish guidelines for growth and to promote the services of member companies to brands and other content-related providers. Members of the LBMA include retailers, agencies, advertisers, media buyers, software and services providers, and wireless companies. Simply put, we want to help those engaging location-based services be as successful as possible.

The LBMA represents an instrumental marketing organization that is heavily invested in stimulating location based marketing companies, technologies, and, of particular importance,
discussions around the value of location in contemporary marketing practices. Here, the weekly podcasts are evidence of the LBMA’s efforts to sustain particular kinds of discussions around location based marketing that could be used to educate or inculcate the public into perceiving the value of the field. I followed this podcast primarily to develop an inventory of key companies that leverage, in one way or another, location data as part of their business model. I analyzed 63 podcasts produced weekly by the LBMA from 2015 to 2016. The selection of 63 podcasts spanned the entire 2015 year, plus 11 weeks of 2016 podcasts. As a brief note on the podcast format, the weekly podcasts would range in length but were on average under an hour. They are always divided into two main sections. After a brief introduction and banter between the hosts (this is always the president of the LBMA, Asif Khan, and his co-host), the first section is the “top ten” news stories of the week, where the hosts would list ten stories or events that highlighted location based marketing success stories, such as new campaigns, a new company that entered the market, and so on. The second portion of the podcast would typically center around an interview with a company, or some other explanation of a new company or campaign. My interest in the podcasts were exclusively to gather data from the top ten news stories, again, as my intention was only to produce a database of location based marketing companies. There is no doubt that the second portion of the podcasts could also be valuable for my research, but it was not my focus here.

I stopped after 63 episodes because at this point I felt I had achieved saturation in that I felt confident I had ascertained a sufficient sample of companies that occupy the field. This was particularly the case for companies that worked in location analytics who would often be repeated in different podcasts as the data collection went on. Analyzing the white papers and podcasts resulted in the creation of a database of 62 companies that occupy the field of location
based marketing. The complete list is included in Appendix A. It is of course possible that there are companies that exist in the field that I am not aware of, or for that matter, that some companies have consolidated or merged with others, or are simply now defunct. Future research will be required to develop a longer analysis of which companies persist in the field in order to identify the major players in the field.

The analysis of podcasts was relatively simple because my intent was strictly to provide an inventory of key companies. However, the analysis of white papers was slightly more complex. Here, the reflexive approach to my data collection was useful because, while these white papers are ultimately well-dressed advertising, they do reveal fundamental beliefs concerning the kinds of risks and opportunities that structure the relationship between consumers and institutional agents such as marketers, brands, and retailers. We can reasonably assume that these documents have explanatory value because of their rhetorical power in guiding the overall discourse of the market. They tend to enact new kinds of problematizations, and reveal the underlying game of production and exchange between various institutional forces of supply and demand. I consider these documents as significant because they embody what Callon (1986) calls “obligatory points of passage” in that they function as necessary socio-technical discourses that various actors in the market must articulate in order to sustain new market practices and relations of production and exchange of capital. Likewise, I believe they fulfill an important function (beyond trying to sell a product or service to a client) in that they can reveal the underlying beliefs about the asymmetric power relations between institutional forces and vernacular cultures and practices. In total 43 white papers were analyzed. A full list of the white papers is provided in Appendix B.
Several methods were used to acquire the white papers. First, I subscribed to daily marketing digest e-mails that are compiled by a mobile marketing website, mobilemarketer.com. Every morning, Mobile Marketer sends out a daily brief of relevant stories, but occasionally they would feature a new white paper released by a mobile marketing company. These stories were mostly promotional pieces about the integration of a mobile element into a marketing campaign, or about new challenges currently unfolding in the field in terms of consumer targeting, acquisition, and conversion. Typically, in order to access the white papers I was required to fill out several fields asking for my contact information, including name, e-mail, industry, and so forth. As a second method for data capture, I subscribed to Google alerts on “location based marketing” where I would receive a weekly compilation of news articles algorithmically harvested from the web. Sometimes, again, this would direct me towards newly published white papers. Finally, I acquired the data simply by scouring, ad hoc, marketing company and industry websites, as usually they would have entire sections devoted to market research white papers.

The second phase of the research consisted of in-depth qualitative interviews with industry agents employed in various capacities in the field of mobile and location based marketing (Holstein and Gubrium 1995; Holstein and Glassner 2004). I conducted 14 interviews in total that ranged between 20 and 90 minutes. The interviews were semi-structured in that my main objective was to probe their philosophy of mobile and location based marketing, what they were doing with mobile and location based media to target and influence consumers, how they saw the value of location to inform new understandings of consumer lifestyles and tastes, and what sorts of challenges they were facing in the field. Therefore, I would ask typically open-ended questions, such as “explain your philosophy of location based marketing,” or, “what can location tell us about people,” or “explain what your company is doing with location data.” A
copy of the interview guide is included in Appendix C. Appendix D provides a copy of the general recruitment letter.

Each of the participants occupied very different positions in the field from one another in terms of the specific kinds of cultural, social, and economic capital they possessed, and overall revealed a complex field in which agents tended to possess very different kinds of capital which they use to position themselves in the field and enact particular market strategies. The participants of this phase varied in terms of their specific roles and responsibilities. They also varied in terms of the size and reach of their company, such as for example, an entrepreneur of a local digital marketing startup company, to a media planner for a global marketing company. A full list of the participants (anonymized) is included in Appendix E.

My overall rationale of recruitment was to target participants from a “top down” approach, meaning that I would first aim to recruit the person with the most authority in their organization. Typically this would be in the upper echelons of management, such as the President, CEO, or some other position of higher authority. From there, I negotiated with them by explaining my research project and objectives in order to gain consent. Sometimes, this would succeed and I was able to interview them directly (I ultimately conducted seven interviews with high ranking members of marketing companies or associations). Other times, I was directed to some other member of their company, such as for example, a data scientist (only one interview occurred this way). Third, while attending marketing conferences, I networked with those in attendance whom I believed would be willing to participate in an interview. This method was more ‘ad hoc’ in that I had to make very immediate judgements about whether or not they would be valuable to interview, and whether or not they were interested in participating (in total, I conducted four interviews from this approach).
Finally, three participants were introduced to me via a colleague of mine who works in a boutique market research company that has offices in major cities throughout the globe. I was deeply fortunate to have this prior connection, and ultimately this resulted in three interviews. However, one of the interviews was omitted from my final sample and analysis. This was because the participant, who is employed in a major financial institution in Canada, explained to me that in order to provide official consent (by signing my informed consent sheet as required by the University of Toronto research ethics board), they would be required to consult with their legal department, and the whole process would have dragged on for months. We came to an agreement that the interview would not be recorded and would only function to provide me with a sense of background around what their organization is trying to do with mobile media. However, the interview itself became further mired in difficulty. The interview was undertaken over the telephone, and I was informed that another person (an intern, they claimed) was listening in on the interview to learn about how to handle these types of scenarios (i.e. speaking to “the public” as a public relations officer). Not surprisingly, I found their answers to be generic discourses about the need for the financial sector to leverage mobile media to better cater to the changing nature of how consumers use mobile media to access financial information when making key purchasing decisions around consuming financial products, in effect confirming what I already assumed about the theoretical significance of mobile digital culture on existing consumer practices and norms. I decided after the interview to therefore omit their responses from coding and analysis because it was obvious that the participant was under pressure from their employer to not disclose key details.

Throughout most interviews my participants largely offered generic or ‘boiler plate’ answers to my questions, and created many challenges for me in terms of realizing my
underlying methodological objectives of developing a more in-depth reflexive narrative. However, the manner in which my participants tended to respond using such discourses is in itself an interesting finding of the research. That is, the consistent use of generic marketing rhetoric to explain the logics and beliefs of the field demonstrates how marketers are apprehensive about disclosing their true objectives and strategies towards outsiders such as myself, and instead rely on institutional discourses as an attempt to demonstrate their value and authority in the field, particularly if there were strong economic incentives involved. Put differently, it is possible to see how many of the responses offered by my participants were deliberately vague or generic because, as marketers exploring an emerging field of production, their primary objective is to convince the public to value and trust their endeavours, their authority, and their company to deliver new kinds of targeting and engagement that they assume is desired by consumers. The discourses revealed during these interviews, in other words, reveal an important correspondence between the institutional values, beliefs, and authorities of marketers that function to legitimate their position in the field by appealing to specific cultural and economic narratives of the value of using location data to empower consumers in mobile digital culture. For marketers, there is a direct correspondence that legitimates the intensification of surveillance as a means of innovating new kinds of economic and cultural values, markets, and intimacies with mobile audiences. Thus, it became evident that, in order to properly analyze and critically understand the responses of my participants, I had to theorize how their discourses contained a hidden performative dynamic that functioned to structure the field and legitimate particular power relations between marketers and consumers.

The third phase involved attending and observing industry conferences. I attended six events that varied in size (as measured by attendance) and importance (some where local and
routine industry meet ups, such as a Christmas party, and others were international conferences for marketing professionals). A full list of the events attended is included in Appendix F. These conferences are typically hosted by some sort of marketing association, and are usually attended by major brands, retailers, and software companies interested in learning about how location can inform new marketing campaigns and relationships with consumers. Often, these conferences would be organized around a specific theme or vertical. For example, one conference was about learning how the sporting entertainment industry could leverage mobile and location based marketing to boost consumer engagement and conversion rates. Of the six events I attended, two were very large marketing conferences held in large capacity hotel conference halls—one in Toronto, which I estimated had several hundred attendees, and one in Chicago that had about 100 attendees. Although these conferences happen fairly regularly, I was only able to attend two due to financial or logistical limitations. These difficulties in accessing potential sites for data collection are the direct reflection of the objective conditions that define the field of mobile and location based marketing. The ability to access and participate in this field is necessarily contingent upon access to social, cultural, and economic capital; and because I am ultimately an outsider to the field, these structural forces were significant barriers that limited my ability to penetrate the field, build social networks, and collect data. This is in itself an important finding, and reinforces existing theoretical discussions concerning the “crisis” of empirical sociology, and the relationships (or lack thereof) between academic and commercial sociologists (Savage and Burrows 2007; 2009).

The objective conditions of capital that challenged my ability to access the field in effect confirmed my theoretical assumptions. The capacity for access, participation, and establishing trust is contingent upon the kinds of specific resources one possesses, and directly confirms the
existence of objective social structures that are designed to restrict the production of cultural and
economic capital in the field. Distinctions are therefore inevitable products of a larger division of
labour, and the ability to produce analytical knowledge fundamentally depends on how an agent
can successfully position themselves in the field by exploiting the different kinds of capital they
possess. In turn, this necessarily means that my own ability to investigate and reveal hidden
truths about the field are structurally conditioned by the kinds of capital I possess and the kinds
of moves I could make in the field as an agent with my own set of interests. However, rather than
framing this social fact as a weakness in my methodological design, I instead perceive this to be
an important insight about the nature and social conditions of the field, and so I choose to
interpret the failures to access and participate in the field in ways I had originally hoped as a
significant finding about the unequal distributions of power and capital. It moreover taught me
important lessons about how to breach and negotiate the field. I will offer some
recommendations in the conclusion for researchers hoping to penetrate these fields based on my
own experiences.

Aside from these major events, I attended three smaller industry events in Toronto all
hosted by the Location Based Marketing Association (LBMA). The LBMA is a Toronto based
global marketing association with whom I owe a great deal of thanks for helping me conduct my
data collection. The LBMA is a vital industry association that exerts significant influence on the
production of location based marketing as a field because of their role in bringing together a
heterogeneity of vendors, suppliers, verticals and markets. Overall, I found the LBMA to be
quite accommodating to my research, and they were instrumental in helping me establish
important connections with the industry. I was able to penetrate the LBMA through a
combination of persistence and naivety, in that I learned how to exploit my status as a PhD
researcher funded by a Social Sciences and Humanities Research Council (SSHRC) doctoral scholarship as a mechanism for penetrating the field. Simply put, I learned how to sell myself in the field by appealing to their desire to advance the field, and I did this by explaining to them that my research was funded by a Federal Canadian scholarship intended to advance Canada’s digital economy. I am extremely grateful to for this scholarship because I believe that it was instrumental in helping me penetrate the field and convince my participants that my research had tangible value for them. Furthermore, this scholarship was an important source of cultural and economic capital that helped distinguish myself as a researcher. I am not arguing that it would have been impossible for me as a social scientist to penetrate the field without it, but I do believe that it made a significant difference in my ability to convince my participants that I was worth their time. In effect, it shows how institutional distinctions such as scholarships help reproduce structural inequalities in the field of academic research by granting particular notions of privilege and status on researchers.

My objective for attending these conferences was both for recording data and, more importantly, networking with the industry in order to recruit participants. Sometimes, I was able to conduct brief interviews with very important agents during these conferences, because it was in all likelihood the only opportunity I would have to speak to them in person, and therefore I knew that I had to exploit every moment I had during these conferences to introduce myself and request a moment of their time for an interview. Typically, I would employ the “foot in the door” technique in that I would ask for a quick 20 minutes of their time, and appeal to their pathos by explaining to them that I found their company to be very interesting for my research. It was a gamble. With any luck, I could turn 20 minutes into 30 or even 40 if I gained their attention, interest, and trust.
I learned very quickly that this is a field characterized by speed, and that if I were to gather any qualitative data, I had to be aggressive by seizing any opportunity that came my way. I had to adopt my own particular methodological beliefs to conform to the logic and practice of an entirely different field of production, and quickly realized through trial and error that the field of marketing operates under very different rules and imperatives than those held by academics whom typically value participation through a much different lens of time, quality, and care. It became a matter of understanding how they operate in the field, and the kinds of obligations and expectations they must negotiate, typically under very intense temporal conditions. It became a matter of realizing that ultimately marketers embedded in this field are not interested in you unless you have something to offer in exchange, and so I was forced to adopt a reflexive approach to my data collection wherein my recruitment depended on my ability to quickly intervene in their busy schedules, even if it was just for a brief interview to learn about their business through an emotional appeal of curiosity. This was learned the hard way through failure, and has helped me as a researcher in terms of learning how to recruit participants embedded in capitalist enterprises. For example, in the first major marketing event I attended, I reached out and introduced myself to a major executive of Nielsen (arguably the largest audience research company in the world), who expressed interest in connecting me with some of their staff for interviews. My initial feelings of optimism for making this connection quickly dissolved into a realization that I was merely being placated. After many back and forth e-mails it became clear that they were not going to help. I learned from this experience that, under conditions of necessity that were well beyond my control, I had to make certain methodological sacrifices about the kinds of interviews I could realistically accomplish for this project, and so I had to learn how to conduct rapid interviewing methods because it would be my only chance.
Ultimately, my initial assumptions about positioning my approach to recruiting participants by appealing to a larger altruistic pathos as an incentive was not as effective as I had initially anticipated. I learned in other words that the field of marketing is governed by very clear rules of exchange, and that I did not really possess the kinds of capital many of my participants were trying to exploit in return for something they considered valuable. Thus, there are very pronounced structural forces that defined the objective conditions for establishing important social relationships between academic and commercial sociology. Despite my efforts to appeal to and recruit participants, there was always an omnipresent question of why I was worth their time, particularly because I could never possibly be a potential client, let alone agent that could provide new insights and value for informing their overall market strategy. As Ang (1991) observed, much of what actually goes on in the world of market research is done in obscurity from public view and critique. An outsider interested in learning about how a particular company actually undertakes the work of manufacturing specific understandings of consumer lifestyles and tastes is thus structured by a larger political and economic conflict of the pragmatic value of this inquiry. I furthermore did not want to risk engendering any conflict as I was hoping to keep the channels of communication open and positive in case I could ask them for more information later, or to be connected with someone else.

3.5 - Coding and Analysis

I coded the data using NVIVO 10 (a digital application for coding and analyzing qualitative data) through an iterative approach to identify the most important discourses marketers articulated about the potential of location data to engender new kinds of audience consent and interactivity. This approach to coding is also known as "pattern coding" (Miles and
Huberman 19994, p. 69) whereby the objective is to search the text for "repeatable regularities" that can help identify and explain key themes. In this case, the objective of coding the data was to thematically group my findings about how marketers perceive and value the potential of location data to identify, cluster, and influence audiences. These primary themes are what Schrier (2012) refers to as "dimensions" or "main categories" of the coding framework. Again, the primary objective of this dissertation is to map out the field of location based marketing by understanding what kinds of social and material relationships are considered valuable (or conversely risky) by marketers, and what kinds of capital and opportunities marketers are hoping to accumulate in order to stake particular beliefs of authority and legitimacy.

The coding stage followed an iterative process until I felt I had reached a set of codes that represented the objectives of my dissertation, and had reached a point of saturation. I coded my data through a reflexive approach whereby my clusters (or nodes as they are called in NVIVO) were continuously revised based on the introduction of new findings and my own reflections on the data collection phase. The overall purpose was to analyze the data by thematically examining how I could cluster the data into coherent nodes that reflected the goals of understanding the political economy and cultural politics of location data. To be clear, this means that throughout the course of my data collection, I was simultaneously organizing and classifying my findings into specific clusters that changed over time. I did not proceed in a deductive fashion by first collecting all my data, and then organizing it into a predefined schema. Instead, the data was collected and analyzed as the research unfolded using an inductive and iterative design (Ragin 1994). This had several key advantages, particularly because it allowed me to critically reflect on my existing findings in order to inform my future approaches to interviewing and probing my participants. Furthermore, because in many respects the field of
location based marketing is arguably still in its nascency, this approach allowed me to be receptive to new findings derived from my empirical observations, rather than simply restrict my analysis of the data through a rigid theoretical framework. Somewhat ironically then, there is a certain methodological and epistemological correspondence between the structural dynamics of location based marketing and my own efforts to understand it. Namely, conventions of fluidity, reflexivity, and critical interpretation largely characterized how I approached, queried, and analyzed my data because it is precisely how marketers also negotiate their own position in the field.

Given my overall research objectives, questions, and core theoretical assumptions, the coding process was largely focused around analyzing how location data could inform new methods of audience conceptualization, measurement, and influence of consumer lifestyles and tastes in mobile digital culture. This iterative approach to coding meant that I largely analyzed the discourse of marketing in terms of how marketers understood location data as a ‘new’ or special kind of technique for audience production, and in turn how it could legitimate their own particular beliefs, values, and efforts in the field. I therefore analyzed the data with the objective of identifying key discourses that revealed what makes location data a particularly important difference in contemporary digital marketing. I focused largely on coding the particular affordances and challenges marketers articulated about how they understood the field, and why they believe that marketing is radically changing because of the analytical power of location data. As the analysis unfolded I quickly found that my nodes swelled in number: 13 primary nodes with over 10 entries each, and over 30 smaller nodes with under 10 entries. I therefore focused the majority of my analysis on the larger nodes with the most entries for simplicity. Several nodes only contained one or two entries, and thus I eliminated them from my analysis as
they were deemed insignificant for this dissertation. Appendix G contains a list of the 13 primary codes used in my analysis.

3.6 - Conclusion

Having explained my methodological approach and commitments, the following three chapters will explain key findings in terms of the political economy and cultural politics of location data. Chapter four will explain the mobile distinction, where I critically examine how habitus and distinction are conceptualized by mobile and location based marketers. In chapter five I explain the production location data in order to reveal the different configurations of infrastructure and audience labour inherent in location data. Finally I will explain the cultural politics of the field of location based marketing with specific focus on understanding how location data is perceived and appreciated by marketers, and how affective conventions of consent and trust structure the field of production. Following this, I will offer a brief analysis, recap, and conclusion of the dissertation.
Chapter 4 - Habitus and the Mobile Distinction

4.1 - Introduction

In this chapter I will explain what I term the mobile distinction. This refers to ways in which location data is redefining how marketers imagine, conceptualize, and measure mobile consumers, and what kinds of beliefs, values, and philosophies they articulate in discourses about mobile lifestyles and tastes in order to legitimize the field of location based marketing. This is important because, following a long line of research in media audience research (Bermejo 2009; Livingstone 1998; Fisher 2014), it is important to examine how media industries imagine and actualize audiences in order to create specific kinds of institutional relationships, particularly economic relations of production and commodification (Ang 1991; Bratich 2005). Furthermore, as Turow and Draper (2014) argue, there is an increasing need to pay special attention to institutional conceptions of audiences in digital environments, including the kinds of powers, agencies, and propensities audiences are assumed to possess when interacting with media. Therefore, rather than beginning my analysis with an explanation into the kinds of technologies used to produce location data, I start instead by looking at the underlying system of beliefs that sustain the field of production and which create particular conceptions of cultural and economic value, how marketers perceive their relationship to mobile consumers, and how they imagine the habitus or “sense of place” of consumers in location based marketing (Hiller and Rooksby 2005).

I will largely focus on understanding how the smartphone is assumed to have transformed the relationship between consumers and marketers because of its ability to endow consumers with new kinds of agencies and authorities, how the smartphone is fundamentally seen as an empowering tool that consumers leverage in the field to inform their consumer practices and
aesthetic distinctions in both material and digital contexts, and how marketers perceive how the smartphone has augmented one’s sense of place in various ways. As was explained in the literature review, existing research in mobile and location based media argues that there is an important relationship between consumer identities and mobile media as evidenced by the investment of time and capital into constructing, negotiating, and performing particular kinds of identities through mobile media. Therefore, the focus of this chapter will examine how marketers understand this relationship between people, places, and media, and how this relationship is enacting new kinds of spatial logics and marketing practices that are invested in targeting consumers in increasingly specific and intimate “micro moments.” There are several reasons that explain why marketers are investing in developing increasingly precise and granular marketing strategies in mobile digital culture, but what is of particular interest is how it is rationalized as a more authentic form of engagement that consumers genuinely desire from marketers. That is, it is about how marketers believe that consumers want particular kinds of distinction, particularly in order to accumulate cultural capital.

4.2 - Critiquing Existing Channels of Audience Engagement

The significance of mobile media for marketers can be understood in terms of how it emerges from a larger history of digital marketing largely monopolized by desktop (or static) spatial relationships between marketers and consumers. This larger context defines how marketers perceive the relations of the field and the kinds of capital they possess to inculcate new strategies of acquisition and conversion. The smartphone has arguably become a focal point of recent marketing discourse, and symbolizes a new opportunity for addressing the failures of
desktop marketing to effectively target and influence consumers. There is evidence to suggest that marketers are beginning to critique existing methods of serving advertising to audiences, particularly through desktop based web browser advertising, as typically engagement metrics such as clicks and conversion rates are very low. Problematizing conversion rates in desktop advertising is important because it reveals important tensions marketers must negotiate regarding how they perceive the absolute value of precision targeting to deliver personalized content, compared to how consumers actually respond to, or ignore, their efforts. One white paper in particular goes into detail to explain the failure of online advertising to realize significant conversion rates, and argues that location will help marketers realize new efficiencies in conversion rates:

The effectiveness of online advertising has decayed every year since the first banner ad was introduced. For example, in 1994, a banner ad on HotWired reported an incredible clickthrough rate (CTR) of 78%. In 2011, the average CTR for a Facebook ad was dramatically lower at only 0.05%. Effectiveness has also declined for other digital marketing platforms such as email, online search, and in-app mobile advertising—once the novelty wears off, engagement tends to drop off (CMO Insights, n.d., p. 3).

The failure of marketers to demonstrate the value of digital marketing (and in turn algorithmic serving of advertising) is a significant problem facing the industry because it problematizes the belief that simply serving targeted advertising will necessarily increase conversion rates and efficiencies in media spending. More importantly, the subtext of this rationale is premised on certain kinds of beliefs about consumer habitus in terms of their
propensities for engagement. If marketers wish to successfully accumulate capital and maintain their position in the field, they must enact new kinds of distinctions by interpreting habitus as it is embedded in complex flows of targeting and acquisition across a myriad of possible channels:

Finding effective ways to reach consumers has become the biggest challenge facing advertisers today. Traditional methods of advertising are becoming less effective as consumers are no longer spending time in places where marketers have traditionally had an advantage in reaching them. To recapture attention, advertisers are forced to navigate a complex media landscape in pursuit of an often distracted and unreceptive consumer (CMO Insights 2014, n.p.).

Paradoxically then, marketers are beginning to problematize the value of contextual targeting in terms of how it might risk engendering audience disengagement, but at the same time the solution is to actually intensify this production by shifting focus towards new channels such as mobile. Negotiating the perceived indifference and anomie of consumers towards digital advertising is the primary challenge marketers face when seeking to redefine the dynamics of the field, and requires that marketers re-imagine habitus as it is embedded in new socio-technical practices of mobile digital culture. The necessity to re-target and engage the unreceptive consumer is important because this discourse of consumer agency sets the stage for understanding how marketers envision habitus, and why they see the potential for mobile and location based marketing to enact a new field of cultural and economic production. This rationale is premised on the importance of the smartphone as a new opportunity for marketers to eventually realize their agenda for developing an omni-present and omni-channel regime of
consumer targeting and acquisition. The Canadian Marketing Association, for example, believes that despite the risks of consumer disinterest in precision targeting, it can be resolved by actually intensifying this practice by developing new “seamless” experiences whereby marketers can attach themselves to consumers through smartphones, effectively allowing them to further entrench themselves in the everyday practices of aesthetic distinction:

The industry’s constant journey toward the Holy Grail, a seamless ‘all-channel’ shopping experience – one that can break down the walls between business channels and deliver a seamless, consistent, engaging enterprise-wide shopping experience – was driven by the consumer’s adoption of smart phones (CMA, n.d., p. 3).

The adoption of the smartphone into everyday practices of consumer culture is significant for marketers because it is perceived to offer them the ability to accompany consumers across their shopping practices; this means that the new objective for marketers is to determine how best they can engage consumers through mobile media because it is inherently assumed that mobile channels will offer more positive and engaging experiences for consumers, and therefore lead to greater conversion rates and consumer loyalty. Here, marketers are articulating what they might consider an ideal socio-technical scenario given its abundances for consumer targeting. They are in many respects speculating on the assumption that the intimate relationships consumers invest into their smartphone can be capitalized on and exploited in a similar fashion. In effect, we see the convergence of multiple fields of cultural production necessary to commodify and exploit consumers through mobile channels. This is known as mobile engagement:
Mobile engagement is the act of engaging a user through available messaging channels inside and outside of an app. Companies use mobile engagement to deliver positive brand experiences, support their business goals and build valuable, long-term relationships. Engagement typically starts the moment a user downloads your app. Showing users your app’s value from the very beginning is essential to building a long-term relationship that keeps them coming back (Urban Airship, n.d., p. 3).

We can begin to see how engagement occupies several layers of interactivity that are both internal to specific devices and software, but also external in terms of spatialities. This likewise begins to reveal that the homologies of the field are understood through both digital and physical spaces, effectively revealing how marketers seek to develop new strategies that break down or de-differentiate the spatial dynamics of the field. Interestingly, discussions of mobile engagement have become a significant opportunity but also risk for marketers when determining the kinds of agencies that consumers can exercise in routine consumer practices. Martin (2013) for example argues that marketers need to re-imagine shopping beyond the final point of purchase because consumers can now vocalize their shopping on social networks immediately after, creating a “Mobile Shopping Life Cycle” whereby any purchase, especially big ticket commodities, will also have a digital afterlife on social networking facilitated by mobile media. It is therefore both about recognizing but also annihilating spatial differences in order to sustain new homologies of fields. The cycle of shopping is at once both mobile, digital, and physical, and necessarily means that consumers must be acknowledged to exist simultaneously across these fields; the task is therefore to establish new homologies in order to maximize acquisition
and conversion. This does not necessarily guarantee that consumers will speak positively about a particular event or purchase, but the discourse tends to largely placate risks with new effervescent opportunities for mobile engagement. This claim reveals how marketers assume that mobile software installed on a consumer’s smartphone signifies a key source of value that can translate into new opportunities for engaging consumers in a long-term strategy. In effect, serving banner ads over desktop environments is thus seen as a short-term, one-time strategy for targeting and acquisition.

By contrast, when a consumer chooses to install an app onto their phone, marketers perceive this as a much more meaningful and authentic opportunity for engagement because of how conventions of choice are assumed to govern and inform the kinds of relationships sought by consumers with publishers and marketers. It is thus a distinction defined by the assumption of desire. By framing app installation and engagement within rhetorics of choice and distinction, marketers are able to redress the failures of digital advertising due to its relative neglect of habitus, and instead argue that the choices of consumers to install particular kinds of software signify genuine desires to build cultural and economic relations in the field. In other words, the success of mobile and location based marketing not only depends on the critique of existing institutional relationships, but more importantly acknowledges that consumers possess particular kinds of authority and power over the conditions of choice and distinction in mobile digital culture. It is by appealing to the capacity for consumers to enact propensities of taste, in this case manifest by choosing to install particular media onto their smartphone, that marketers can begin to unlock the potential of mobile and location based marketing to deliver new and intimate kinds of value.
4.3 - Micro-moments, Intimacy, and Authenticity

In addition to the critiques against desktop based marketing, there are strong reasons to suggest that marketers are also critical of how audiences should be targeted and segmented through mobile media. Specifically, there are new kinds of values around what successful engagement looks like that coalesce largely around negotiating the affective dynamics of mobile media. That is to say, the key to successful mobile marketing depends on how well marketers can, in a sense, make themselves an invisible but necessary element for producing mobile lifestyles. As one white paper for a global push notification company argues:

What matters in advertising—reach and frequency—isn’t what matters in mobile. Mobile is about relevance and context. Customers are increasingly sensitive to intrusion—from blocking spam to un-liking Facebook pages that are too self-promotional or post too often. Push messages give you the opportunity to virtually tap customers on the shoulder all day long (Urban Airship n.d., p. 10).

It is interesting that this company is trying to frame the discussion over the value of push notifications by appealing to an embodied metaphor of tapping the customer on the shoulder. This reveals the intimacies of mobile and location based marketing that manifest as embodied metaphors of targeting that could at once be an opportunity for intimacy but also a risk. As a quick note on push notifications, this has become a key technique in mobile and location based marketing where a publisher can deliver (or “push”) targeted messages to the lock screen of a smartphone because the user has explicitly granted permission to the publisher. Thus, push
notifications are significant because not only are they valued for their ability to deliver targeted content, but also because the publisher can prove that the consumer desired to receive it, in effect allowing marketers to enact new discourses of habitus. This is dramatically different from desktop banner ads because it reintroduces habitus into the relationship between marketers and consumers; the decision for a consumer to allow a publisher to send push notifications is therefore interpreted as an exercise of consumer agency to desire this level of engagement and interactivity. Furthermore, what is interesting to consider here is how marketers see the smartphone as the most valuable kind of media real estate, not simply because of how it extends the scope and reach of marketers to deliver targeted content, but also because of how the smartphone is appreciated as extending cultural and economic identities across physical and digital spaces. It is perceived as a convergence of bodies, affects, and software, and represents an instrumental variable that mediates how consumers exercise particular agencies of choice and schemas of cultural appreciation. The smartphone, in other words, is important because of how it can connect our faculties of perception and appreciation with a larger field of media convergence:

In the 2010s, the mobile phone has become a digital hub where everything seems to converge: publishing, ticketing, media, wallets, banking, and shopping. In a world in which the mobile phone is intersecting and changing so many different verticals, it has become a sensory orthotic (Schwartz 2011, p. 1).

The smartphone as the sensory orthotic is interesting because of how it can embed our faculties of aesthetic appreciation and distinction within a convergence of embodied digital
practices; here the smartphone is valued especially for its ability to sustain new embodied practices of consumption through mobile software. The capacity for convergence necessarily conditions consumers to exercise themselves in this field of production by leveraging themselves as active agents over the ways their identity is produced and circulated within larger flows of culture and economy. For example, we see this in the way that the smartphone is imbued with cultural and economic significance to organize and manage our everyday affairs and routines:

We use our smartphones to augment our memories when we set alarms and use the calendar to organize our lives. We use our smartphones when we store contacts, complete with photos, and surreptitiously check our phones when bumping into an old friend whose name we can’t quite remember. And we augment our very sense of self and being when we carry our social network with us, like a built-in audience with whom we share our lives (Urban Airship, n.d., p. 20).

Using smartphones to augment our memories and sense of self tells us several key insights about habitus and distinction, particularly with respect to how the smartphone is seen as a medium by which consumers produce and curate their lifestyles, and more specifically, how the smartphone is assumed to be a necessary device for successfully reproducing and organizing our identities. This expectation that individuals increasingly self-organize is also one that places new demands on consumers to extend these new practices of self and augment them across a larger field of cultural production because consumers must now increasingly comprehend themselves as they exist and are known across heterogeneous fields and flows. The idea that smartphones augment our identities is both an internal and external process because it permits
both the individual to augment their own capacity for memory and organization of their everyday lives, but also it is external in that it allows for individuals to extend themselves across a larger field of social networking and performance. In particular, for marketers, it becomes a question concerning the value of mobile media to realize new insights of habitus that satisfy particular cultural and economic expectations of authenticity and intimacy. We can see how marketers appeal to discourses of authenticity and intimacy by analyzing how they situate consumer practices and agencies within new discourses of logic and practice. In particular, beliefs of intimacy and authenticity can be realized when marketers situate habitus within new spatio-temporal dynamics of consumption. For example, Google has argued that now because of mobile media, marketers and brands must increasingly target consumers through specific “micro-moments” by injecting themselves into the spatio-temporal flows of consumer practices:

…we call these micro-moments. They’re the moments when we turn to a device—often a smartphone—to take action on whatever we need or want right now. These I-want-to-know, I-want-to-go, I-want-to-buy, and I-want-to-do moments are loaded with intent, context, and immediacy (Google n.d.,b, p. 4).

Google’s emphasis on producing knowledge of habitus by appealing to cultural practices of knowing, going, buying, and doing, represent four key manifestations of how mobile marketers conceptualize and measure habitus in mobile digital culture, or put another way, they describe the kinds of agencies and faculties of perception and understanding possible for consumers in the field. Micro-moments epitomize the importance of habitus because of how it situates consumer practices of distinction within increasingly specific and knowable spatio-
temporal contexts that are revealed by practices satisfying particular desires, typically desires to access and consume. In other words, rhetorics of micro-moments are important because we can see how marketers are beginning to construct and value habitus in mobile digital culture by everyday practices of information seeking into new kinds of cultural and economic opportunities that directly reveal the aesthetic dispositions of consumers. Here, the ways in which consumers use mobile media to acquire knowledge about cultural distinctions can directly inform marketers about the intentionalities and agencies of mobile consumers that, for marketers, translate directly into economic potential. In turn, this means that the capacity for marketers to comprehend aesthetic preferences becomes increasingly defined by the contextual capacities of mobile media, rather than appealing to larger discourses of lifestyles and tastes rooted in traditional epistemologies of class and social stratification. We see this by how companies such as Google, and marketers more generally, assume particular beliefs of habitus and distinction in mobile digital culture as revealed by appeals to intimacy and affect over traditional sociological ontologies of social stratification and aesthetic dispersion along axioms of class:

Intent beats identity. Immediacy trumps loyalty. When someone has a want or need, they turn to their smartphone for help—whether it’s a karate newbie watching an expert do a move on YouTube or a mom looking for the best deal on a pair of sneakers. When a need arises, people turn to search and YouTube to look for answers, discover new things, and make decisions (Google, n.d.,a, p. 2).

The belief that traditional institutions of identity—as defined by empirical and theoretical knowledge of class and space—are being superseded by new cultural beliefs around knowing the
affect and intentionality of consumer agency reveal how marketers are using mobile media to enact new kinds of distinctions informed by institutions of reflexive and liquid modernity, but also because it begins to uncover some of the politics of surveillance. This is important because it reveals how new practices of mobile digital culture directly translate into new opportunities of consumer targeting and acquisition. These moments signify an increased investment in coding habitus through empirically observable and measurable patterns of behaviour, particularly search behaviours, and offers marketers the promise of influencing how audiences engage with and consume specific brands at an intense level of geo-spatial and temporal specificity. Furthermore, Google’s micro-moments reveal an understanding of the field that assumes a specific affective and economic logic to mobile audience behaviours. All searching can and should directly translate affect and intent into an economic opportunity to influence the social relations of consumption:

When someone picks up their mobile device, chances are they want to learn, do, find, or buy something right now. Whether in the form of searches, app interactions, mobile site visits, or even YouTube video views, these micro-moments happen constantly. You need to be there for them (ibid, p. 6).

Encouraging brands to exist in closer proximity with consumers through mobile media is a core objective of the field necessary for accumulation, and is governed by an appeal to understanding habitus in ways that emphasizes the affective interpretation of consumers. Again, this very clearly signifies an imperative of intimacy because the information seeking practices of consumers are empirical indicators of habitus as it is revealed in increasingly specific micro-
moments. Put another way, the objective is to understand the predispositions of consumers as fundamentally desiring to be constantly connected to their favourite brands and products because marketers assume that the capacity for consumers to accumulate cultural capital now depends on the kinds of relationships they establish in the field with institutional forces. Accumulation, in other words, depends on the creation of durable social, cultural, and economic relationships that are directly made visible in specific moments. Other institutional agents likewise emphasize this affective strategy as a necessary and absolute objective of the field. The Canadian Marketing Association has, for example, encouraged retailers and advertisers to appreciate the power of targeting audiences through multi-channel strategies, and to maximize their penetration into the mobile market. Failure to do so would be detrimental not just because of the potential loss in terms of targeting and acquisition strategies and because it would mean ignoring entire segments of the population that rely on mobile media to make informed (or impulsive) purchases, but also because such neglect would in effect alienate brands from reaching audiences at a personal, intimate level:

In an increasingly omni-channel world, consumers crave information, and the digital technology that helps them make more informed purchase decisions. Now they expect their favourite brands to follow suit and adopt solutions that will deliver a more intimate, engaging shopping experience… Regardless of their rationale, every day a brand “waits on the sidelines,” it is losing the chance to personally connect with its shoppers – a factor that can make or break a retailer in an increasingly high-touch marketplace. As the omni-channel business model expands, consumer intimacy is the key to a success – and consumers truly crave this intimacy (CMA, n.d. p. 2).
Here we see how discourses of technological sophistication create new roles and expectations for marketers to constantly keep pace with consumer culture, and in a certain way, reproduce institutional beliefs that embed audience agencies as consumers constantly seeking to accumulate specific kinds of capital through mobile media, and therefore expect marketers to forge new intimacies with them through mobile media. Staying relevant therefore is not only a question of keeping up with technological trends; it is also a question of inculcating consumers into making new intimacies with brands. Appeals to staying relevant, however one chooses to define this, embody the idealization of affect as the key strategy for mobile campaigns. It reveals the structure and logic of how institutional agents position themselves in the field, and how they interpret habitus as a variable that must be mediated in order to successfully influence behaviour.

This argument -- that consumers truly crave the kinds of intimacy marketers can offer with brands -- was also discussed by Chris. Chris is by all accounts a mobile marketing “guru” in the field. He has been involved in the industry since its nascency, he attends and lectures at mobile marketing conferences to publicize his personal philosophy of mobile marketing, he co-chairs several key marketing industry associations, has published several books on mobile marketing, and, naturally, runs his own mobile marketing firm. Chris explains that a key goal is to know and influence consumer intent in order to drive conversion rates:

Well, when somebody has an intention to do something, you have to nurture that intent and make sure that… so thought is not a good thing.
Chris advocates a specific kind of marketing that is more interested in capitalizing and exploiting specific micro-moments where consumers express a desire to want something, and fears that if consumers are left to their own devices, or are given more time to consider their purchasing decisions, they might rethink or abandon their desire. As he explains:

You want to make it like: ‘Holy shit! You want to buy that! Well let’s go ahead!’… So intent is a pure and beautiful thing that you want to nurture, you don’t want hesitation to enter the equation. It’s like anything. It’s like that social interaction at the bar… You meet somebody, you feel like there’s something happening you want go up and say ‘hi’, you don’t want to hesitate.

Chris’s sublime emphasis on the purity of intent reveals how it is informed by appealing to notions of intimacy and immediacy. The field of marketing in many respects acknowledges that the point is to influence behaviour in very specific instances where an expression of interest or desire by the consumer can be nurtured and encouraged. This appears throughout the marketing literature, and arguably constitutes a fundamental pillar of the field. This emphasis on intent is significant because it reveals how marketers conceptualize habitus, meaning the propensity for knowing and influencing actions such as purchasing behaviour is more likely to be framed by understanding how campaigns can influence deeper affective and impulsive drives, rather than being determined by structuralist models of rational choice or logic. One of the core ways marketers can capitalize on these intimacies is by assigning new kinds of distinction that transcend demographic segmentations:
So if I say ‘you are,’ I’m segmenting you because you fit into this demographic bucket. That is interesting potentially from a targeting perspective. I can send you deals and nobody else knows. But if I can also send you deals which gives you a sense that my segmentation to this bucket has a classification and value which makes me special then I am more likely to see that as content that I want to consume.

Chris explains how location is important because of how, if used correctly, it can produce new kinds of distinctions, and therefore create more intimate relationships between marketers and consumers. This requires that marketers frame the production of distinction as an exchange of information (such as location) for value:

You can invite them into a relationship and there’s going to be full disclosure of what that relationship is. Join the Saks VIP community, we want to know you so we can service you better. Opt into this community and we will greet you at the door, and we will give you access to catwalks… and then… it’s like: ‘holy shit, you promised and you fucking delivered!’ But goose bumps, goose bumps. You want goose bumps. You want to know that holy shit they can… Goose bumps and spooking somebody are two sides of the same course.

Producing goosebumps clearly reveals how marketers such as Chris imagine what success looks like in the field, and how, contrary to just simply using new kinds of data such as location to intensify institutions of segmentation, the more important objective is to produce meaningful intimacies with consumers by intensifying the affective dynamics of mobile
lifestyles. Thus, it is interesting to see how even though the field of marketing is largely characterized by the intensification of data production, there are still much more hidden dynamics to successfully targeting and segmenting consumers, and much of this centers on how well marketers can earn the consent and trust of consumers:

I look for clues… and then I segment, and I slice and dice, and I pull trust, and then I exploit that trust to then drive conversion, and conversion is getting a wedding ring on, but it’s all about trust. We talk about trust, we talk about data, we talk about privacy. Those are all human means, those are all human elements that we need to understand. At the end of the day, ultimately, why Amazon is successful, why Google is successful… they can be boiled down to human insights.

Sam also articulated the desire to frame marketing in terms of knowing human insights. Sam is a digital ethnographer who owns a market research company. This is how he describes his firm:

Our thirty second elevator pitch is that every other research company tells you what people are saying and doing, nobody tells you why. That's what we do. Our focus is on understanding the beliefs and value systems that drive human behaviour.

Sam is particularly interested in understanding new kinds of cultural distinctions, and how such distinctions are increasingly important for marketers to identify in order to justify themselves to their clients:
We’re not interested in niche markets, but rather interested in uncovering niche subcultures that clients aren’t even aware exist. You know, again, I think the important thing is to identify movements in culture that people often either ignore or don’t even pay attention to because, you know, if you intercept somebody and ask them they might not be able to articulate to you why and what is actually happening.

This reveals how there is a need for marketers to enact increasingly granular conceptions of lifestyles in order to produce the kinds of engagement they hope to achieve with consumers. There are many reasons for this, but arguably, a major rationale is because of how marketers problematize existing methods of targeting, and how there is a need to refocus their efforts on understanding the particular cultural dynamics of consumer lifestyles that are much more informed by epistemologies of affect rather than situating consumers as rational agents. Instead these beliefs about the importance of creating intimacies with consumers, through micro-moments and increasingly granular aesthetic epistemologies, reveal how marketers perceive particular notions of what successful marketing looks like in mobile digital culture, and largely critiques the belief that the objective of marketing is simply to deliver personalized content through algorithmically produced media.

4.4 - Habitus, Distinction, and Cultural Capital

In addition to micro-moments and granularity, a major objective for marketers is to produce distinction by situating consumer practices within a larger field of cultural accumulation. A key finding here is how marketers see consumer practices as a kind of
competition for distinction, and how mobile media is a key process of accumulating cultural capital. This was explained to me by Leslie, a strategic planner for a major global advertising company. Her job is primarily to assess the state and direction of media markets, primarily by conducting market research, competitive audits, and forecasting emerging trends and markets. Leslie explains that she recently undertook a global ethnographic study on “mobile mothers.” This research identified a particular segment of consumers and sought to understand the similarities and differences of mobile mothers across specific nationalities:

We wanted to talk to moms about their relationship with their mobile phone, and the kind of apparent addiction... you read a lot of articles about moms handing their mobile phone over to their kid, it becoming a way for the child to be babysat... it becomes like this bubble where she can also find ways to express herself and connect with other women beyond the processes of being a mother. It’s a way to tap back into things she used to enjoy, whether it be fashion or celebrities, or whatever. So we just wanted to understand the nature of that relationship and some of the limitations and opportunities, and then frame the implications for marketers in terms of connecting with her better.

Leslie explains that the primary finding of this ethnographic study was that mobile mothers use their smartphones primarily as a stage to engage in particular kinds of identity performances, but also to mitigate various emotional struggles that come from being a new mother and negotiate structural expectations to perform particular roles online:
It allows her to project who she is and show off what her kids are doing. It’s also a theatre, as I said, she can quickly tap into fashion and celebrities, everything that’s going on in the world because a lot of women, especially when they’re on maternity leave, can feel like they’re isolated from what’s actually going on beyond the child. But at the same time, it can make women feel more competitive.

This belief that mobile distinctions have engendered a new kind of power dynamic of connectedness but also anomie is important because of how Leslie is interpreting the affective politics of mobile digital culture, and how mobile lifestyles are often perceived as a competition for attention:

There was this thought around how mobile is this kind of passport because it enables you to stay tethered to the outside world, again, because you can feel really isolated, especially when you have a really young child, so it can help you feel connected. At the same time there’s this duality that it sucks you in. It’s so easy for moms to become absorbed in their phones. There’s stories of moms in the playground supposed to be watching their child, but they’re not. We talk about how it’s this new form of sibling rivalry with their kids; they’re no longer competing for attention with another person, they’re competing with a device.

This belief in the propensity for competition in mobile is particularly important for understanding how distinction is created. Brands have also begun to conceptualize mobile distinctions around the capacity for lifestyles to compete against one another, particularly in
order to accumulate cultural capital. For example, Ashley, a products and innovations executive for a global candy company explained to me why her company has begun to take an interest in mobile and location based media because of how the industry is perceiving changes in consumer lifestyles:

Trips to retail stores are declining depending on the channel between one and three percent. It doesn’t sound like a lot but that’s billions of dollars. As we look at that and we look at our category and we see where the projections are going we know that the retail store has to evolve. So part of my job is the evolution of retail. How do you make it more fun, innovative, and a great experience. But then there’s the other side of it where we say well why don’t we not put all of eggs in the retail basket? Let’s look beyond retail, so we’re looking into different areas we might be able to place product where people dwell.

Ashley’s belief that it is becoming increasingly necessary to re-imagine the significance of existing retail environments and spaces of consumption, and instead refocus their attention towards knowing where people “dwell” is a signature element of mobile and location based marketing. This re-imagination is premised on, and sustained by, new cultural beliefs concerning the significance of mobility and location to influence the predispositions and propensities of consumer practices. In particular, it becomes a question of understanding habitus based on identifying performances of identity and practices of consumption that are guided by new spatial logics, in this case, the imperative to design strategies of targeting and acquisition by focusing on the affective and experiential dynamics of the field:
If we can find a way to enhance the experience I think those are a really great vehicle to get people where they dwell. So we know that we sell when people dwell because a lot of our products are based on impulse. So finding that opportunity where somebody is ready for that. They’re primed. It’s coming at the right, exact moment. I think there’s a great opportunity…

Once again, Ashley’s emphasis on dwelling and impulse is very similar to Chris’ belief in the power of creating intimate moments that capitalize on the particular affective states of consumers in specific locations. This belief that brands must increasingly produce and demonstrate new kinds of value, particularly values as they are perceived and appreciated by consumers in terms of how it will deliver new experiential, affective, and performative methods of targeting and acquisition, was illustrated by a recent campaign that used digital and location based technology to enact new distinctions through personalization of a mass produced chocolate:

We did one that was... it’s a sticker that’s about the size of the bottom of [the candy], and it’s a customizable sticker so you could put on “happy birthday Harrison” or “It’s a boy”.... so the print out these stickers, they print out in store, and it’s meant to drive [candy] sales. When we did the online version, what people would tell us “oh I’d love to be able to do that in store” because right now I’m planning a party but I don’t order those personalized [candies] early enough. I want to be a ‘Pinterest Mom’ but I don’t want all the work of Pinterest Mom. I want shortcuts to looking like I’m Pinterest Mom because right now that's the bar… This is perfect because I'm trying to compete with all those
other women in there and they’re bringing in snowman cupcakes, and here I am, I just bought something off the shelf at the grocery store. Well, have the kids but the sticker on the bottom of the [candy] and you look like you did Pinterest Mom.

Creating the aesthetic of the Pinterest Mom is particularly significant in terms of how marketers understand the value of distinction as a means for a specific cohort of mothers to accumulate cultural capital, and how in a sense the capacity for distinction in mobile digital culture is increasingly rooted in new kinds of affective relationships between brands and identities (Arvidsson 2005). It reveals how brands are beginning to acknowledge and facilitate new processes of cultural production by exploiting larger narratives in reflexive modernity that place new demands on consumers to perform increasingly specific aesthetics of distinction as a way of interacting with and negotiating global culture industries, and how the consumption of brands becomes a key part of this aesthetic distinction (Hearn 2008; Carah 2015). Put another way, the Pinterest Mom reveals how marketers assume and create specific kinds of understandings about habitus in terms of how consumers perceive and consume global brands in ways that are informed and structured by tensions of distinction and homology. In this case, the capacity to successfully perform the Pinterest Mom depend on how consumers can position themselves in a field of cultural production, and leverage new kinds of marketing techniques to enact meaningful performances of distinction. It reveals a new cultural economy of lifestyle production consumers have internalized into habitus. This is significant because it reveals how habitus in mobile digital culture is informed by new beliefs and values concerning the capacity for consumers to perceive and appreciate the value of global brands, and appropriate them for specific objectives of distinction by competing with others to accumulate cultural capital.
4.5 - Conclusion

In this chapter I provided an analysis of the kinds of beliefs and philosophies that marketers enact about the field. In particular, I focused on understanding how they critique existing institutional channels of consumer targeting, and how they see mobile media as a new opportunity to realize the kinds of intimacies with consumers they seek to produce. There are several key findings from this chapter. First, marketers perceive a new kind of spatial logic through mobile channels that are focused around exploiting “micro-moments” where consumer intent and desire are seen as more effective strategies for consumer acquisition than simply producing analytical knowledge through demographic profiling. In other words, the objective is to target people in highly specific spatio-temporal, as well as affective states of mind, through mobile channels. At the same time, marketers also recognize the need to develop increasingly granular conceptions of consumer lifestyles because of the overall imperative for the pursuit of distinction. Finally, one of the ways that distinction is produced is through the accumulation of cultural capital. Here, marketers perceive consumer practices with mobile media as a pursuit of accumulating particular notions of distinction, such as the Pinterest Mom. In this respect, we see how mobile media converges with brands and consumer practices in complex ways and thus require that marketers focus their attention on highly specific epistemologies of lifestyle, and new spatio-temporal logics of micro-moments.

The emphasis on micro-moments is significant because it reveals how marketers are negotiating the value of location data, specifically by trying to determine the extent to which segmentation is necessary. This is perhaps the most striking finding from the research is that, for some, using location data to intensify geo-targeting can be interpreted to mean that the objective is simply to reveal what, how, and why mobile audiences are using mobile media in everyday
urban settings. More importantly, the objective is not so much to create general descriptions of lifestyles, but simply to ascertain the exact intent of the individual at the spatio-temporal and affective register. Again, we also saw this when marketers revealed that their objective is to ascertain the value systems of specific niches or cultural sub-groups. This suggests that the habitus of mobile audiences is best influenced when marketers can target in specific states of mind that are ascertained by surveilling their information seeking practices as they are embedded in specific micro-moments. Thus, the perceived, imagined, or actual identity of the audience may not be as important if marketers are seeking to stimulate audience engagement and conversion rates; however, there is nonetheless a particular kind of segmentation of habitus that is evident that depends more on ephemeral qualities and assumptions about the kinds of states of mind mobile audiences might be in at specific micro-moments.

At the same time, there is evidence that marketers are still continuing to re-evaluate and develop new approaches to segmentation and epistemologies of mobile lifestyles because there is still ultimately a need to make audiences knowable and classifiable in order to reproduce various hierarchies that normalize and typify lifestyles. Here, rather than constructing such modes of classification and judgment around spatial information (such as postal codes), the construction and typification of audiences can be instead oriented around distinguishing segments through brands and media practices that are informed by specific cultural and economic assumptions about habitus, and in particular the pursuit of distinction through assemblages of people, places, and media. In the case of the Pinterest Mom, we do see a very clear gender politic where marketers are seeking to reinforce domestic roles on mothers through cultural economies of media personalization and competition for distinction.
The pursuit of distinction becomes grounded in the ways that marketers can create audiences into bricoleurs of brands and commodities, and in turn allow mothers to perform various kinds of cultural and economic distinction. Interestingly, this could suggest that contrary to the logic of algorithmic content production that has hitherto defined the field of digital marketing, it is possible that now the focus is on stimulating affective relationships between audiences, brands, and marketers through various kinds of spatially embedded media, and not instead through automated channels of targeting. As such, there are important questions and discussions beginning to emerge from this with respect to how marketers conceptualize and imagine the kinds of relationships they believe they can or should establish in the field with audiences and brands, and how mobile and locative media channels should best be exploited to intensify engagement metrics.

To conclude this chapter, it is worth pointing out that both in the case of micro-moments and in the branding of mobile lifestyles such as the Pinterest Mom, there are hidden elements of audience labour that inform the production of mobile audiences and mobile engagement strategies. Therefore, it is worth examining the kinds of infrastructures and political economies of audience labour that underscore the production of location data, that is, as a key source of capital that informs how marketers conceptualize, measure, target, and engage with mobile audiences. Therefore, the following chapter will explore three specific kinds of infrastructures of location data and how they can be used to segment audiences into new kinds of mobile geodemographic clusters.
Chapter 5 - Capital and The Production of Location Data

5.1 - Introduction

In this chapter I will analyze the production of location data using three infrastructures as examples that demonstrate how location data can be produced using multiple configurations of capital and labour. These infrastructures each offer particular affordances, applications, and limitations with respect to how location data can be a source of capital, and how it can translate into analytical knowledge for classifying habitus into specific hierarchies of worth.

First, I will describe how marketers understand the value of location data as a source of cultural and economic capital that can be used to infer geodemographic attributes. This is important because it reveals the underlying beliefs and philosophies marketers enact in the field to justify the collection of location data, and in turn the intensification of consumer surveillance using location specific methods of audience targeting and segmentation. Second, I will explore the use of location data for Mobile Location Analytics (MLA), which, in brief, collects location data from smartphone WiFi signals in order to quantitatively measure and map retail foot traffic patterns and frequencies. Third, I will analyze how location data can be extracted from smartphones during routine advertising requests placed by mobile applications (apps), and how third party analytics companies use this data to develop new kinds of geo-segments, as well as measure audience engagement with mobile advertising. Finally, I will explain how location data can be collected through the direct labour of audiences who consent to being under constant geolocative surveillance in exchange for monetary or affective rewards.
There are three reasons that justify this particular approach to explaining the political economy of location data. First, in each example, there are elements of the commodification of audience labour that vary relative to the extent that audiences authorize, consent, or are even aware of the fact that they are under surveillance by marketers, as typically these methods of surveillance are largely invisible, meaning that the social relations of labour and capital that underpin these infrastructures are typically not perceived directly within mobile interfaces. This poses important questions for existing research into how mobile media users perceive and understand notions of surveillance, visibility, and privacy (e.g. Humphreys 2011), and how it is possible to theorize the relationship between surveillance, location data, and the mediation of identity in ways that are “beyond privacy” (Phillips 2003), particularly when these infrastructures do not necessarily require that the user actively interacts with a particular application interface for the data to be collected.

Second, these examples illustrate how everyday urban environments are increasingly layered by commercial marketing interests that can ubiquitously monitor, record, analyze, and intervene in the everyday mobility of consumers, and therefore augment the cultural politics of urban space because of the ways that marketers seek to attach themselves to urban space to measure and analyze the economic and cultural functions and performance of consumer culture across different urban contexts. This reinforces scholarly discussions around how urban environments are being reconfigured, and “splintered” by private infrastructures (Graham and Marvin 2001).

Finally, each approach contains hidden cultural, ethical, and affective politics of the extent to which consumers perceive, understand, appreciate, or resist these methods of consumer surveillance, or, in the case when consumers choose to participate in their own surveillance as
active agents. There are important material and affective political economies that structure the terms and relations of exchange. This can be understood as the “politics of platforms” (Gillespie 2010) in that we can see how each of these infrastructures helps reveal how location based marketers try to frame public knowledge and understanding of location data and the intensification of consumer surveillance.

5.2 - The Use Value of Location Data

The collection of location data is sustained by several key beliefs around the necessity for developing new audience metrics that reflect the changing habitus of mobile consumers. We can observe how marketers construct particular narratives around the use value of location data, by understanding the kinds of beliefs and assumptions they make about habitus and distinction in mobile digital culture. The most common narrative of location data is that it provides marketers with useful empirical knowledge about a consumer’s lifestyles and tastes, particularly if a marketer can construct a longitudinal picture of their locational histories. For example, the Mobile Marketing Association has argued that location is increasingly valuable for delivering targeted advertising across mobile channels because of how location can enhance segmentation:

Location can indicate quite a bit of information about users. Geo-behavioral patterns can indicate demographics (age, gender, race, income etc.), behavioral/psychographic traits (travel, dining habits, shopping behavior, brands and retail locations frequented etc.), and geographic data (areas that the user spends time). Additional datasets such as purchase data, TV viewership, auto ownership or credit card data can allow for additional segmentation (MMA, n.d., p. 2).
These beliefs clearly articulate the extent to which location data signifies a way that marketers can ascertain the habitus of consumers with respect to how geodemographic attributes translate into generative dispositions of taste, such as location frequencies and shopping habits. Many have also begun to appreciate location because of how it can extend the value of existing mobile marketing and advertising campaigns, such as serving advertising to mobile publishers:

Location awareness is the solution for mobile advertising. Mobile is location. For all of the data that we see, the most consistent signal is location of the device. This can be the IP address or the latitude and longitude or zip+4 as provided by opt-in application usage. Not only does location allow you to reach your audience at the right time or where they normally are, location is a great connection for integration to first and third-party data sets (Mobile Marketer 2013, n.p.).

Here we see how marketers appreciate location in terms of its reliability and consistency for targeting consumers based on knowing very specific details about their identities and spatial patterns. In particular, the value of location is that it can act as a key stabilizing agent for anchoring mobile lifestyles. Marketers are appreciating the value of location because of the kinds of cultural assumptions being made about the changing rhythms and flows of everyday life, and the need to develop new methods and metrics that adequately capture these rhythms. This is evidenced by how marketers argue that location data has become the new “currency” of marketing:
Americans today spend significantly more time outside of the home and workplace than they did just a few decades ago. Increased mobility is providing new opportunities for marketers, which is why location has become the new currency of marketing (CMO Insights 2014, n.p.).

This belief that location is a new currency is incredibly powerful for marketers because of the ways that it can enable marketers to develop a nuanced understanding of the field and appreciate the necessity to develop new metrics that reflect perceived changes in consumer culture, and firmly reinforces the belief that location has become a key source of capital to produce new kinds of cultural and economic relationships in mobile digital culture. This helps explain why location based media have become a focal point of recent interest for brands and retailers, and why they have sought to explore how they can better integrate mobile and location based elements into their stores, or across urban environments.

Steve is the co-founder of a startup company that measures retail foot traffic behaviour that profiles consumers through specially designed WiFi Mobile Location Analytics sensors (MLA will be further explained in section 5.3). In brief, their technology is able to passively monitor retail foot traffic by measuring smartphone WiFi signals, but can also be used to construct detailed profiles of consumers by measuring the frequency of visits, and also a person’s movements across all their stores that have their technology. Steve explains the value of location analytics this way:

Smartphones have a unique property in terms of they can act like an online cookie. In the sense that now we can passively detect these phones, and if we had sensors around or
inside the stores, we could then infer some characteristics at very high levels of the people… how many people are in my store; how many people actually spend more than three minutes; how frequently do they come back?

Steve’s company also has the ability to use location data to create new kinds of consumer segments based on measuring the frequency of visits to stores across their network. This allows them to construct attributes about people’s lifestyles based on analyzing their location histories. What is interesting then is that the production of location data redefines how marketers imagine the nature of consumer segments. Thus, segments need to not follow a logic of applying a static label onto a cohort by knowing their residential address; instead, locations can make segments, or, as one participant described it, a “living profile” that can change as new data is ingested.

An important distinction being made here, and that in turn creates specific beliefs of value about location data, stems from how marketers critique existing methods of geodemographic segmentation in terms of its authenticity and epistemological value. Michelle is a global sales representative for a major mobile advertising company that uses location data to inform targeted ad delivery to mobile devices. Her business uses location data to inform the delivery of mobile advertising. As Michelle explains:

If you see someone that frequently is pinging or their device ID [and] is frequently appearing in a certain place between the hours of 9 PM and 5 AM we can say that's home, and maybe third party data will say that that area has a household income of X and it's generally comprised of this type of audience. But if you start to look at different
locations that that device appears in it might be something totally different where it's not who we thought it was.

This reveals how some marketers are beginning to problematize the underlying logic of spatial homology that structures the production of geodemographics, specifically, that residential address is a reliable indicator of lifestyles. By contrast, we see here how location data can be used as a new method of segmentation that intensifies how marketers can construct highly granular profiles of consumer tastes through the analysis of location histories. This construction of profiles through location data in turn offers marketers the promise of producing more dynamic, or fluid kinds of understandings of lifestyles because of how it is informed by location data and mobility patterns. In other words, we can see how the construction of cultural epistemologies are informed by new socio-technical relationships that marketers seek to develop with mobile consumers that will enable a greater degree of personalization, but also more importantly, for how it will enable a more authentic epistemology of individual tastes. As Steve explains it:

What we’re doing today is we’re building these more tailored profiles—you’re no longer having to make assumptions about someone based on someone’s postal code, but you can make assumptions of someone based on their behaviour in the real world.

This construction of segments through location data was also explained to me by John, who, during the interview, was employed as the Chief Mobile Evangelist for a major push notification company. John describes the use value of location data in terms of its dynamic and
fluid nature that can be used to construct and re-evaluate geodemographic profiles using iterative methodologies. John describes this as dynamic segmentation: the continuous and incremental construction of geo-segments based on location data. He illustrates this with a scenario of targeting consumers using Bluetooth powered beacon technology in a retailer:

So if somebody walks into a store, walks into the men’s shoe department, hits a beacon, right? We can add that attribute to a segment. We can also take away that attribute when they leave. You can also say ‘oh now they’ve left the shoe department’... You might say ‘hey let’s hit everyone that's in the men’s shoe department right now’... That’s dynamic segmentation as opposed to going in and manually create a segment. We can add those tags and we can remove those tags on a dynamic basis.

Interestingly then, we see several different interpretations of how marketers can know consumer tastes in terms of how this corresponds with knowledge of habitus, particularly the ways in which location data can translate into the kinds of knowledge marketers desire about consumer propensities to engage with marketers when consumers are targeted based on location data. As Frank, the President of a media analytics company who analyzes a heterogeneity of social and mobile data to measure audience engagement explains:

Location can tell us about habits and rituals. Location can tell us about proximity to things and things like that which we sell, meaning, if you are an outdoor clothing company then you are probably going to take notice of people who hang out in parks quite a bit. You’ll probably be able to tell if people are checking in or tweeting or sharing
photos on Instagram from national parks, they’ll probably fall into that segment of people that you like to reach out primarily from an acquisition standpoint. And for current customers you just simply want to know, if they’re not coming into the store then why not?

Interestingly, as it was mentioned in the previous chapter, the significance of mobile and location is in some respects understood by how marketers have critiqued many institutions of digital marketing, such as analyzing web click through rates. By contrast, it is believed that location offers marketers a much more genuine insight into the underlying propensities of consumers and their lifestyles, particularly because location data contains hidden assumptions of consumer desire, intent, authenticity, and affect which, if used correctly, can translate into new opportunities for marketers to target and acquire audiences. As Michelle explains:

There’s very little effort in going to one website versus another, whereas locations visited takes so much effort which therefore means it’s a stronger indicator of who I am.

Using location data to segment therefore not only allows marketers to ask new questions around consumer acquisition and fall off, but also it allows them to redefine the scale of targeting because of how it changes the logic of typification through spatial infrastructures. As John explains, marketers no longer need to base their media buys around particular markets defined by traditional geodemographic infrastructures:
Think about DMA [Designated Market Area] or ZIP codes... it’s like I’m going to buy the Portland market, and I'm going to assume that everybody there is a 30 year old hipster that rides a bike and drinks tea out of mason jars. That used to be what location marketing was.

This quote very clearly reveals the cultural politics of geodemographically segmenting audiences around assumptions of spatial homology. However, it is also evident that John may be exaggerating the extent to which marketers would apply such blunt instruments for homogenizing lifestyles around specific regions or cities, especially given the existence of more precise geodemographic segments such as ZIP+4. It is highly unlikely that a marketer would ever simply assume that the Portland market is that stable or homogenous; however, it is possible to see how such beliefs are used to easily critique existing methods of geodemographic segmentation in order to legitimate the accumulation of location data, and the construction of new methods of dynamic segmentation. In other words, we see here how the rhetoric of location data contains tacit critiques of the value of geodemographic segmentation. Here, location data signifies not only a new data point but also new sets of values around what kinds of lifestyles mobile audiences lead, and in turn how marketers should re-imagine the epistemologies of distinction. This makes location a particularly appealing form of capital because it encapsulates both cultural and economic distinctions.

5.3 - Mobile Location Analytics

A primary application of location data is the production of new methods of measuring consumer behaviour and engagement with retail stores through Mobile Location Analytics.
MLA. MLA is a key pillar of location based marketing because of how it uses location data to infer specific understandings of consumer lifestyles and tastes, but also can be used to determine the value of locations, and develop specific responses or agendas to stimulate the performance of locations—typically in terms of sales and customer engagement. This particular kind of consumer segmentation is in some respects similar to traditional geodemographics that builds audience clusters anchored in specific codes of residential address such as postal codes; however, the construction of segments through location data necessarily means that there are important distinctions concerning the methods of data collection and analysis in that it is the analysis of ‘locational behaviour’ or the times, frequencies, and regularities of locations visited that informs the modelling and clustering of locations and consumers into specific cohorts of worth. This suggests that MLA is an extension of pre-existing kinds of geodemographic marketing because it is rooted in the analysis of spatial data, but departs from it in terms of the kinds of data collected, analyzed, and how locations and audiences are commodified into increasingly specific segments which are mapped and analyzed through cartographic and statistical interfaces.

It is possible to develop MLA platforms using many different kinds of signals emitted from smartphones, such as WiFi, GPS, and cell tower triangulation. However, there is strong evidence to suggest that the field of location based marketing is investing in new, and increasingly discrete or invisible methods for collecting location data that exist well beyond the direct perception of consumers. Some companies, such as Xovis\(^1\), depart from smartphones entirely by employing 3D sensors that are installed inside retailers to measure customer foot traffic for people counting and flow analysis. Other companies, such as Sysorex\(^2\), have likewise

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2 http://sysorex.com
developed special sensors that can measure consumer foot traffic using passive Radio Frequency detection of mobile phone signals (an application that has its origins in security, but has since begun to explore retail markets). Finally, there are also new companies beginning to emerge such as IndoorAtlas\(^3\) that can measure consumer mobility patterns, as well as geo-locate smartphones using magnetic fields (i.e. by exploiting the Earth’s magnetic core and smartphone compasses to “ping” the location of smartphones).

Each method has its own particular advantages and limitations, as well as its own distinct approach to collecting and analyzing location data. However, this section will focus exclusively on the production of location data through WiFi signals as it offers a unique and under-explored approach to the production of location data. It is particularly important for this dissertation because this kind of location data is typically collected without a user’s knowledge, yet is also a particularly intimate metric for marketing because of how it measures and quantifies consumer behaviour. With respect to WiFi MLA, estimates of the industry size vary. In 2013 the *Washington Post* reported that there were at least nine major companies accounting for the majority of tracking activity, but others estimate at least 40 companies (Fung 2013). 2015 saw a 400% growth in retailer adoption of indoor WiFi analytics from the previous year (ABI 2016). WiFi analytics works by exploiting the technical design of how smartphones routinely connect to WiFi networks, and employs a non-intrusive method for passively detecting smartphones within a particular urban or retail environment. Figure 1 provides a photograph of one such device in question manufactured by Livegauge, a Toronto based WiFi MLA company that claims to offer its clients a “consistent and objective measurement” that “will allow you to maintain a consistent and objective measurement strategy, allowing you to ensure your performance is not

\(^{3}\) https://www.indooratlas.com
skewed by change in measurement approaches, different KPIs [Key Performance Indicators], and human error” (Livegauge 2016).

There are many reasons for explaining the increasing popularity of deploying WiFi based MLA sensors in urban environments such as shopping malls. The primary rationale stems from the fact that it provides a discreet technique for audience measurement by exploiting the technical infrastructures of smartphone internet connectivity in order to produce specific kinds of location data based on mapping smartphone internet connections with known WiFi hotspots.

Every smartphone regularly and indiscriminately broadcasts a unique signal called a MAC address [Media Access Control] in order to seek out and connect with WiFi networks, provided the WiFi capabilities of the smartphone are turned on. The MAC address is a unique
string of 12 characters that is assigned to a smartphone during its manufacture. It is typically permanent and will not change unless the owner modifies it with special software. Furthermore, the status of a MAC address as a private identifier (compared to a social security number) is in some respects in a legal grey zone, similar to Internet Protocol addresses, and so it is much easier for various parties to access the MAC address, including mobile applications and WiFi networks and advertising networks (FTC 2014, p. 23). This presents analytics companies with several key advantages, particularly because of its indoor functionality, and because unlike GPS signals, WiFi analytics are in a sense “always on” (again, assuming the phone's WiFi settings are set to on) and does not consume significant resources from the phone such as battery power.

Furthermore, WiFi analytics carries significant advantages because it is considered to be a more precise and non-invasive form of location tracking for indoor environments such as in shopping malls or retail stores. This is because, as Gallagher (2104) notes, WiFi acts like a “two way street” in that smartphones are automatically searching for existing WiFi hotspots it has previously connected with, meaning that with the right kinds of sensing it is possible to detect the connection histories of any given smartphone, and indeed there are companies in location based marketing (for example Livegauge) that track and profile consumers through passively detecting the WiFi connection histories of smartphones. There are open source tools that can allow users to access and map their location history, such as iPhone Tracker⁴ for iOS, or Google Maps Timeline for Android users.⁵

WiFi MLA companies have developed special sensors and internet routers that can passively detect and log MAC addresses which can be deployed throughout a retail space,

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⁴ http://petewarden.github.io/iPhoneTracker/
⁵ https://www.google.com/maps/timeline
although some companies have also experimented with installing them outdoors. For example, one company, Renew London, installed these sensors in a dozen recycling bins in London’s Square Mile. Once this became public knowledge the company was forced to abandon their trials due to public complaints about the ephemeral nature of privacy concerns (Seward and Datoo 2013). WiFi analytics are capable of recording location data in the sense that they can record how often a MAC address is observed in a particular environment (frequency), how long it is seen there (duration/dwell time), how close or far away it is from the sensor (distance), and the device manufacturer. For example, one manufacturer, Aislelabs, working in partnership with Aruba (a division of Hewlett Packard that manufactures in-store WiFi infrastructure), has developed a series of metrics in their product Aiselabs Flow. These metrics include: window conversion (i.e. the foot traffic frequency from outdoors to inside the store); dwell time; customer loyalty (measured by new and repeat MAC address identifiers); cross shoppers (customers that visited two or more locations); device manufacturer; and finally, “engaged shoppers” (Aislelabs 2014). Figure 2 and Figure 3 provides a screenshot of the Aislelabs and Livegauge interfaces which details some of the Key Performance Indicators (KPIs) of MLA dashboards for clients in order to illustrate how WiFi MLA measures mobile audiences in order to illustrate how the location analytics ecosystem works.
MLA is important because of how it seeks to use location data captured by observing and recording MAC addresses as a means of inferring analytical knowledge of consumer preferences with respect to their propensities for visiting particular locations. MLA is often characterized as
the application of web-based surveillance techniques onto retail environments, in that the kinds of Key Performance Indicators [KPIs] that have come to define audience engagement with websites such as clickstreams are transformed in retail settings through location data. One company for example describes this as the transformation of “your store into a physical website” (Measurence 2016). This transformation of physical retailers into surveilled and measurable environments is key to understanding the underlying logic of MLA because it reveals the de-differentiation of analytics whereby the imperative is to quantify retail behaviour in the same way that digital marketing quantifies and analyzes online behaviour in order to personalize content. However, in this case the objective is not necessarily to personalize the shopping experience, but rather to observe and quantify the behavioural patterns of consumers, particularly the frequencies and durations of in-store visits for the purposes of understanding consumer preferences and engagement rates. As one company, Euclid Analytics, states, the purpose of their approach to measurement is three pronged: to count and measure retail foot traffic, to develop analytical insights by analyzed aggregate behaviours and pattern recognition, and to develop new kinds of mobile engagement through new approaches to segmenting and targeting customers—or put differently, to determine the value of specific locations and postal codes (Euclid Analytics 2016a). For example, a client of Euclid Analytics, a major retailer with locations across the United States, placed hundreds of MLA sensors throughout their stores in order to calculate the value of specific ZIP codes by empirically measuring foot traffic patterns and comparing them across all their locations (Euclid Analytics 2016b). This particular method of spatial analysis compliments existing approaches to geodemographics, but is unique because of its incorporation of “real world” empirical measurements of the relative performance of locations across different ZIP codes in order to enact economic or cultural distinctions about the value of specific locations.
and consumer cohorts. This information could be used to intervene at locations deemed to be under-performing. For example, one client of Euclid Analytics compared the average visit time with sales at each location. By developing correlations with time and customer engagement, the retail chain was able to determine which locations needed to further influence customers to stay longer at that specific location in order to boost sales, which, over a three month period, led to an average increase of 5 to 7 minutes spent in underperforming locations, and an approximately $2000 increase in weekly sales (Euclid Analytics 2016c).

It is particularly important to understand the politics of consent with MLA primarily because it represents a relatively invisible method for measuring consumer behaviour that builds on existing WiFi infrastructure and does not require user consent to operate. WiFi analytics does not necessarily require that a user connects to a network in order to facilitate the collection of location data (although some companies offer complimentary WiFi, also known as “social WiFi” by asking users to create a profile in exchange for free internet access), but is instead an infrastructural exploit of how smartphones are designed to seek out and connect with WiFi networks. Smartphones regularly broadcast their MAC address in order to connect with WiFi networks, and can therefore be detected by sensors with or without a user’s knowledge (Tanner 2014; Sweeney 2014). Companies such as Google and Apple have also been reported to be collecting the location of WiFi hotspots by crowdsourcing MAC address collection from its users in order to map out an inventory of known WiFi hotspots (McMillan 2010). This has created significant opportunities for marketers to exploit existing retail infrastructure, but also at the same time creates important risks concerning how consumers are made aware of these new forms of passive surveillance, and the extent to which consumers can opt-out of this tracking. For example, one WiFi analytics company, Nomi Technologies, was brought up by the Federal Trade
Commission for alleged charges of consumer deception (specifically for giving false information about opt-out features) (FTC 2015). More recently, the FTC settled with Singapore-based mobile advertising company inMobi for tracking the locations of hundreds of millions of consumers, including children, to serve geo-targeted advertising, and was ordered to pay a $950,000 fine for tracking consumers without their consent (FTC 2016).

This pattern suggests that there are key underlying regulatory issues around consent that are beginning to surface for regulatory bodies such as the FTC, and it is also becoming increasingly clear that there is a need to establish new policy instruments to govern how MLA can operate in everyday urban environments. Perhaps more importantly, it is also the case that these settlements reveal how little the general public is even aware that such practices exist and are becoming increasingly prevalent, and that there are significant ethical and affective dynamics that MLA companies must negotiate due to the intimate and invisible aspects of this kind of surveillance, particularly if they seek to normalize this method of surveillance in everyday life. For example, in 2014 the National Post reported on the use of WiFi MLA in the West Queen West neighbourhood of Toronto—an endeavour that was commissioned by the neighbourhood’s Business Improvement Association, and utilized 15 sensors manufactured by Turnstyle Solutions of Toronto. The program was able to monitor the foot traffic of the West Queen West neighbourhood without the need for consumers to opt-in. Not surprisingly, public reaction to this method of surveillance was tepid, for example, being described as “creepy” by a local resident (Ligaya 2014). This response is particularly important because of how sensitive this form of data collection is perceived in the vernacular with respect to the cultural politics of what constitutes normal or acceptable kinds of consumer surveillance, and in turn suggests that MLA companies,
and the field of location based marketing as a whole, must carefully negotiate these attitudes in order successfully position themselves in the field and accumulate capital.

In this section, I have explained the basics of MLA by focusing on how location based marketing companies have been measuring audiences through passive WiFi detection. I explained how this approach is particularly valuable because it builds off and exploits existing socio-technical infrastructures and does not require the consent, or even awareness, of mobile consumers for MLA to function. I furthermore explained how this approach can be used by retailers and marketers to enhance their analytical knowledge of locations by empirically measuring foot traffic patterns—that is, by observing the frequencies and durations of MAC addresses as they are located in specific locations such as retail stores or urban neighbourhoods. This can permit for new kinds of knowledge about the performance of specific locations and ZIP codes; however, depending on the configuration of the sensor network, it is possible that consumers might perceive these forms of surveillance as overly invasive because of its invisibility and lack of consent. I will, however, save this discussion about how the field perceives and negotiates audience consent, as well the underlying cultural politics that define notions of intimacy for chapter six. For now, it is important to understand how technologies such as WiFi MLA are designed and installed in everyday spaces with the assumption by the manufacturer and the retailer who purchases these devices that there is no real need for consent. Thus, the particular economy of intimacy afforded by MLA is unique because of how it is embedded within a pre-existing socio-technical process of mobile WiFi infrastructure, as well as the everyday vernacular practices of consumer culture that is increasingly mediated by the presence of smartphones. In the next section, I will explore another method of acquiring location
data from smartphones by looking at how it can be extracted from ad networks and ad exchanges.

5.4 - Advertising Networks and Exchanges

It is possible to extract location data from mobile advertising exchanges and networks to produce new consumer segments and measure conversion rates with mobile advertising served to smartphones. As David, a data scientist working for a mobile ad network explains to me:

…you get access to the bid requests that come from the exchange, and this bid request contains geographical information, and the level of detail in that geographical information varies wildly. The accuracy is also unconfirmed… But by and large you do get real GPS co-ordinates from a good fraction of phones. How current that is, there’s no way of determining.

The ways in which location data is produced and analyzed, particularly with respect to its validity is thus a major aspect of the field, and largely a matter of proprietary knowledge. However, unlike WiFi MLA, the extraction of location data from ad exchanges is only possible if users have authorized particular applications (apps) on their smartphone permission to use their location data. This means that unlike WiFi MLA, the key distinction here is the extent to which audience labour is commodified by the infrastructure of mobile advertising because the collection of location data depends on the kinds of permissions users grant applications, and in turn their consent to sharing their data with third parties. When accessed by third parties (a now regular occurrence in the mobile advertising ecosystem) this data could easily provide key
geodemographic insights, such as the neighbourhoods they frequent, their residence, and place of work.

There are several ways in which an iOS user can see the operation of these classes in order to realize the extent to which their phone is collecting location data, and much of this is contingent upon the kinds of authorizations and consent they grant to applications to collect and share location data. iOS location protocols dictate that obtaining consent must follow by prompting the audience to specifically allow or deny the application to use their location. This authorization can take several forms. To illustrate this, Figure 4 describes three different ways that audiences are prompted to disclose their location, and how the applications try to instruct the user into granting authorization to access and share location data.

The first app (left) provides a standard authorization where the app will be able to access a user’s location while using the app. The second example (center) is not actually an
authorization prompt, but instead tries to educate the user as to why the app wants to collect location data. Many apps will do this before prompting the user to allow or not allow the app to obtain location data so that the user is aware of why the app wants to collect location data, although typically it is only the privacy policy that will explain that these apps will also pass along location data to third parties such as advertising networks. The final example (right) shows an instance where an app will continuously monitor a user’s location even when not in the app itself.

To explain the relationship between location data and the infrastructure of mobile advertising exchanges and networks, I will focus on one company in particular, PlaceIQ\(^6\), to illustrate how location data is collected, shared, and analyzed to produce particular kinds of knowledge such as geo-segments and KPIs such as audience engagement metrics. I will furthermore only explain how this occurs on the iOS platform. Whenever someone receives an advertisement to their smartphone (be it in-app or on mobile web browsing) it is because an ad request was made by the app publisher to an ad server, and in doing so passed along unique information about the user in order to determine which ad should be delivered. This in many respects is no different from the delivery of targeted advertising and content found on traditional desktop environments, as discussed in the literature review. In the iOS platform, the unique information passed to ad servers is called the Identifier for Advertising (IDFA, also sometimes called the Identifier for Advertisers, or IFA). The IDFA is a string of 32 hexadecimal characters which can uniquely identify the user to mobile ad servers, and is a successor to the Unique Device Identifier (UDID) Apple previously used. This shift from the UDID to the IDFA protocol was done for several political and economic reasons. The UDID is essentially the serial number

\(^6\) [http://www.placeiq.com](http://www.placeiq.com)
of a specific device which could be tied to the owner, and was deprecated with the introduction of iOS5. Many in the industry speculated that this was due to privacy concerns raised by the Federal Trade Commission (Schonfeld 2011), and an exposé article by the Wall Street Journal about the extent to which mobile apps were collecting and sharing personally identifiable information about its users (Thurm and Kane 2010).

The IDFA also comes with a ‘sister’ metric, the Identifier for Vendors (IDFV). This metric is designed for publishers who own multiple applications, allowing them to use the same metric to identify a particular user across all its holdings. Like the IDFA, the IDFV is thus a continued attempt to develop cross-platform and omni-channel metrics that will append a unique identifier to a specific user. A basic explanation of how the mobile advertising ecosystem works is that media agencies, who represent brands, are seeking out inventory from publishers (such as app developers) or Supply Side Platforms (SSPs) through mobile advertising networks or mobile advertising exchanges. There is a subtle but important difference between an ad network or an ad exchange, but in both cases they represent platforms that connect advertising inventory (this denotes the particular spaces in which advertising content is displayed, such as banners on websites or in mobile applications) with advertisers seeking to purchase advertising space on behalf of their clients (for example, a brand or retailer). Ad networks are collections of ad inventory from a specific collection of publishers which is then sold to advertisers at a price (Fitchett 2015a). Ad networks can essentially be understood as curators of inventory for specific buyers, such as niche brands or boutique retail stores. By contrast, advertising exchanges are technology platforms which allow advertisers to browse ad inventory to gauge prices based on fluctuations of supply and demand. Ad exchanges typically interact with Demand Side Platforms (DSPs) which automates the buying process through algorithmic buying by targeting and
delivering ads to specific niche audiences within milliseconds of an ad request (Marshall 2014). Marketers typically contrast ad networks and ad exchanges as the difference between private stock brokers, who sell select groupings of advertising inventory to specific buyers, and the open stock market that functions to facilitate the buying and selling process. Furthermore, whereas ad networks tend to offer static pricing models, ad exchanges offer dynamic pricing based on Real Time Bidding (RTB) of ad inventory (i.e. advertising auctions completed within milliseconds of an ad request). Although there are hundreds of ad exchanges on the market,⁷ there are strong indications that the industry is moving towards consolidation and oligopolistic structures. For example, Fitchett (2015b) argues that 74.4% of the mobile ad market share is controlled by five key players: Google (including their subsidiaries AdWords, DoubleClick, and AdMob), Facebook, YP (Yellow Pages), and Pandora.

Anytime an ad request is made by a publisher, the IDFA and other contextually relevant information (including location data) can be passed from the publisher to the ad network. It is possible for third party companies to analyze these transactions in order to build profiles of mobile audiences. PlaceIQ describes itself as a company that develops dynamic models for understanding consumer behaviour by leveraging location data from mobile devices to infer analytical knowledge, and does so through a “multi-disciplinary” approach to data science that allows for an understanding of human behaviour in physical and digital environments. PlaceIQ is a key player in the market that continues to gain investment and interest, having raised over $52 million in capital investment over 5 rounds from 10 investors, including $25 million in February 2016 alone (Shields 2016; Heine 2016)⁸. Their business model is twofold: first, it analyzes

⁷ A list of online ad exchanges can be found here: http://www.knowonlineadvertising.com/online-mobile-advertising/list-of-mobile-ad-exchange/
⁸ See https://www.crunchbase.com/organization/placeiq/investors for a complete list of PlaceIQ’s investors
location data to build geo-location specific segments of audiences; and second, it measures the effectiveness of mobile advertising by measuring the extent to which ads served to mobile audiences actually result in increased foot traffic into retail stores (i.e. measuring audience attribution and conversion rates). In this respect, it is arguably a significant example of an emerging kind of clustering based on knowing audiences through location analytics that are derived during routine ad requests made by publishers such as mobile applications (“apps”) or during mobile web browsing. PlaceIQ’s privacy policy states that it utilizes indirect methods of data capture:

We do not collect information directly from individuals through our technology. We collect information from our partners, which are usually mobile advertising networks and mobile apps. These partners deliver advertising onto your mobile device. In addition, we may collect some information directly from customers or from third parties if requested by our customers (PlaceIQ 2016a).

PlaceIQ’s proprietary platform “Place IQ” (or PIQ):

…connects the physical world to the massive set of digital signals associated with mobile devices, providing marketers with a unique understanding of consumer activity. Yielding the purest indicators of real world behaviors, our technology performs 5 trillion computations daily, delivering unparalleled targeting and foot traffic measurement to marketers (PlaceIQ 2016d).
PlaceIQ’s claim that their methodological approach will result in a more “pure” epistemology of audience behaviour in the “real world” assumes that the digital traces a mobile device creates will reveal a more authentic understanding of audiences, and in this respect echoes many of the existing theoretical discussions about the value of location in relation to identity and authenticity in mobile digital culture discussed in the literature review. This belief is likewise sustained by an appeal to the analytical authority of maps with respect to its capacity for producing authoritative, institutional knowledge. The economic power of mapping software effectively becomes a primary terminus for translating location data into competitive insight. As PlaceIQ’s explains:

A map can tell you the topography of a space, but imagine the possibilities when people’s physical behavior is actually fused with a map. This critical dimension imbues a location beyond its latitude and longitude: it allows us to interpret the complex dimensions, categories, dayparts, and behavioral patterns to comprehend how people interact with specific spaces in their daily lives. The data generated is actual and deterministic – not modeled or projected. By processing opted-in movement signals for over 100 million devices and attributing each one to a specific latitude/longitude and unique device ID, our platform analyzes how device data moves through time and space. The outcomes? Creation of highly sophisticated audiences based on historical and “right now” real-world behaviors, along with refined analytics that help marketers drive better marketing decisions (PlaceIQ 2016d).
The imperative is to stress the capacities of PIQ with respect to its ability to measure and calculate mobility patterns and make them visually comprehensible through mapping software. The PIQ platform approaches geodemographics in a unique manner due to the way the software segments and divides spaces. The PIQ platform works by imposing a linear grid onto the entire United States (it could of course be applied onto any territory). Unlike residential geodemographics which cluster audiences through the postal codes, the method of spatial division employed by PIQ is to divide the United States into uniform square tiles of 100 x 100 meters. This means, as PlaceIQ claims, that they have segmented the United States into 1 billion tiles. Each tile is assigned specific rules and properties. As one promotional video explains: “because behaviour changes depending on time of day, each tile changes based on different time periods. Our platform is then brought to life using mobile device movement data. This lets us define, build, and reach audiences on their real world behaviour” (PlaceIQ 2014a).

The claim that specific attributes about places change over time is a fundamental aspect of mobile geodemographics which in some respects differs significantly from traditional geodemographics. Elsewhere, PlaceIQ describes this in a patent filed in 2013:

The attributes associated with geographic locations may vary over time (for example, an area with coffee shops and bars may have a stronger association with consumption of breakfast or coffee in the morning, an association which weakens in the evening, while an association with entertainment or nightlife may be weaker in the morning and stronger in the evening). User profiles may be generated in accordance with the time-based attributes that predominate when the user is in a geographic area. And in some embodiments, user profiles may also be segmented in time, such that a portion of a given user’s profile
associated with a weekday morning may have different attributes than another portion of that user's profile associated with a weekend night, for instance (PlaceIQ 2013).

Not only does PlaceIQ’s approach to producing mobile geodemographics assume that locations shift in meaning over time, but also that it is possible to weigh specific audience attributes over others depending on spatio-temporal context. This means that the particular attributes a user is assigned by PlaceIQ are dependent upon the location attributes users are observed in from their location history—in effect, the means that in some respects a user’s calculated lifestyle is premised upon the locations they are observed in at specific moments in time. PlaceIQ’s approach to audience measurement is based on its proprietary Place Visit Rate (PVR) metric. The purpose of the PVR is to measure the effectiveness of ad campaigns by measuring foot traffic conversion rates, meaning that the platform allows PlaceIQ to measure audience engagement with mobile advertising by measuring frequency of mobile phones observed in a retail following the delivery of an ad impression. In this way, it quantifies mobile audience conversion rates by measuring how effective an ad impression was at influencing the audience to visit a particular location.

In effect, this approach to measurement signifies an intensification of the performative epistemology of geodemographics because it interprets the relationship between ad requests and observable changes in audience behaviour as following a logic of causation, allowing PlaceIQ to make specific claims about the performative capacities of mobile advertising to influence audience behaviour. For example, a white paper by PlaceIQ explains their methodological approach with an experimental case study in the Quick Service Restaurant (QSR) vertical. The experiment tested the likelihood of observing specific audiences visiting a QSR restaurant for
breakfast after receiving a targeted promotion on their mobile device when compared to a control group that did not. The experiment mapped out QSRs and segmented a sample of mobile users along specific geodemographic characteristics, including whether or not they were more or less likely to eat breakfast at home or not. The experimental group was observed, as the case study report claims, to have been 2.5 times more likely to visit a QSR for breakfast after receiving the ad than those who were not. Furthermore, the campaign found that the most likely cohort for conversion was by reaching audiences while they were at home. The manner in which audiences are profiled and segmented using location data is of particular importance. Here, we see how the PVR platform is able to discern several important insights about mobile audiences, including their residential address and their geodemographic characteristics, including age (35-54), heads of households, minority parents of middle class households with children in high school. The audience is also known to “exhibit retail behaviours that align with family shopping needs—likely to shop at big box stores and more economical clothing stores such as Old Navy or TJMaxx” (PlaceIQ 2015, n.p.).

This typification demonstrates how it is that locations, particularly retail environments, are informing how mobile geodemographics defines audience attributes. Furthermore, whereas traditional geodemographics typifies audiences through residential address, mobile geodemographics likewise offer this potential to know where audiences live, but also to know specifically where they go. Understanding where audiences live, dwell, and go using these methods also depends on the ability for third parties such as PlaceIQ to distinguish location data based on sociological and scientific maxims. There are at least two metrics PlaceIQ utilizes to distinguish location data: Clusterability and Hyperlocality. These two metrics serve several key functions necessary for the commodification of audiences. In particular, they serve to clean the
data such that illegitimate or unreliable location data is scrubbed from their calculations; and second, they allow the data to conform to tacit cultural norms around how audiences are believed to behave and dwell under “normal” conditions (PlaceIQ 2014). Defining the quality of location data, which in turn also signifies its value as a commodity in the mobile advertising ecosystem, is thus also a question of understanding the extent to which the data can be made to appear and conform to scientific and sociological expectations of normality.

PlaceIQ is a dominant player in the field of location based marketing with a long client list of major brands across many verticals. However, one particular case study stands out and deserves particular attention. In the summer of 2016, it was reported that the Bryant Park Corporation, a non-profit private management company that administers the economic and cultural development of New York City’s Bryant Park, contracted out PlaceIQ to measure and analyze the foot traffic of Bryant Park visitors in order to determine the economic potential of Bryant Park for new or existing clients interested in hosting events in the park. The park, which was once an infamous example of urban decay, has over the past several decades been transformed into a hub of cultural and economic growth, in large part due to the investment of private capital to redevelop the space into an iconic quasi public-private neoliberal manifestation of urban rejuvenation, hosting upwards of a thousand public events per year. This intensification of capital into the commodification of public urban space has likewise translated into a key economic opportunity for PlaceIQ to measure the geodemographic composition of Bryant Park visitors in order to enhance its economic potential for private investment, and demonstrates the mutual intersection and intensification of consumer surveillance with the neoliberal economic development of public spaces (e.g. Sassen 2016). As PlaceIQ’s press release states:
Partnering with PlaceIQ enables BPC [Bryant Park Corporation] the ability to use location data to better understand visitors and apply insights that may increase foot traffic and improve the park experience for visitors. These insights will also fuel effective decisions for BPC in areas such as sponsorships, program development, event planning, staffing, and more (PlaceIQ 2016c).

PlaceIQ was commissioned by BPC to record, measure, and analyze the geodemographic composition of visitors, specifically by measuring the foot traffic patterns of Bryant Park visitors between May 2015 and April 2016 in order to determine their geodemographic attributes (Kaye 2016; Wiggers 2016). PlaceIQ’s data collection revealed many key insights into the geodemographic composition, and cultural distinctions (the habitus) of Bryant Park visitors. For example, they concluded that the average Bryant Park visitor is between 25-44 years old; dwells in a two-person or single residence; is 2 times more likely to bank with Bank of America; is 50% more likely to visit Macy’s, and 2 times more likely to shop at PetSmart; that 19% of visitors live in Manhattan and 16% live outside New York City; and that 65% commute from outside NYC locations. PlaceIQ was even able to determine the occupational status of visitors: 16% in management; 9% business/finance; 8% sales; 4% Arts/Entertainment; and 1% employed in legal occupations (PlaceIQ 2016c).

The particular metrics and attributes PlaceIQ ascribed to Bryant Park visitors reveals the potential of location data because of how it can track and trace the mobility patterns of populations, and analyze such behaviours with respect to socio-economic and cultural epistemologies of consumer lifestyles and tastes. The objective, in other words, is to develop analytical profiles of consumer habitus by describing the observable and predictable patterns and
regularities of consumer behaviours as they are revealed by location data. Conversely, it is also possible to see how these technologies function to develop analytical profiles of spaces such as Bryant Park by measuring the behavioural patterns of its visitors. In either case, this represents a significant intensification of the analytical power of geodemographic attribution because of how it models cultural and economic distinctions along axioms of locational behaviours that are aggregated over time to infer particular kinds of knowledge about the kinds of dispositions and preferences consumers will perform as they are rendered visible by location data.

This infrastructure of consumer surveillance in Bryant Park likewise sparked numerous questions concerning consumer privacy and visibility, particularly around the extent to which such data can be truly (if at all) anonymized in order to protect consumers from personal identification. The civil liberties group the Electronic Frontier Foundation, for example, expressed several concerns about the extent to which these infrastructures can be truly “anonymous” (Collon 2016). However, it was also acknowledged that this method of measuring foot traffic and profiling Bryant Park visitors into geodemographic segments was a sensitive issue (Kaye 2016). This is not the first time a public park has sought to employ such methods of surveillance to better understand the geodemographic composition of visitors. For example, Williams (2015) reported that London’s Hyde Park has likewise covertly tracked its visitors by tracking their mobile phone signals over a twelve-month period. Likewise, Walker (2015) details the same methods of mobile phone tracking were proposed in the planning of London’s Garden Bridge. A major argument for this surveillance of public spaces is to increase the economic efficiency of the parks, particularly in order to convince potential advertisers that their message will reach the intended audience.
5.5 - Panel Applications

The final section examines the production of location data by directly soliciting audiences to disclose their location data in exchange for particular rewards. This approach compliments existing research into the immaterial labour of media audiences whereby audiences commodify themselves in the act of using new media, particularly through new media platforms that "valorize" visibility and surveillance, and convert audiences into "prosumers" of media. (Cohen 2004; Ritzer and Jurgenson 2010; 2012; Terranova 2000). It likewise compliments existing research into the production of geoweb data through VGI and geocoding, as was explained in the literature review, because of the ways that audiences are being encourage to produce geographic information for a variety of applications, such as in this case for designing geodemographic segments using location analytics. There are two primary companies in the market that engage in this kind of geodemographic production: Placed, a small tech company with about $10 million in capital investment; and Foursquare, a major player in the field with over $166 million in capital investment. For brevity, however, this section will focus only on Placed as a case study.

Placed’s methodology utilizes an opt-in panel of, as the company claims, about a million participants, yielding billions of location based data points everyday (Placed 2016a). Panelists can choose to opt-in to Placed using one of two applications: Panel App and Give2Charity. Both applications perform identical functions in terms of its data collection; the only difference is a qualitative distinction in the method of rewarding panelists for their labour. Panel App users consent to having their location tracking turned on at all times in exchange for points that can be redeemed for rewards, typically as gift certificates to retailers such as Amazon. In order for a user to accumulate points, they must consent to having their location tracked at all times by Placed. Users are also prompted regularly to complete surveys and geocode their location by, for
example, identifying the particular retailer they were observed in (see Figure 5 for sample
screenshots of the user interface). These surveys are not necessarily undertaken by Placed, but
could be administered by third parties or clients of Placed.

![Figure 5 - Panel Application Screenshots (retrieved from https://www.androidpit.com/panel-app-win-prizes-while-on-the-go)](image)

Compensation for panelist participation is at the sole discretion of Placed. Users have no
recourse to negotiate the terms of labour. As explained in the Terms of Service:

The rate to be paid for a particular panel will be determined solely by Placed and may
vary from panel to panel depending on a variety of factors. In addition, such rate is
subject to change for a particular panel you are participating in at any time without
notice… If you are dissatisfied with the amount of compensation you are being paid, your
sole remedy is to terminate your use of the Service (Placed 2012).
Give2Charity rewards audiences for their consent to having their location monitored at all times in exchange for points that can be redeemed as donations for charity. Users who sign up provide Placed with basic demographic information, and consent to having the app monitor their location at all times. Several times a week, audiences are prompted to complete various surveys in exchange for more points. It is not entirely clear how many points are earned for participating. In terms of donations, Give2Charity’s Facebook and Twitter pages post monthly updates on donations raised, which typically average under $1000 (see Figure 6 for a sample of screenshots of the user interface).

Figure 6 - Give2Charity Interface Screenshots (retrieved from Apple iTunes Store)
Both Placed and Give2Charity’s use the same privacy policy. They make clear that the information it collects is shared with third parties (namely clients of Placed):

We share information that does not contain personally identifiable information, such as your first and last name, address, and phone number. Information we share includes but is not limited to location and demographic information and device and advertising identifiers, with our customers to provide insight into consumer behaviors and preferences and to enable them to tailor market research, attribution modeling, and future ad campaigns based on such data. We may also share information with unaffiliated third parties whom we work with for purposes such as market research, product development and/or recruitment purposes (Placed 2016b).

The End User License Agreement (EULA) is identical for both applications. The EULA explicitly states that by consenting to use either application, the user grants a “perpetual, irrevocable, and unlimited right and license to use and share such panelist data” (Placed 2012). Both the privacy policy and the EULA reveal the terms and conditions of immaterial labour that Placed dictates on the audience. However, this does not necessarily assume that audiences are completely informed of how the application works, particularly with respect to its ‘always on’ approach to location data collection.

The distinction between these two applications concerns the quality of rewarding audiences for their labour using either material or affective rewards. Ascertaining the reward for participating in the Panel app is difficult to measure without firsthand experience; however,
online reviews suggest that the amount is fairly minimal. One review claims that on average a user will earn about 33 points per day, or 3300 per month. With 1000 points equaling $1, a typical user is thus earning about $3 per month (Wuerch 2015). No information could be gathered on Give2Charity’s reward policy. However, Give2Charity’s appeal is not really the promise of receiving a personal benefit, but derives from a deeper affective reward for contributing to charity in exchange for the work of being watched, and the expectation that audiences complete surveys at the request of Placed. Many reviews for this application not only make various biblical references, but also note that one can make a difference without really doing anything substantial. Placed understands the effectiveness of this approach to recruiting audiences through an appeal to audience affect (Give2Charity was in fact a sister application to the Panel app which originally had an option to donate to charities) even if the donations are not particularly substantial. Still, Give2Charity reinforces a larger cultural economy of location based surveillance by stressing the affective value of participation, particularly by sustaining a discourse of not only empowering audiences through digital software, but also by labouring in the service of a larger altruistic enterprise.

5.6 - Conclusion

This chapter explained three key methods by which location data is collected by location based marketers based on specific combinations of infrastructure and audience labour. Three approaches were studied, each of which represent different manifestations of the way location data can be scaled to classify audiences and places. In the case of WiFi MLA, this method depends on how retailers or urban environments choose to deploy third party sensors to measure audience foot traffic. Assuming a user has left their WiFi on, this method can passively record the smartphone MAC address, which can be used to determine metrics such as visitation
frequencies and patterns. In the case of extracting location data from mobile advertising networks or exchanges, again, we see here how third parties effectively capitalize on a pre-existing infrastructure (in this case the delivery of advertisements to mobile ad inventory). However, this method is not necessarily dependent on the existence of specific hardware installed in specific locations (unlike WiFi MLA). Instead, the infrastructure exists within larger cloud based computing platforms. Finally, panel centric approaches intensify the relationship between capital and labour by ubiquitously monitoring and surveying audiences in exchange for material or affective rewards.

In addition to the methods for producing data collection, a key distinction between these three approaches concerns the ways that habitus is conceptualized and actualized into the infrastructure, typically as it is manifest into influencing specific dispositions of authentication and consent. In the case of MLA WiFi, these sensors depend on exploiting smartphones that have their WiFi functionality turned on. Some companies will incentivize consumers to switch theirs on by connecting to their free WiFi hotspot, or “social WiFi” networks where users must actually login and authenticate using a pre-existing social media account such as Facebook. Similarly, the ways that advertising networks and exchanges must rely on producing audiences as consenting subjects, in this case by specifically querying them to access their location when an application is first launched on their smartphone, reveals how the success of location based marketing depends on producing consumers as active agents that understand and consent to the collection of location data, even though in most cases location data is automatically passed to third parties during routine advertising requests. Making consumers understand these complex relationships between consent, information collection, and its subsequent sharing with third parties is typically sidestepped because, as Turow (2005) notes, much of the discourse in
contemporary marketing tends to treat consumers as consenting agents because audiences desire to be tracked by marketers in exchange for particular rewards. This in turn is clearly revealed in the logic of panel centric methods, where marketers develop their own application that users willingly choose to install and labour for in exchange for material or affective rewards. All of these methods clearly point towards a consistent pattern of framing the intensification of surveillance as contingent upon building relations of consent with active audiences that desire to establish deeper, and more intimate kinds of new media interactivities with personalized content. Therefore, the following chapter will further explore these narratives in order to understand how the field of capital production and accumulation depends on the ways that marketers position themselves in relation to audiences along particular continuums of intimacy.
Chapter 6 - Field and the Economies of Intimacy

6.1 - Introduction

This chapter will analyze key empirical findings from interviews with location based marketers in order to explain how marketers perceive the field of location based marketing, and how institutions of trust, intimacy and consent are produced and rationalized by appealing to various cultural and economic logics of mobile digital culture. This is important because it allows for a deeper understanding of how marketers conceptualize habitus in terms of a generative mechanism for consenting with location based marketing, particularly as economic agents engaging in various kinds of immaterial labour to disclose their location data that is then transformed into a key source of capital for enacting specific geodemographic orderings of mobile audiences.

This chapter will center primarily on critically analyzing how the field constructs habitus along economic rationales of consumers seeking to exchange personal information in return for specific rewards that only location based marketers can deliver. This reveals the underlying politics of consent that, I argue, govern the ways marketers structure their perception of consumer habitus in order to legitimate specific rules and relationships in the field of location based marketing. Following this, I will outline the structural dynamics of the field by examining what kinds of rules govern the collection and exchange of location data, and the social shaping of the field of location based marketing based around neoliberal economies of choice and autonomy. Here I will focus on analyzing the existing policies and instruments that prescribe the conditions of ethical conduct for marketers with respect to how they negotiate its potential to be seen by consumers as an invasive form of surveillance. I will largely focus on one instrument in
particular, the Mobile Location Analytics Code of Conduct developed by the Future of Privacy Forum (2013), a non-governmental body comprised of location data companies that seek to develop self-regulating principles to guide the collection of location data.

6.2 - The Politics of Consent

It is important to understand how the accumulation of location data is rationalized by marketers because it reveals how intimacy is negotiated in order to legitimate the cultural politics of location based marketing. The logic of consent argues that marketers should only collect location data if the customer benefits in some way, such as through the delivery of tailored products, information, and services, to provide consumer incentives such as loyalty programs, or simply to provide a more relevant experience that enhances the overall value of the experience.

At first this appears to be a relatively unproblematic—albeit a somewhat arbitrary logic. However, further inspection reveals how marketers perceive the field as a symmetrical distribution of power in which the decision to choose and consent is necessarily assumed to benefit both parties equally, and that the decision to resist is perceived as a failure to properly inculcate consumers to appreciate the value of the field. This logic can also be interpreted in such a way to rationalize the phenomenological experiences and value systems and, ultimately, the habitus of consumers draw on when making sense of their position in the field, and sustains an appearance that consent obeys a calculative decision making process: consumers willingly choose to exchange their personal information in exchange for receiving particular services which they deem valuable in their own ability to accumulate capital and enact distinction. As Forrester Research, a major technology market research company, argues in their white paper,
“The Cost of Convenience is Privacy,” the politics of consent is first and foremost a voluntary exchange because consumers ultimately perceive, understand, and appreciate the exchange of personal information to receive particular kinds of value, and more importantly, because it is in their overall best interest to inevitably consent:

We believe that consumers will voluntarily give up privacy in exchange for the benefits of mobile convenience. eBusiness professionals and their organizations — selling media, services, and products — will use the contextual information collected about consumers to deliver highly personalized experiences that consumers simply view as too convenient to pass up over privacy concerns (Forrester 2012, p. 19).

The voluntary exchange of privacy for value and convenience reveals how marketers imagine the exchange within particular hierarchies of value. However, this economic interpretation between the exchange of information for the production of value contains specific expectations and rules for both marketers and consumers that structure the logic of the field. This economic contract reifies particular social constructs about consumer beliefs, values, and practices, as well as cultural and economic hierarchies of taste and distinction, such as, by tacitly encouraging marketers to direct their energies towards consumers who are more likely to consent, and subsequently reward them for their consent (and labour) accordingly. Simply put, the logic of consent reveals particular hierarchies of consumer lifestyles whereby those who choose to consent and participate are therefore perceived as more lucrative targets. For example, one white paper directed towards mobile publishers explains why consenting consumers (in this case the segment of users that choose to install an application onto their mobile phone) should be
treated as a more lucrative segment because they willingly choose to participate in the field and engage with brands. As such, they represent a cohort that fundamentally desires to subject themselves to new intimacies of exchange:

Customers who choose to install your app represent a higher-value segment than your overall base because this sends a clear message that they like your brand. They’re also more available for contact: You’ve got your brand in their hand (UrbanAirship 2013, p. 17).

Justifying consent through rhetorics of affect, desire, and intimacy is a key element that structures the field in terms of how marketers position themselves in relation to consumers, and enact particular kinds of hierarchies of value. It reveals how the capacity for economic accumulation depends on how successfully marketers can interpret consumer agency by appealing to particular affective discourses of consent. However, this hierarchy of value is in fact mired by power relationships that establish the positions and rules for both marketers and consumers, and almost inevitably functions to act as a mechanism to reproduce capital accumulation and distinction. The belief that consent equals desire, or that the choice to participate indicates a need for establishing intimacy, is arguably the maxim of the field. It is held as unconditionally true. It is heard at every marketing conference, in virtually every interview I conducted, and in almost every document I analyzed throughout the course of this research. For that reason, this maxim makes it one of the most foundational findings of the structural logic of the field because it reveals how new hierarchies of mobile lifestyles can be
empirically distinguished through the ways that consumers consent to disclosing personal information, particularly their location, in exchange for distinction.

The logic of exchanging data for some kind of distinction can be understood as resembling an economic contract in which both parties are governed by specific rules when playing the field to accumulate various kinds of capital. This articulation of the rules of accumulation and exchange were best said by Mike. Mike is the President of major location based marketing organization, and arguably one of the world's foremost authorities on location based marketing today. This organization is one of the most important organizations in the field because of its diverse member base and potential to create new marketing assemblages between brands, vendors, and consumers. This organization holds regular meetings to discuss pertinent issues and promote particular companies and products. It also produces weekly podcasts that highlight new startup companies, review existing products, and discuss existing location based marketing campaigns. This organization therefore represents a key terminus for bringing together a heterogeneity of companies, suppliers, vendors, and products together. One of Mike’s primary responsibilities in the field is to explain and promote the particular advantages of location based marketing by articulating the underlying conceptual distinctions between location based marketing and mobile marketing by emphasizing its advantages in terms of capital accumulation and consumer consent. Mike holds a very special kind of power in the field defined by his possession of social, cultural, and economic capital. His organization boasts local chapters throughout major global cities; membership includes global brands and retailers across many verticals that leverage location data for new digital marketing strategies. Mike is very quick to
provide an explanation for how marketers can get consumers to consent to opting in and authorizing mobile media to collect location data:

We always like to describe it as a value exchange. It’s a simple equation. I’ll give you my data as a consumer as long as what I get in return is valuable to me and relevant to me at a very personal level.... There’s a lot of factors that have to go into deciding if that’s the right thing at the right time…

Mike takes this logic of exchange even further by explaining how consumers are beginning to appreciate their personal information as capital, as well as their position in the field, by highlighting an emerging practice called “data vaulting”:

If you’re going to use the data in some kind of commercial way then you need to make sure that you’ve got multiple layers of consent and opt in and all the things that go with that. The flip side is, and we do a lot of work in working with location data and thinking about that so the far downstream where we see a lot of experiments is what we call personal data vaulting which is this idea that the consumer is becoming smarter. They recognize their data, including their location data has value, and they want to benefit from it. So it’s not even, ‘what are you doing with my data’, I know my data has value to you, Mr. Marketer, what are you going to give me for it?

Here we see how Mike’s belief that the consumer is becoming smarter is revealed in the ways that consumers exercise particular kinds of economic agencies in the field, and attempt to
play the game by influencing the structural conditions of consent in exchange for distinction. This is particularly important for understanding the field of location based marketing because it reveals how new political economies of production and accumulation are increasingly structured by the capacity for consumers to enact new kinds of cultural and economic appreciations of capital, and how marketers try to rationalize the predispositions of consumers to consent or resist the field. We can also see the hierarchy of value and the logic of consent by examining the ways that the field classifies consent along particular axioms of empowerment. This constitutes an important dynamic of the field in terms of understanding the distribution of power between institutional agents and the vernacular logics of consent.

The hierarchies of cultural and economic value that marketers ascribe to specific cohorts is clearly revealed in the nomenclature that is applied to the typification of audience lifestyles as known by their willingness to consent and share personal information. For example, Microsoft (2015) published an important white paper based on their research into the “Consumer Data Value Exchange” that was based on a mixed methods study that sought to develop a typology of consent. Their classification of consumers is divided into six discrete cohorts measured by their propensities to consent. This typology effectively reveals how marketers classify and distinguish habitus in the field, and demonstrates how consent is structured by how consumers internalize their position in the field through specific economic and cultural logics that normalize the sharing of personal information insofar as it contributes to the social construction of neoliberal subjectivities of agency. Microsoft identifies six mutually exclusive types of consenting agencies that exist along an axiomatic distribution of awareness of the value of personal data, and their willingness to share it: “satisfied sharers,” “enthused explorers,” “savvy sophisticates,” “nervous neophytes,” “cautious contributors,” and “observant objectors” (See Figure 8).
These nomenclatures clearly reveal an underlying symbolic violence (Bourdieu 1985) that marketers apply to the economic and cultural agencies of audiences. Segments that have a greater propensity to appreciate the value of intimacy, and consent to disclosing their data in the field, are described through positive and empowering adjectives: satisfied, enthused, and savvy. This stands in stark contrast to those who are nervous, cautious, and observant about their position in the field. This reveals a powerful hierarchy of value that the field imposes on the cultural dispositions of habitus, and moreover assumes that notions of empowerment are largely privy to those who choose to consent. Moreover, the ways that Microsoft theorizes consumer habitus in terms of their dispositions to consent is interesting because of how they assume that those less likely to consent do so because they fail to appreciate the value that they can receive in
exchange. In other words, resistance to consent is perceived as a failure to successfully develop the necessary kinds of intimacies necessary to inculcate consumers into appreciating the hierarchies of value, and the capacity for consent to enable distinction:

A strategy adopted by many brands has been to attempt to move consumers directly from reluctant sharers to willing ones without updating their understanding of data in the process. In our segmentation model, this usually means converting Nervous Neophytes (the majority of users) directly into Satisfied Sharers. However, this strategy follows the path of greatest data resistance. Amongst consumers with a weak understanding of what data is and how it is used, there is extreme reluctance to share. In fact, this group are four times more likely to resist sharing data. Trying to increase their willingness to share without increasing their understanding of data is a challenging task (Microsoft 2015, p. 13).

In other words, the challenge is to determine how to develop intimacy without necessarily burdening the consumer with a technical knowledge of the infrastructures of data producing and sharing. This requires that marketers develop new strategies and tactics for inculcating consumers into consenting, labouring audiences that target their habitus, particularly as it is manifest in values, beliefs, ethics, and affects:

Appealing to consumers’ conscious sense of value and fair exchange can help to build willingness to share on one level. However, to promote more effective behavioral change,
brands should also seek to align the benefits of data with deeper, emotive needs (ibid, p. 20).

Here we see how the field depends on negotiating multiple kinds of consumer agencies, in particular the capacity to create new intersectionalities between economic and affective agencies in order to inculcate consent. This is important not just because it reveals an active endeavour in the field to inculcate consumers to consent, but also helps us understand how marketers conceptualize the logic and practice of consent by framing resistance as an affective politic whereby consumers fail to properly appreciate the kinds of value that consent rewards. In other words, resistance is framed as a failure of consumers to properly understand the economic and affective relations of exchange, and the hierarchies of value that their personal information represents in terms of capital. Thus, the ability to placate this propensity for resistance requires that institutional agents enact new strategies of inculcation by targeting consumers at the affective register, and by cultivating new kinds of economic intimacies.

At the same time, the ability to appeal to particular understandings of consumer’s consciousness, their affect, or their economic agencies can be particularly challenging for marketers. As Lisa, an industry analyst for a major Canadian telecommunications carrier described it:

The idea of tracking people or understanding where you are in location—it’s all contingent on how it’s being used. If we can actually show a tangible benefit for
customers it becomes less of a concern, but if we’re just sharing information that’s still... there’s an “ickiness factor” as we like to call it.

Lisa in many respects echoes Mike’s beliefs that consumers are rational actors that choose to exchange their data because they have been properly informed, and are sufficiently positioned in the field to make their own autonomous decision to exchange data for value. Lisa, however, premises her appeal of a rational exchange of privacy for services within a larger affective concern about the potential for resistance, or becoming positioned in the field whereby their customers are uncomfortable (or icky) with their data collection and sharing practices. Both Mike and Lisa therefore conceptualize the field in terms of market transactions between mutually autonomous forces of supply and demand, particularly as Lisa explicitly conceptualizes the exchange as a “sell.” At the same time, both Mike and Lisa try to sublimate notions of value with epistemological differences in content delivery. Put another way, they do not really need to understand or believe it is necessary to actually know whether or not consumers derive value from personalization. Instead, it is assumed to be self-evident that consumers demand increasingly personalized content, including promotional and targeted content, and that therefore, this ability to produce distinctions in the market is in itself sufficient proof of value. However, as Turow, McGuigan, and Maris (2015) note, much of the social and semiotic meaning that marketers invest into new technologies are themselves part of a larger re-imagination of how marketers rationalize institutions of market discrimination and distinction as normalized practices of everyday life. Thus, from this perspective, it is in some respects irrelevant whether or not consumers actually crave the kinds of intimacies and distinctions marketers desire; the purpose is instead to realize how marketers utilize new social imaginations of data to naturalize
the institutional processes of ascribing value to particular segments more than others, or by rewarding consumers that ‘choose’ to consent, while dismissing those that resist as overly cautious neophytes. In other words, a core strategy of the field is how marketers are able to embed discussions of segmentation and market discrimination as conversations about consumer agency, desire, and consent. This is particularly true when marketers explain their value in terms of offering a more tailored or relevant experience. Lisa arguably said this best by claiming that what marketers are trying to do with location data is to ultimately help their customers:

“it’s all about how it’s relevant to the consumer. If what we do in turn benefits them then it’s an easier sell. If they don’t see a direct benefit to them they’re obviously going to be aversive the moment they hear it... it depends on who that end consumer is. If you tell someone like me that you’re that you’re tracking my information, if you tell me there’s a benefit “sure do what you need to.” If it eases my life, improves it in any way I understand that perspective but again it's delivering that message to the right person and letting them know that we’re ultimately helping them.

However, what is interesting about Lisa’s discourses on what constitutes relevance, value, or what ultimately she thinks location data can do to “help” consumers in one way or another is that it is in some respects informed by her own particular socio-economic position, and in particular of her own status as arguably a power user of mobile media given her position in the field. Thus, there is a certain inevitability that location based marketers assume the necessary value of their field because of how they conceptualize consumer lifestyles as similar to their own:
Being a consumer myself, and that’s the interesting side is how do people approach me, what methods are they choosing to market to me, I find that very interesting... I think a lot of people are creeped out by it, but the thing is they don’t understand enough about it, so understanding more about it I think I’m more open to it, and the idea of people marketing to me as a result…

Lisa's appeal to consent as following a logic of economic exchange between two rational actors in many respects stands in stark contrast to Chris (the mobile marketing guru) presented in chapter four. As Chris sees is, the success of marketers to produce consenting audiences depends far more on capitalizing and exploiting specific micro-moments in an opportunistic manner. For example, Chris discusses how gaining consent can operate much like rules of courtship and intimacy:

You just have to say, look the goal here is to give my mobile consumer a bear hug... is to make them feel I am servicing their needs and there’s an intimacy and there’s a sense of differentiation. I’m not hugging them the same way as I’m hugging everybody else and so there’s a sense of warmth.

Whereas Lisa, as a telecommunications carrier analyst tends to imagine the field as following a logic of exchange whereby consent is granted when consumers are informed and appreciate particular notions of value and relevancy, marketers such as Chris appeal to a more affective politic of intimacy and creating an aesthetic of distinction by targeting audiences based
on the assumption that they desire to be individualized and immersed into the field; that audiences fundamentally desire to receive the kind of attention marketers can offer. Chris likens marketing to dating, and explains that:

it’s a sense that you’d go to be in a relationship and you want to get laid. And so laying is the conversion. Maybe you want to get married, that’s the ultimate goal, maybe not, I don’t know. At some point you have to say hello, and at some point you have to have enough trust that, that person gives you a phone number so that when you leave the bar you can call them for a second date.

We see here how the field is beginning to articulate multiple, and perhaps even contradictory views, about the correct tactics and strategies for inculcating audience consent and reproducing their position in the field. This could suggest that the heterogeneity of strategies being considered could demonstrate that the field might not yet fully understand the specific value of location data or location based marketing. However, there are certainly indications that the field is undertaking to stabilize the value of location through the creation of rules or norms for engagement. This necessarily includes the articulation of a coherent doctrine and set of practices that normalize how intimacy and consent is defined and given. In particular, we see the increasing importance of marketing associations in stabilizing the field into a coherent system of production and accumulation.
6.3 - Credibility, Authenticity, and Distinction

The politics of consent is complimented by a sustained effort for location based marketers to establish the field of production. A primary objective is to inculcate both consumers and other sectors of marketing into understanding and appreciating the value of location based marketing. This is most clearly evident by Mike, the president of a major location based marketing association that has chapters throughout the globe, and devotes his efforts to bringing together various suppliers, vendors, and brands to appreciate the power of location based marketing to target and influence consumers. Mike is quick to distinguish location based marketing from mobile marketing because location based marketing prefers to treat location “as a data set and not a media platform. So that means that we address all media. We work in out of home. We work in print. Television. All forms. So it's very different [from mobile marketing] from that perspective.”

Here we see a very important distinction in the field whereby location based marketers seek to position themselves as possessing very different sets of capital than mobile marketers through an entirely different philosophical approach to developing audience engagement strategies, as well as promote a multichannel and immersive strategy of audience engagement that is arguably distinct from simply serving banner ads to mobile devices. This is also not just a conceptual or technological distinction, but signifies a new philosophical distinction with respect to the underlying system of values for construction economic and cultural relations between marketers and consumers in the field. As Mike describes it:

We define location based marketing as the intersection of people, places, and media. We’re really clear in our mandate... and we say media because we don’t believe it’s only
about mobile. We believe that mobile is the tool that helps us understand where the target person is that a marketer might want to reach. So it’s the geo-acquisition piece, but it’s not necessarily the engagement platform.

Mike perceives the value of location based marketing, and location based media in general in a way that contradicted what I was expecting to learn about location based marketing as an intensification of mobile and geo-locative media. Here, Mike explains to me that location based media does not necessarily have to be an entirely new approach to marketing, but could actually be accomplished simply by augmenting existing media inventory in ways that incorporate particular kinds of locative elements:

So I can use mobile to tell me, as a marketer, where Harrison is right now. But once I know where you are the question that we want our members to think about is, ok, Harrison is at Jack Astor’s right now, what media is available to me in Jack Astor’s that I could use to influence him? So, it could be, there’s a TV screen here. Can I put something on that screen that I know you can see because I know you’re in proximity of it that can resonate with you. There’s music here; can I embed an audio signal in that music stream right now that could create something on Shazaam that you have on your phone—that’s a location based activation that's using an audio signal to trigger it. If we were sitting outside I could say, ok well there’s a billboard outside of the street, or there’s a bus driving by with media on it. All of these things are location based, in our view.
These socio-technical scenarios are in many respects idealizations of market performance between an assemblage of players whereby virtually all media can be exploited through location data in frictionless interactivities. In other words, Mike envisions a field in which consent is embedded within the everyday media practices of consumers and can be taken for granted by marketers. Here, location data, and more specifically the ability to leverage this data with new kinds of socio-technical relations between media and consumers in the field, signifies a belief in the sublime authority of location based marketing to enact new surpluses of audience acquisition. Location in many respects functions as a malleable kind of capital that can be both economic and cultural depending on how it is produced and circulated in the field. As Mike explains:

One of the things I talk about, and have written about, is this term I coin location as the cookie for the physical world. So, in the same way that you have cookies online... I believe that it's the only piece of data that allows us to understand the movements of people as they cross devices, screens, and media devices. Nothing else can do that.

This is powerful narrative that Mike is describing, but interestingly it is also a well practiced and rehearsed script Mike uses when describing location based marketing, such as during conferences or for promotional videos. This narrative in effect signifies a form of institutional discourse that marketers hope to instill into a set of core values and opportunities for exploiting location as the new cookie of the physical world. Here the field is conceptualized as a series of discrete moments for consumer targeting that can be united and optimized by location data—it signifies an anchor for attaching consumers to specific yet also omni-present opportunities of commodification and influence.
However, the field that Mike envisions is complicated by the intersection and complexities of uniting markets and vendors together, thus requiring certain kinds of co-ordination between various service providers. Mike explains that his organization is tasked with three primary objectives: education, research, and “creative collaboration.” This third objective is of particular significance because it demonstrates how his organization attempts to mobilize and exploit various kinds of capital to experiment and test how location based marketing can influence habitus. For Mike, the challenge is to prove how his approach is different from but also better than pre-existing approaches to mobile marketing by positioning location-based marketing as an entire strategy that requires agents to successfully leverage their capital in order to engage consumers:

Because we have so many great brands and diverse supplier side... it allows us the ability to kind of brainstorm ideas in the way an ad agency would, and come up with these crazy concepts and then say, ok if we want to test this theory that we have, what members could we involve in an experiment? So we actually come up with these things and we say, ok, well we need a beacon company, and we need a television network, and a restaurant chain... and then we look within the network of members and we find companies that want to play in this sandbox with us.

Playing in a sandbox is in many respects a metaphor for playing the field in that it allows for his organization to create specific market relationships between various suppliers and consumers in order to better understand, measure, and conceptualize the politics of consent. Put another way, these creative collaborations are not merely just casual experiments that help
inform marketers about the potential of location based marketing, but it also structures the rules of the field by testing how consumers respond to specific campaigns and socio-technical relationships. At the same time, the need for experimentation and play in the field between various suppliers is also caused by shifting economic policies within the industry itself. Despite the rise in mobile penetration rates, marketers are still very tepid to invest significantly in mobile ad spending, and continue to prefer more traditional methods of audience targeting. As Mike sees it, there are still many challenges in establishing the credibility of the field, particularly when framed in terms of media budgets:

If you look at the data in terms of global ad spending, while the shift in ad dollars is obviously you know over time going to the mobile advertising piece, there’s still not much of a decline in traditional media spend... Our advice to marketers to advertisers is to say look, we’re here not just to say go spend money on your mobile advertising, but to say, continue spending money on traditional media, but let’s just do it in a smarter way that makes it more effective and more measurable.

This imperative to enact new kinds of measurement is in many respects a euphemism for intensifying the infrastructure of audience commodification through surveillance by increasing the measurability and calculability of media campaigns to target specific segments and ascertain their efficacy. It is also interesting because it shows not only how traditional or old media can be updated to look new, but also highlights how the field’s capacity to accumulate capital is contingent upon the ways it can quantify and measure specific cultural relationships of media consumption. Thus, we see how location based marketing tries to attach itself to pre-existing
cultural and economic relationships between media and consumers, but then tries to augment and intensify the machinery of targeting and acquisition through location specific forms of surveillance. This is important because it reveals the hierarchies of capital that exist in the field whereby location based marketers are not really advocating a complete “paradigm shift” where location becomes the focal point, but instead the correct approach is to produce new socio-technical relationships between media capital that are augmented by location based elements. Furthermore, Mike’s emphasis to integrate with existing media capital is clever because it does not require that marketers altogether abandon existing infrastructure, nor for that matter are they really required to penetrate into altogether new markets as would be the case with digital and mobile. Thus the appeal of location based marketing is its ability to exploit existing infrastructure by producing new and fundamentally quantifiable economic and cultural relationships with ad inventory consumption. As Mike describes it, a key advantage to location based media is the fact that it can augment existing media inventory by making it more measureable:

If you take a billboard, for example, Clear Channel might say to you, BMW, we want you spend a million dollars this month on this billboard at Yonge Dundas Square. But how do you measure actual engagement with it? It’s still a tough thing to do, and they’ll tell you 100,000 cars drive by here and on a monthly basis 1.6 million people walk by, but how many actually looked at it? We don't know. It’s a tough thing to measure. But, enter location and mobile, all of a sudden I can tell you how many mobile phones were near that billboard today, in the last hour. And, if I can do that in real time, not only can I tell you from a measurement perspective, I can actually create engagement now. What if I
could say to you, hey Harrison, I know you’re standing across the street from this BMW billboard, what if I could use a mobile app of some sort that you have on your mobile device to send you a message to get you to look at it and react to it in a certain way. What I’ve done is I’ve taken a mass media and I’ve turned it into a one to one.

In many respects this approach bears strong resemblances to existing theoretical and empirical research around the reconfiguration and splintering of urban spaces because of how digital surveillance becomes layered overtop of existing infrastructure to produce new kinds of political and economic arrangements that monitor the flows of everyday life (Graham and Marvin 2001). Furthermore, the idea of making existing media capital "smart" clearly reflects larger trends in smart cities towards the increasing measurability and calculability of everyday life through "real time" analytics (Kitchin 2014b). This belief in the ability for quantification to translate existing media into a more personalized, and therefore engaging and authentic experience, constitutes the source of location based marketing’s potential for capital accumulation. Mike’s explanation for how he envisions the performance and efficacy of location based strategies reveals tacit assumptions concerning the politics of consent in that he assumes consumers will automatically respond to media in ways that are altogether new, even if the media itself is considered old or traditional. In effect, this means that the discourse of location based marketing for enhancing the infrastructure of media with digital technologies is premised on specific political and cultural interpretations of audience consent through a nexus of economic quantification and the cultural production of intimate moments between media and consumers in the field.
Throughout the interview Mike illustrates his beliefs with specific examples tested in the field in order to prove the value of location based marketing. Typically this involves identifying key players in the field such as major content providers, analytics companies, and tech vendors that can span across many verticals. Mike does not restrict his philosophies of location based marketing to the field of practices of creative collaboration, but he also uses these examples to speak for the agential and affective qualities of consumers as desiring and consenting to new forms of media targeting and engagement. The goal of experimentation is to realize a qualitative distinction of engagement that targets consumers through new kinds of intimacies. As Mike explains:

All these experiments that we do, at the core of many of them is, are we creating some kind of crazy experience for the people, the consumers, the audience, that basically allays any thought even entering their mind of things like privacy or anything like that because the experience is so powerful that they just want to be part of it.

This quote in particular exemplifies what success “looks like” in the field when marketers can successfully position themselves in ways that correspond with the habitus of the audience. Mike’s appreciation for the value of creative collaborations can not only mobilize new markets through capital assemblages, but also it functions to speak for consumer agencies as desiring and consenting participants in the field. The claim that consumers genuinely desire this kind of participation is a powerful testament to the philosophy of location based marketing. Put differently, one of the goals is to prove that marketing can transcend the cultural violence that strips consumers of their agency, and creates a sense of belonging that other media cannot. Much
of the experimentation being done is not exclusively rationalized by a naked interest in getting consumers to buy commodities, but instead, like his previous example in stimulating voter behaviour, Mike sees the potential for this media to engage consumers in non-profit markets through new assemblages of media, consumers, and affects. The second example Mike leverages to demonstrate how location based marketing can be applied towards non-profit initiatives details a recent and emotionally charged example of using creative collaboration to draw awareness to domestic violence prevention:

Basically on the display is a picture of a women who’s been obviously beat up, and it’s digital so her eyes are moving and all that... and then we’ve got built into this display we’ve got facial recognition camera mounted to the top… The way this ad worked was, we’re using this camera and people see themselves there and then when they look at the screen and see this woman her face starts to heal. Obviously there’s an emotional reaction to this.

To successfully create this intimacy, a heterogeneity of actors were mobilized into stimulating new kinds of audience acquisition and conversion by appealing to specific cultural affects of mobile consumers. The goal, in other words, is to determine how media can create new acquisition models with mobile consumers in order to drive conversion by using location to produce new kinds of intimacies and affects between consumers and marketers in the field. This requires the successful collaboration of numerous stakeholders, vendors, and service providers, including: Ocean Outdoor, a digital out-of-home supplier (DooH) (incidentally, the ad later went on to win several advertising awards, including one sponsored by Ocean Outdoor itself);
Women’s Aid, the charity (as both a non-profit organization and a brand); WCRS, an advertising company; Weve, a mobile marketing tool used to solicit donations through push notification SMS; as well as the necessary vendors and developers of facial recognition technology that had to be integrated into this billboard (Couch 2015) (see Figure 7).

The success of this ad is, of course, only possible when the audience is positioned as an integral part of the ad itself. Not only is the audience spoken for as sympathetic agents to the cause, but, in a somewhat tautologous fashion, the only way this ad can demonstrate its value is through the co-presence of mobile consumers who function in the assemblage to enact a performative difference in the campaign’s rhetoric. Measuring the success of the ad is in effect
proven by seeing the aesthetic differences consumers passively create in the production of content. Put another way, this specific example reveals an institutional logic of location based marketing: through new forms of audience measurement that quantify mobile traffic, it is possible to intensify the underlying cultural significance of the ad itself. Here, simply looking at the ad could be interpreted not just as a successful measurement of audience acquisition, but also as a larger transformation of urban media from a broadcast model towards an increasingly interactive model that directly reveals how consumers can make a performative difference in the production of cultural content.

One of the core objectives of these creative collaborations is to inculcate consumers to accept and participate in location based marketing in order to normalize the affective attitudes towards the intensification of digital surveillance in mobile urban environments. The point, in other words, is not simply to convince consumers of its value by showing new kinds of digital strategies, but to make consumers enjoy participating as active and consenting agents. Even more simply, a key approach of these campaigns is to make consumers internalize the objective structural relations of the field through intimate, affective, and experiential campaigns. This means that it is possible to see how the field depends on, and is sustained by, granting consumers a certain degree of consent and agency, or by making consumers perceive and appreciate new hierarchies of value that are, in many respects, derived from the production of new intimacies for the realization of consent. This campaign reveals how Mike envisions the field as operating in unison between consumers and media, and in particular how metrics of audience acquisition are conceptualized as becoming increasingly automatized and calculable by integrating specific sensors that not only surveil the audience but can also produce noticeable differences in the content itself. Thus for Mike, the successful use of location based marketing is based on the
intensity and quality of mediating consumers with location specific media. In this case, the success of the campaign is not simply understood in terms of how many conversions it drove, but also because of the heterogeneity of devices and media capital that are being fused together into one discrete campaign. This assemblage of media capital is understood by Mike as they key to unlocking the potential of location based marketing to produce intimacies in the field through experiential and affective campaigns that brush away any concerns of consent or other issues such as surveillance and privacy. For Mike, there is a positive relationship between the capacity to target and exploit emotion and the production of consent:

A lot of the work that we do is about experience and emotion; that type of marketing that leverages location to create it. But it’s not about how many people per se, it’s what do we do with those people... and, as I said earlier, when you ask any of the people who participated in it, or walking by the billboard who saw it, not one of them—we asked them directly, are you concerned about privacy issues—not one of them, because the idea of I’m sharing my location and there’s a privacy concern around that, does not enter into their mind when they’re participating in this thing… At a higher level, one of the core things for us is to teach brands teach marketers how to use location in ways that basically just make location part of the consciousness of society; that it doesn’t become a question of should I share my location or not share my location, it’s just part of everyday life and there’s immediate benefits that everybody sees from that.

The ways in which Mike interprets habitus—specifically the capacity for consumers to perceive, appreciate, and consent in the field—is a testament of how the field is structured by
affective discourses because of how it is perceived as the key to successfully accumulating capital and thereby reproducing the field. Thus, the hierarchies of capital that circulate in the field, and structure cultural and economic relations between marketers and consumers can be largely traced back to how marketers can negotiate and influence the systems of perception and appreciation of consumers towards surveillance. The field is thus a game in which a necessary condition for accumulation depends on how marketers can position themselves, and leverage their capital to influence habitus by exploiting affective and phenomenological beliefs concerning the positionalities and intimacies between consumers and marketing. To simplify even further, the capacity for accumulation depends on the creation of new intimacies in the field. This is accomplished by positioning institutional agents into particular assemblages of surveillance and influence, but also by positioning consumers in particular ways with these assemblages so that they will properly internalize the field, and consent to being part of its reproduction.

6.4 - Intrusion, Self-Regulation, and the Social Shaping of Location Based Marketing

The final section of this chapter describes how the field seeks to reproduce itself using self-regulatory policies as a means of negotiating resistance and normalizing the field based on how risks of intrusion are understood and placated through notions of choice and neoliberal autonomy. This permits for a final consideration of the economies of intimacy by examining how the field seeks to maintain their authority and autonomy by enacting neoliberal policies of free market governance that have hitherto come to define the neoliberal economic condition (Harvey 2005). A key aspect of this reproduction of the field is the social shaping of location based
marketing whereby marketers must imagine the kinds of responsibilities they have towards informing consumers of what they do, and also the extent to which consumers will "naturally" consent. This social shaping depends mainly on the ways marketers enact boundaries and distinctions between themselves and audiences based on imagining the extent to which location based marketing will be intrusive or disruptive to everyday life mobile practices and consumer lifestyles. This need to imagine the social shaping of the field, as well as enact neoliberal policies of governance is in some respects guided by the prediction that the industry will only continue to gain momentum as more consumer regularly choose to consent. As David, the data scientist for a mobile advertising and analytics company explains, consent will only likely continue to increase because of the way location is increasingly built into the social shaping of mobile media practices and the underlying digital literacies of consent:

For example, the weather network. Do you want to know the traffic on your street? We need your location. It’s a simple as that. Most people don’t read the consent things that they agree to—an ongoing problem. If there were some scandals in the future about too much information getting into hands that people rather that didn’t, I don’t know, it could change, but for the time being people seem increasingly willing to have their phones report on them.

The increasing propensity for consent helps situate regulatory policies within a larger backdrop of the relationship between risk, surveillance, and new media production (Livingstone 2008; Hasinoff 2012). The field is largely internally governed by informal rules and guidelines
that structure the social relations of producing and exchanging location data. At the same time, there are also external bodies, such as the Federal Trade Commission that, as was explained in chapter 5, have imposed penalties on mobile marketing companies that have collected personal information without consent. Acknowledging the potential risks of collecting data in ways that either violate formal laws, or also in ways that violate the ethical or affective cultural frameworks of vernacular information practices, the industry has recently begun to develop specific codes and rules that prescribe how marketers should accumulate capital. In large part, however, these instruments and regulatory bodies lack any real legal status, nor are there any enforcement bodies that could execute these rules or enact sanctions. The “Future of Privacy Forum” in particular has become a case in point that illustrates the kinds of social contracts that marketers envision for governing the field through non-binding rules. The Future of Privacy Forum (FoP) was first shown to me by Steve (the co-founder of a Toronto WiFi MLA company). As Steve explains to me, there is a certain inevitability to the future of location based marketing that requires that the industry develop their own sets of standards that govern how data should be accumulated and exchanged:

in my opinion you can’t stop technology but what we can do is shape how it’s used. So rather than be totally afraid of it and stop it altogether, let’s have a conversation about what we’re doing...

One of Steve's underlying rationales for inviting such "conversations" is that it is important to not attempt to halt or impede this industry as such pursuits are, in his view, futile.
Instead, his philosophy is to stimulate a conversation around the social shaping of location based marketing:

I would encourage those that are trying to stop, whether it’s the passive tracking or there’s any new technologies that come out, I would encourage people not to try and stop it, but rather spend that energy trying to shape it in a way that’s respectful of people’s privacy rather than trying to shut it down.

Notions of privacy coalesce into the foreground for structuring the dynamics of the field, and the kinds of roles and relationships marketers have to consumers that might require a sustained effort by the field to demonstrate they respect the thresholds embodied visibilities and locative surveillance (Smith 2016). Thus, the FoP has emerged as an important avenue for justifying to the public that location based marketers are sensitive to the possibility of being overly-intrusive in everyday life. As Steve explains, the FoP has been meeting regularly with privacy commissioners such as the Information and Privacy Commissioner of Ontario to discuss what kinds of regulatory standards are required in order to minimize the risk of government interference, as doing so could possibly restrict industry growth:

we’re learning, like, we don’t know what we don’t know and so we’re constantly making revisions over and over. And that’s kind of our opinion is that there’s a business risk of the government regulation shutting a piece down that would be detrimental to the industry so from just like a business preservation point of view…
The FoP is a Washington, D.C. based think tank that is comprised of privacy chiefs from over 110 companies, think tanks, as well as experts from academia and industry; their top 10 corporate donors are: AT&T, Facebook, Google, Apple, American Express, Disney, Bank of America, Amazon, Tune, and Ernst & Young (FoP 2016). Their membership likewise is composed of over one hundred major companies in retail, consumer goods, media and marketing. Collectively, the private sector accounts for 75% of their operating budget, yet, ironically, describes itself as a not for profit entity. What binds all these interests together is to determine how best to articulate the need for self-regulatory forms of governance, including adopting industry wide standards that can be self-enforced on participating companies. This spans across several different emerging applications of location data, such as wearables, connected automobility, the sharing economy and of course “Ad and location practices” (ibid.).

The FoP has been working on developing a policy instrument that guides the collection of location data for mobile location analytics companies. It states very clearly that MLA companies should be self-regulating in terms of informing consumers that they are under surveillance:

MLA Companies shall take reasonable steps to require that companies using their technology display, in a conspicuous location, signage that informs consumers about the collection and use of MLA Data at that location. Such steps shall include proposing standard or model contract language, providing companies with model language for in-store signage, developing a standardized symbol or icon to be included with such signage, and using other reasonable efforts to promote the use of in-store signage where MLA technology is used (FoP 2013, p. 1).
The FoP’s working group on mobile location analytics has likewise designed a sticker that retailers could post on their storefront window in order to inform consumers about the use of location tracking. This sticker (Figure 9) also directs consumers to a website for more information and one’s “choices” to be tracked.⁹

![Figure 9 - Informed Consent in Retail Location Tracking (retrieved from smartstoreprivacy.org)](http://smartstoreprivacy.org)

This website directs to an “opt out” page where consumers can input their MAC address of their smartphone and be added to a “do not track” registry. The registry is intended to inform participating companies to not track that particular MAC address; however, there is no information about the extent to which it is in any way binding, nor what kinds of enforcement mechanisms are in place to ensure companies adhere to the consumer’s request. The Privacy Policy states that the MAC address will be shared with “The Wireless Registry”, a vendor that graphs device identities in the Internet of Things (IoT) in order administer the opt out database.

The MLA code of conduct is an “enforceable, self-regulatory framework” but does not describe what kinds of enforcement mechanisms exist, or how consent is to be clearly defined.

⁹ http://smartstoreprivacy.org
The policy does make several references to “Affirmative Consent” which they define as “an individual’s action in response to a clear, meaningful, and prominent notice regarding the collection and use of MLA Data” (FoP, 2013, p. 6). They do not define what kinds of actions might be considered clear and meaningful in this regard. It is possible that affirmative consent could be interpreted in many ways, such as a consumer continuing into a retailer despite the presence of signage informing them that the store employs location analytics. However, again, there are many vague references to knowing whether or not retailers will take necessary steps to inform their customers, as the privacy policy consistently employs superfluous language to many of the articles, including, for example, that MLA companies must take “reasonable steps” to ensuring that retailers using MLA technology inform their customers about the collection and use of location data (ibid, p. 1).

The FoP’s MLA code of conduct is important not because of its capacity to govern MLA companies, but because of how it capitalizes on exploiting consumer’s overall lack of awareness about these technologies in order to protect themselves from the risk of scrutiny and perhaps even gain public confidence. At this time there is no data to support these claims, it does clearly reinforce a larger pattern in “digital capitalism” that relies on neoliberal market principles of internet governance in order to maintain industry growth (Schiller 1999). Furthermore, as Silverman (2015) notes, notions of transparency and openness in digital media industries such as social media companies are often rhetorical ploys designed to reinforce existing power relations and particularly the configurations of surveillance and visibility that render consumers increasingly transparent whilst obfuscating the larger corporations responsible. Finally, as Mosco (2015) notes, there is a growing concentration of power and vertical consolidation in the cloud computing market that is beginning to pose serious questions around the extent to which free
market principles will dominate the regulatory structures of emerging cloud based service providers. As such, examples such as the FoP reinforce the rhetorics of digital capitalism and the increasing concentration of capital into, in this case, complex assemblages of private and non-profit actors that function to develop policy instruments that serve as self-regulatory guides for MLA companies. This emphasis on self-regulation and a pro-active approach to outlining a standard set of guidelines and mechanisms for informing the public demonstrate how the field tries to justify itself to consumers as capable of autonomous self-regulation and responsible collection and use of personal information, and how these instruments likewise reflect the larger cultural and economic agencies marketers assume consumers possess and exercise in their everyday mobile digital practices. At the same time, the industry's efforts to preserve their autonomy through self-regulation could also be explained by understanding the extent to which they believe it is necessary, or have a duty, to inform consumers and educate them about the field. This includes the kinds of roles and responsibilities of both marketers, brands, and consumers, but also, what kinds of benefits or values consumers will receive in exchange for their participation. For example, Mike explains to me that by and large he does not believe that marketers need to educate or inform consumers about location based marketing:

I think on the consumer side we don't need to do that. I think it's very confusing to the consumer to try and convince them or educate them on what location based marketing is. I don't think it's necessary. I think it's more important that we teach the advertising community on how to do it well so that it just happens and it's just part of society, and society embraces it without actually knowing it's location based marketing.
This assumption that marketers need not inform or educate consumers about location based marketing, and in turn the larger ecosystem of location based surveillance is important because it reveals how Mike assumes that audiences will ultimately "choose" to consent irrespective of the conditions by which they are informed. This finding is important because it reveals the extent to which marketers assume consent is already built-into the fabric of mobile digital culture, and that in general consent is assumed to be given by audiences insofar as it does not cross ephemeral boundaries, such as being too invasive on the body, or conversely, insofar as it does not directly interfere with how consumers move through everyday spaces. For example, Erin, a sales representative for a company that manufactures location analytics sensors using passive radio frequency identification explains to me that, as she sees it, consumers largely won't mind as long as the technologies are not overly intrusive in people's everyday lives:

I don't know if consumers actually want tracking devices or sensors in their shoes, but I think that for like airports... wayfinding is useful. Knowing what is happening around you without being bombarded with offers that aren't relevant to you is cool. Like when you go to a new city... with the check in app like Foursquare or Swarm, that's cool. But how much do you actually want to spend time on your device seeing what's going on versus actually being there, so that's something people are going to fight with.

Similarly, other participants explained to me that a key tension that marketers must negotiate when trying to ascertain the limits of location based marketing is the extent to which these technologies and media might be overly intrusive because, as Leslie, the strategic planner for a global advertising company put it simply:
I think part of it as well is that nobody wants to be marketed to. Advertising is annoying...

Your mobile is such a personal, in your face device; how do you create something that consumers actually want to spend time with? They just want to go to Facebook and see what's going on with their friends. They don't want to hear a message from Gillette...

This delicate negotiation of, on the one hand, marketers fulfilling their job of being intrusive by directly trying to interfere with everyday life and influence behaviours, and on the other hand, to remain as an invisible agent that exists in the background constitutes an important dynamic of the field that guides how marketers imagine their position in the field and the habitus of audience consent. As Erin explains further, the challenge is to determine the thresholds of surveillance and consent in location based marketing: "I think it's a delicate line between what we can do, and what we've been able to do, versus what we should do or what people want."

How exactly the field determines this "delicate line" is still arguably up for discussion. However, the development of self-regulatory bodies such as the FoP and their opt-out database clearly reveals the kinds of relationships the field hopes to structure between marketers and audiences that is largely defined by neoliberal principles of autonomy and self-governance. This reveals what kinds of agencies the field hope to endow upon audiences with regards to the kinds of choices they have to consent or resist. This in turn helps understand the economies of intimacy that define the field, and how this cultural economy is contingent upon how successfully marketers can maintain a delicate balance between accumulation and intrusion.

6.5 - Conclusion
This chapter provided an analysis of the field of location based marketing by focusing primarily on how location based marketers position themselves in relation to consumers by engaging in various politics of consent, particularly as it concerns the kinds of cultural and economic agencies marketers enact on consumers as labouring audiences that will willingly consent to disclosing their location data in exchange for various rewards or benefits. Furthermore, I explored how the field compliments these social constructions of agency with affective strategies that seek to inculcate audience consent, such as the “Look at Me” campaign that in many respects demonstrates how marketers are trying to normalize this kind of immersive surveillance as a facet of everyday urban life using non-profit clients to exemplify the value of location based marketing to accumulate trust and consent. Finally, I examined how the industry is attempting to develop self-regulatory policies as a means of demonstrating to the public that the industry is engaged in multiple levels of care around the collection and protection of personal information, such as through the development of centralized opt-out databases. These institutional efforts can be seen as attempts to black-box the infrastructural nature of location based surveillance, particularly as the rhetoric or these policies are often couched in non-binding or superfluous language. The final chapter offers a conclusion of the dissertation. I will restate the objectives and groundwork of the dissertation, and offer some concluding analysis, as well as suggestions for future research.
Chapter 7 - Major Findings and Conclusion

7.1 - Introduction

This chapter will conclude the dissertation by offering a final analysis of its overall key findings with respect to how they can help inform new scholarly discussions of the core topics explained in the literature review. Three key themes will be discussed as they are relevant to Bourdieu’s overall conceptual framework, the research questions I have asked, and key discussions from the literature surveyed. Following this, I will provide a brief discussion of some of the final considerations and limitations of this dissertation, and propose future directions into researching the significance of location data and location based marketing.

First, I will discuss how this research reveals how location data is intensifying the economic and cultural arrangements of knowing capitalism and geodemographics. This key finding demonstrates how location data can ascribe particular values or weights to locations through the incorporation of location data into geodemographic analyses, and in turn can create new epistemological approaches to conceptualizing and measuring habitus, class and distinction.

Second, I will analyze my findings in terms of the cultural economies of immaterial labour by focusing on how notions of intimacy are produced in order to mediate the subjective agencies and productive capacities of mobile audiences, particularly in order to gain, accumulate, or assume audience consent to disclose and exchange location data with various infrastructures of commercial surveillance. Again, here the discussion will focus in large part around the habitus of mobile digital culture, particularly with respect to understanding the dynamics of consent, participation, interactivity, and resistance with location data as an intrusive method of surveillance. This is important because it permits for a nuanced discussion of the logic of
geodemographics in mobile digital culture, particularly because the epistemologies and methodologies of geo-segmentation are contingent upon successfully inculcating audiences into a political economy of immaterial labour. However, it is also significant because it was not an anticipated finding of the research, and therefore the ways in which marketers structure the field by negotiating consent can be understood as an important finding in discussing the cultural politics of location based marketing.

Finally, I will reflect on the political economy of smart cities, and how location data intensifies the commodification and social sorting of urban environments. I will in particular consider how it is possible to theorize the significance of location data as it is embedded in infrastructures and platforms of surveillance and big data, and what this entails for future research into the commercial infrastructures of smart cities. However, before I undertake these discussions, it is necessary to first restate the overall objectives and research questions.

This dissertation began from a general inquiry into how location data transforms contemporary marketing, particularly with regards to the implications of how location data represents an intensification of consumer surveillance and social sorting through geodemographic segments by institutions of marketing. From here, two research questions were asked that were intended to be open ended in order to stimulate an exploratory approach. First, what are the underlying beliefs, values, and philosophies of location data, particularly with regards to how it can provide marketers with new insights and methods for knowing and influencing consumers within specific spatio-temporal contexts? This question sought to critically situate the discourses of location data that marketers enact in the field of location based marketing in order to understand how they imagine consumer lifestyles and tastes in mobile digital culture. Furthermore, it examined the underlying cultural epistemologies between
marketers and consumers through location data, or what, in other words, makes location data so special in terms of its analytical authority in mobile digital culture.

The second research question examined the larger structural relationships between marketers and consumers, and asked: what is the political economy of location data? This question focused on first understanding how location data can be produced within specific marketing contexts and applications, and how location data is then accumulated and exchanged in the field of location based marketing to develop new methods of audience segmentation and commodification. This question in turn allowed for a critical understanding of the underlying political economies and cultural economies of audience labour and commodification, specifically with regards to how marketers perceive their role in the field of location based marketing, and how they negotiate or accumulate consent and trust from mobile digital audiences. As such, there are many implications for understanding how location data transforms the power and authority of marketing in mobile digital culture.

7.2 - Location Data and the Production of Geodemographics

Findings of the dissertation indicate that marketers are beginning to incorporate location data into developing new models for clustering audiences into geo-segments, and in many respects this confirms some of my early theoretical assumptions concerning the impact of location data on audience production as I anticipated that the intensification of data could reinforce institutions of social sorting, and the “phenetic urge” of classification and typification (Lyon 2003; Phillips and Curry 2003). However, the findings of this dissertation reveals that the influence of location data on the construction of geodemographics can take on several epistemological configurations, including the profiling of specific locations based on foot-traffic
measurements and location behaviour patterns to infer new understandings of class and space. Thus, the application of location data on geodemographics might not only serve to reinforce the typification of consumer lifestyles, but also to create new understandings of specific urban locations based on location analytics. This could suggest an epistemological shift in geodemographics away from lifestyles towards the profiling of locations (Phillips and Curry 2003). This is significant for several key reasons. First, the incorporation of location data reinforces existing literature concerning the increasing importance of understanding geodemographics as it is embedded in particular socio-technical configurations of data, software, and space. These configurations are becoming increasingly subject to epistemological and cultural discourses of reflexivity and complexity, and arguably location data continues to reinforce these discourses. As Upprichard et al (2009, p. 2833) argue, the production of geodemographic code is a “dynamic recursivity” subject to a number of different factors and contexts that inform what kinds of methods, variables, and data are incorporated into the socio-technical design of geodemographics. Elsewhere, Burrows and Gane (2006) note that the construction of geodemographic segments through geographic information systems is becoming increasingly complex:

…particularly as identities are created increasingly through acts of consumption that play out in and across a diversity of spaces, and which, in turn, define new forms of ‘class’ and ‘class relations.’ Now more than ever before, for example, the places in which we choose to live, eat, holiday, and more generally consume are key factors in defining who we, as individuals, are, and the social groupings to which we aspire to belong (p. 808).
The incorporation of location data into the construction of geodemographics reveals underlying cultural and economic trends that mutually reinforce one another to produce new kinds of methods for clustering, evaluating, and targeting audiences, and clearly reinforces Burrows and Gane’s (2006) thesis concerning the complex intersections of place, identity, and consumer culture. The incorporation of location data into the construction of geodemographics also reveals an intensification in the granularities and scale for the mechanisms of targeting and analytics, and can be rationalized by understanding how the dynamics of class and space necessarily require an element of mobility and fluidity (or dynamic recursivity) precisely because classes rarely if ever strictly inhabit one particular space.

Location data in this regard becomes important because of how it can ‘naturalize’ the construction of geodemographics as a realist epistemology of lifestyles that more accurately reflects the dynamic intersection of space, identity, and consumer practices. This effectively builds on existing social constructions of geodemographics that reifies the homology of space and class, typically represented through the idiom that ‘birds of a feather flock together.’ This extension and critique in many respects reveals how marketers envision the habitus of mobile lifestyles and tastes, specifically by framing location data, and more specifically the algorithmic analysis of location data from mobile consumers as revealing the propensities and dispositions of mobile lifestyles. Location data, from this perspective thus claims to offer a realist or ‘natural’ measurement of habitus precisely because of how marketers socially construct location data as signifying a more authentic and unobtrusive analytical platform for measuring our dispositions, propensities, regularities, and patterns. This arguably reinforces Thrift’s (2005) thesis of knowing capitalism because of the ways that global capital extends and augments the institutions of rendering spaces and flows visible for particular arrangements of capital.
This also echoes existing research in digital culture that theorizes how commodification and value are produced so that they can circulate within various cultural circuits and flows, and moreover how spatial conventions of mobility increasingly define the production of culture (Lash and Lury 2007; Lash 2002). This theme emerged most clearly in the example of the commodification of Bryant and Hyde parks, where park authorities employed location analytics companies to better understand how they could target particular brands to advertise in these spaces by knowing what kinds of people frequent them, where they came from, and what other locations they’re more or less likely to frequent. In turn, knowing these patterns of location history can be used to infer larger demographic profiles of habitus, such as what kinds of consumer dispositions they are likely to have, typically as they are expressed in the kinds of brands and retail stores they are likely to consume. This in many respects reveals how consumer subjectivities are increasingly known and mediated by their interactivity with branded environments (Murakami Wood and Ball 2014), as well as extends the ways in which our “algorithmic identities” are calculated and inferred based on location data (Cheney-Lippold 2011). The data collected in this thesis, both in terms of particular examples of how analytics companies produced descriptive knowledge about lifestyles, and the responses of participants, both stressed the imperative of framing lifestyles in terms of identifying particular locations consumers visit because it tends to signify a more authentic representation of the actual dispositions and habitus of populations.

At the same time however, this naturalization of building geodemographics using location data is also guided by performative considerations that critically evaluate existing marketing strategies in terms of economic efficiencies in media spending. This was an unanticipated finding of the dissertation in that I was not prepared to discover that marketers are
increasingly problematizing the kinds of values they ascribe to the algorithmic production of content. This was revealed when marketers articulated the need to refine their targeting abilities with increasing precision in order to increase various efficiencies in the marketing ecosystem, such as media spending, measuring audience engagement, tracking and tracing the path to purchase, as well as understanding the cultural and economic value of increasingly precise locations such as parks and retailers. In other words, we begin to see how it is possible to establish correlations between the cultural discourses that frame the epistemological value of location data with the economic forces that structure the field of location based marketing, particularly so that marketers can articulate specific beliefs about the value of location data as mutually serving both the validity of their classification systems, and its economic potential to maximize mobile audience engagement. This explains why a significant portion of Mobile Location Analytics is dedicated to framing location data in terms of engagement metrics by translating it into epistemologies of consumer engagement with particular locations such as retail environments.

The significance of location data likewise reinforces existing theoretical discussions around the relationship between place and identity (Savage, Bagnal & Longhurst 2005; Thrift 1997). However, whereas geodemographics typically constructs geo-segments through infrastructures of neighbourhoods and residential addresses that result in relatively discrete categories of lifestyle, the findings of this dissertation reveal that new kinds of geodemographic segments are emerging based around new conventions of location and mobility, such that the perceived economic or cultural value of populations can be evaluated along location histories, frequencies, patterns, and intensities. Effectively this is a key finding because of how the relationship between place and identity becomes extended into new kinds of spatial
epistemologies in ways that might transcend the existing nomenclature of geo-segments, and instead seek to use algorithms and real-time location data to articulate new kinds of spatial identities that reflect cultural institutions of mobility. Thus, what is particularly interesting to note here is that the implications of location data can not only reify the underlying epistemological assumptions of geodemographics, but at the same time critique the existing classificatory systems as being overly ‘static’ and unable to properly address the mobility of consumer lifestyles, tastes, and practices.

The production of mobile geodemographic segments is also being framed within new spatio-temporal conventions of intimacy, such as the rise of targeting specific “micro-moments” of everyday life. This was a major finding that I did not anticipate to uncover. It is significant because it brings into question how marketers envision the relationship between class and space, but more importantly the extent to which marketers should target audiences based on geodemographic considerations, or through micro-moments of intimacy and knowing affective states. Here I believe that further research into understanding the relationship between capital and affect, particularly through critical and feminist theories of the cultural politics of emotion, will help further unpack how marketers are increasingly targeting populations through micro-moments (Ahmed 2004).

7.3 - Intimacy and Consent

A major finding of this dissertation is that the production and analysis of location data into new kinds of geodemographic segments is contingent upon how marketers successfully negotiate the intimacy of location data and infrastructures of geo-locative surveillance in order to
produce consent, trust, and participation. This is important because of how location based marketing reinforces emerging discussions concerning the cultural politics of visibility through affective epistemologies of surveillance. As Smith (2016) notes, it is increasingly evident that a major structural dynamic of contemporary surveillance is the extent to which bodies are subject to watching and being watched by institutional practices of dataveillance and social sorting. In turn, the visibilities of bodies reveals how affective politics of surveillance are beginning to emerge that mediate the experiences of audiences in mobile digital culture. This negotiation of how marketers perceive the field with how they assume audiences do (either as homologous to their own interests or antithetical) is the key to understanding how the field accumulates capital and reproduces structural divisions of labour, particularly with respect to the intimacies of immaterial labour inherent in location data. Even assuming for a moment that consumers are often largely unaware of the extent to which they are increasingly subject to this kind of surveillance in everyday life, there is nonetheless a profound but highly tacit concern about how marketers should frame key discussions about the aesthetics, ethics, and affects of location data, particularly because marketers recognize that failure to earn the trust and consent of audiences (that is, failure to properly negotiate the rules of the field) can jeopardize their position and authority in the field, and can in turn risk engendering acts of institutional containment or vernacular resistance, typically expressed through affective discourses of disdain by consumers (the “ickiness” factor of location data), or, through the imposition of economic sanctions by regulatory bodies such as the FTC should companies be found to have violated the institutions of consent to collect and exchange location data. This negotiation of consent is particularly important given that at present the politics and regulations that structure the collection and exchange of location data are largely governed by commercial forces whom self-regulate their
accumulation of location data under the assumption that it represents a natural or complimentary extension of existing regimes of marketing, personalization, and new media interactivity. This reinforces existing discussions concerning the extent to which surveillance in everyday life is contingent upon various practices of trust-making that commercial entities must successfully articulate when capturing various kinds of data that are "expelled" from bodies for capture and analysis by surveillance infrastructures (Smith, San Roque, Westcott & Mark 2013). The fact that quite often marketers speak for the audience by imposing their own value sets onto audiences reveals the extent to which the cultural politics of consent reflect a particular "symbolic violence" of the field wherein institutional agents seek to colonize the subjectivity of vernacular practices in order to legitimate their own accumulation of capital (Bourdieu 1985).

Intimacy and consent constitute a key structural relationship between marketers and mobile audiences which governs the political economy of location data and the accumulation of capital, as we consistently observe an underlying tension concerning how marketers should best explain the value of collecting location data from consumers so that it is for their own advantage. It is a politics of immaterial labour that, as Cohen (2004) argues, serves to "valorize" surveillance in order to reproduce institutions of free labour for post-Fordist capitalism. However, whereas the kinds of labour that Cohen analyzes center around digital enclosures of social media such as Facebook, we see here how location based marketing moves beyond enclosures or panoptic architectures and instead focuses around extracting surplus value in new spatio-temporal arrangements of location, media, and affect, such as Google's "micro-moments." This emphasis on highly specific regimes of targeting further contributes to what Andrejevic (2011) terms "affective economics" whereby surveillance is increasingly focused on collecting and analyzing audience sentiments as a "modality of control" (p. 617).
Marketers are all too aware of the cultural politics of location data in terms of how it can reveal highly intimate knowledge of lifestyles and tastes; the objective is thus to position themselves in the field such that they can claim particular beliefs of audience consent, and, ultimately, to make the routine collection of location data part of the “consciousness of society” (as Mike explained) by placating the possibility of audience critique or resistance (itself a constant and historical preoccupation of culture industries with respect to how the media “desperately” seeks out audiences, and attempts to regulate their behaviour (Ang 1991; Butsch 2000).

A key strategy for gaining trust and consent is to embed the collection of location data as an empowering consumer practice that enables consumers to realize distinction through the intensification of personalized content. This embodies the logic of what Lash (2007) calls a “post-hegemonic” power of information and analytics—a negation of agency through the mediation of subjectivity as an exchange of data in order to accumulate cultural capital. Thus, we see a consistent discourse in the field that tries to frame the intensification of surveillance through location data as a natural desire for mobile lifestyles to earn greater degrees of distinction in the field such that consumers will “willingly” exchange private data for specific kinds of cultural or economic value. In this respect we can begin to identify a cultural economy of surveillance wherein the capacity for reflexive agency is sublimated into a discourse of consumer sovereignty and rational exchange that assumes that the rules of exchange are already internalized by consumers and reflected through specific logics of data production during everyday consumer practices. The success of the field of location based marketing, in other words, depends on how marketers can produce, negotiate, or deny the agency of consumer identities by embedding it within particular economic and cultural discourses of subjectivity so
as to channel the productive capacities of audiences as immaterial labourers for an emerging infrastructure of ubiquitous surveillance that is granted the authority to extract data and convert it into surplus value.

The success of the field depends on how well marketers can influence their relationships with consumers by intensifying the intimacies of capital and affect, particularly because of how the dynamics of the field, in terms of how location data intensifies the commodification of audiences and locations, is embedded in larger political and cultural economies of capital characterized by increasingly shorter production cycles and the rapid deployment of capital through global infrastructures of mobility and fluidity (Marazzi 2011). This in turn helps explain why many of the existing campaigns of location based marketing heavily focus on idiosyncratic case studies, and construct geo-segments of audiences that are relative to specific locations such as retailers or parks in order to legitimate the field. Intimacy and affect are a significant dynamic to the immaterial labour of location data, and the cultural politics that mediate the production of subjectivity (Wittel 2004).

A key finding of this dissertation is the ways in which infrastructures of location data embed particular understandings of habitus into the socio-technical design of location based marketing, particularly in order to maximize the extent to which consumers consent to participation. This reinforces existing theoretical research into the cultural politics of geodemographics as it concerns the conflicts of naming and reproducing particular socio-economic divides through structural divisions between the institutional orderings of space and class, and with the vernacular practices of everyday life (Parker et al 2007). Here, the cultural assumptions of intimacy and affect as they are revealed through the politics of consent clearly demonstrate how there may be strong efforts by institutional forces to impose particular notions
of subjectivity, agency, and participation onto the mobile digital practices of consumers in
everyday life in order to legitimate the collection and analysis of location data across a myriad of
infrastructures of mobile surveillance.

Interestingly, it is important to acknowledge that although the potential for location data
to create new kinds of geo-segments and analytical knowledge about lifestyles and tastes is
clearly evident, at the same time, there is also evidence to suggest that location data is also
valuable because it can enable marketers to realize new kinds of intimacies by targeting
audiences in specific micro-moments, or spatio-temporal contexts in which the objective is to
deliver the right message, to the right person, and at the right time and place. Put differently, it is
possible to see how marketers must negotiate between, on the one hand, using location data to
intensify analytical methods of consumer segmentation that can be applied across a range of
spatio-temporal contexts, and on the other hand, to exploit location data in highly specific
situations that target the affective state of individual consumers throughout their everyday
information seeking practices with mobile media.

There are several key implications for this. First, this could suggest that for marketers,
understanding the particular identity of the audience (as gauged through geodemographic
profiling) might in fact be less important than originally assumed. Instead the emphasis might be
to use location data to produce a much more behaviouralist model of targeting and influence
where audiences are produced by using big data to translate particular notions of intent and
immediacy, such as by analyzing and geo-targeting web search behaviour. This engenders
important discussions about the extent to which the relationship between place and identity is
constituted by new approaches of knowing capitalism, and more specifically it reveals how the
institutional construction of identity is subject to multiple considerations that seek to understand
both the relationship between class and space, and with the desire to understand the particular affective states of consumers as they occupy particular spatio-temporal moments that can be translated through algorithms into economic opportunities for targeting and influencing audience behaviour. At the same time, we can also observe the intensification of classificatory processes that exploit location data to better understand the mobility patterns of mobile consumers in order to develop longitudinal profiles of their habitus, such as in the case of the West Queen West’s deployment of WiFi MLA sensors throughout their neighbourhood. Here, the objective was not so much to target consumers in specific micro-moments or affective states, but to establish a better understanding of the relationship between place and lifestyles as they are revealed by patterns of engaging with retailers and brands in specific neighbourhoods.

The dynamics of location data, intimacy, and immaterial labour thus reveal several key theoretical discussions concerning the structure and logic of location based marketing. First, we see how the capacity for marketers to successfully accumulate location data as capital depend on how they can frame consumer subjectivities as desiring and consenting agents in the field, and that rationally choose to exchange location data for distinction. In some respects this echoes existing theoretical arguments in mobile digital culture that show how consumers develop particular emotional attachments with mobile devices, both in a material and digital sense (Beer 2012). This relationship can in turn be used to enable new kinds of immaterial labour, particularly the production of personal information through various infrastructures of surveillance and social sorting. It is thus a cultural economy of immaterial labour whereby economic capital is produced by audiences in exchange for cultural capital. Second, this cultural economy of location data reveals how the intimacies and affects of location data are embedded in larger political economies of global capitalism, particularly the intensification of audience
production and commodification through real-time analytics. This is important because it reveals how the accumulation of capital is subject to a politics of consent whereby marketers must successfully articulate key cultural discourses of the value of location data in terms of its capacity for enacting distinction. Finally, this articulation of distinction is in many respects complicated by epistemological and methodological discussions concerning the kinds of strategies marketers should employ in the field, be it either to exploit location data for enacting large scale classificatory systems of mobile populations, or, conversely, to exploit location data into specific micro-moments of consumer targeting and acquisition. In effect, this reveals an important spatio-temporal dynamic of geodemographic production, particularly as it concerns the necessary relationships of class and space that location data can reveal with the specific economic objectives of idiosyncratic marketing campaigns. Put simply, marketers must try to understand the scope and value of location data in terms of how it can enable them to target, acquire, and influence consumers along particular scales of time and space. In turn, this engenders important discussions concerning the political and economic constitution of smart cities through big data analytics, and as such will be the final section of this analysis.

7.4 - Location Data and Smart Cities

Smart cities have become an emerging focal point of scholarly research in urban studies due to the increasing prevalence of using “big data” for developing flexible forms of urban governance (Kitchin 2014b), as well as stimulating new kinds of economic investment into knowledge driven economies (Townsend 2013). A key implication to smart cities in urban studies is to theorize how smart cities and “big data” can engender new research agendas around
urban lifestyles and citizenship that are algorithmically governed by infrastructures of surveillance (Klauser and Albrechtslund 2014; Tenney and Sieber 2016). Here we can observe important correspondences between the reconfiguration of urban environments and the rise of "personal data revolutions" which both advocate for personal and civic forms of empowerment through big data, however, at the same time, we can observe new digital divides and asymmetric power relationships between those who collect, store, and analyze big data, and those targeted for such surveillance and analysis (Andrejevic 2014), as well as a larger ethical discourse concerning the "ethics of forgetting" (Dodge and Kitchin 2007). Conversely, the intensification of big data has also been foregrounded by new theoretical discussions concerning the reconfiguration of memory through mobile digital practices (Hand 2014), and the impossibility of forgetting because of the ubiquity of surveillance and transparency that increasingly defines everyday life (Bossewitch and Sinnreich 2012). This dissertation reveals how there are important implications for understanding how location data reconfigures the everyday cultural and economic structures of smart cities. This was demonstrated in the ways that marketers envision how location data can impact how smart cities are rendered knowable into new cartographies of biopower (Lazzarato 2002), where it becomes increasingly possible to map the cultural and economic flows of cities in real-time. This mapping is important for understanding emerging trends in smart cities where locations are routinely surveilled in order to “weigh” the relative value of locations according to specific institutional objectives such as the extrapolation of surplus value (Barreneche and Wilken 2015). This reveals how location data is increasingly imbricated in new strategies for organizing people and places into new cultural and economic distinctions of class that is informed by location analytics, and in turn function to re-mediate the decision making processes of marketing strategy such that particular locations can be routinely
profiled and evaluated by location analytics in order to rank or classify locations into particular cohorts of value.

This method of spatial organization largely reinforces existing research into the extent to which spaces are layered or “transduced” by code and software (Dodge and Kitchin 2005), and increasingly “software sorted” (Graham 2005) through new kinds of hidden or “unconscious” technological systems that render spaces increasingly “sentient” of the kinds of flows and mobilities of people and capital (Thrift and French 2002; Thrift 2004; Crang and Graham 2007). It is therefore particularly interesting to note the bi-directional relationship between the production of visible subjects in spaces, and the invisibility of location data as it is typically produced and accumulated beyond the direct perception of mobile audiences because the infrastructure is “sunken in” everyday life, such that it is increasingly impossible to visit urban locations and not generate location data. At the same time, this generation of location data can also be understood as a new politic of visibility that enables the production of hierarchies of capital and worth, and in turn new political economies of geo-segmentation based on the extent to which subjects become rendered visible in certain places and under certain conditions, and in turn changing the ways that institutional powers such as marketers think about and appreciate certain populations over others based on their mobility and the politics of visibility through algorithmic platforms (Thompson 2005; Bucher 2012).

This bi-directional relationship of visibility and invisibility not only reveals many of the contours of surveillance and the power of location based marketing, but also reinforces larger theoretical trends in digital culture towards the increasing “motility” of big data (Coté 2014). Here we see how location data is both at once rooted in specific physical locations, such as parks and malls, but can also be at the same time “lifted out” of these physical boundaries and
distributed across a heterogeneity of digital networks across geographically distributed locations, such that data motility “is, above all else, autonomous movement” (Coté 2014, p. 140). Put another way, we see how location data exists across a multiplicity of ontological states which therefore allow it to circulate as both economic and cultural capital, and as a “motile commodity” (ibid.)—providing a means of translating material and cultural epistemologies based on the topological mechanisms that permit location to circulate into new epistemological configurations and mechanisms of control and authentication (see also Deleuze 1995). The motility of location data is of particular importance because it reveals the dynamic intersection of physical mobility with the mobility of our data, and engenders important questions concerning the underlying mechanisms of control and autonomy that guide the production of location data. In particular, this dissertation reveals how the ethics of big data in various institutional relationships are not simply defined by processes of data collection, storage, and deletion that constitute the ethics of forgetting. Instead, there are also reasons to suggest that there are underlying affective politics of consent and intrusion that define the structural relations of surveillance between commercial forces and mobile audiences. These affective politics play a key role in determining how audiences comprehend their position in various fields of big data surveillance, and the extent to which they are endowed with various capacities to consent or resist these mechanisms of data collection and analysis. It is therefore not simply a mechanistic relationship governed by rules of data collection, but also a cultural politic of consent defined by affective epistemologies that are internalized by audiences in various fields such as location based marketing.

7.5 - Limitations and Suggestions for Future Research
I wish to offer three key limitations of this dissertation in order to justify future research directions into the field of location based marketing. First, because location based marketing is still relatively new, and because the field is undergoing rapid expansion, testing, and market consolidation, there is obviously a key limitation in that this dissertation is largely a preliminary and exploratory project. Further research is necessary in order to properly study the political economy of location data and location based marketing. This dissertation reveals how it is necessary to further study how the politics of consent is internalized by consumers, and how consumers themselves perceive the field of location based marketing, particularly the extent to which they comprehend the ubiquity of location based surveillance. Second, as the literature review of mobile media argued, user-centric research tends to dominate the field of mobile media studies, and so in some respects the decision to not engage with user-centric methodologies restricts my ability to properly engage with key theoretical discussions. This dissertation deliberately chose not to pursue this avenue in favour of focusing on the industry perspectives of location data and marketing. As such, the kinds of responses and data collected by marketers must be contextualized in their own right in that there are ultimately very clear economic objectives and rationales that govern the kinds of responses I was able to uncover from my participants. Therefore, it is important to now return to user-centric research and further explore the politics of agency and affect in location based marketing.

One suggestion for future research is to develop qualitative studies using ethnographic and in-depth qualitative interviews that seek to understand how mobile media users understand their relationship with institutions of mobile and location based marketing, and the extent to which users consent to being subject to this kind of locational surveillance, and their beliefs about how location data is passed and exchanged with marketers during routine information
seeking practices on smartphones. This would permit for a more nuanced understanding of the cultural politics of location data with regards to how intimacy and trust are perceived by mobile audiences, and would furthermore enable a deeper critical interrogation of the politics of consent. The need to understand the politics of consent as it is perceived by users and marketers will arguably become even more important as new mobile technologies become increasingly normalized in everyday life such as mobile payments, geofencing, and push notifications.

Finally, although this dissertation did offer several examples of location based marketing and the ways that location data is being used to segment and target audiences, there is clearly room to isolate specific examples into in-depth case studies, as well as comparative studies to understand the different approaches to location based marketing based across various national or municipal contexts. This would arguably provide a more grounded theoretical research program that critically investigates how location data is influencing the production of marketing content and marketing strategies across various spatial contexts. Furthermore, over time this could realize a long term ‘portfolio’ of location based marketing case studies that would permit for a longitudinal analysis of how location based marketing campaigns have changed over time by measuring and theorizing their effectiveness or failure to target, influence, and acquire mobile audiences. In turn, this could allow for a nuanced understanding into how marketers perceive notions of success and failure in the field, which, from a Bourdieusian standpoint, would be instrumental in helping better understand how marketers perceive the field with respect to the political economies and cultural politics of habitus, capital, and field. No doubt, there are perhaps many more reasons concerning the ‘what’ ‘how’ and ‘why’ social scientists, particularly those interested in developing interdisciplinary research programmes such as “communicative geography” (Adams and Jansson 2012), and critical approaches to smart cities should take
interest into understanding the processes of location data for commercial applications (Kitchin 2014a). Framing location data in this sense can therefore be instrumental in understanding how geodemographic systems, but more importantly the underlying social, cultural, and economic institutions that sort and classify populations into discrete cohorts of worth are being re-imagined and reconfigured through new infrastructural investments in location specific media, and what implications this might have for how institutional powers reproduce divisions of labour based on sociological variables of gender, race, and class. For now, the point of this dissertation was to shed light onto the existence of a new field of research that intersects with many disciplinary frameworks such as digital cultural studies, mobile media, and critical geography.

7.6 - Conclusion

This dissertation is ultimately a first step in a much larger research project that will likely span many years. I believe that it offers an important contribution to several key bodies of academic research, as well as identifying an emerging field of consumer surveillance that will necessarily influence the mediatization of consumer culture, and consumer agencies in smart cities. It is therefore a first step in identifying key ontological, epistemological, and methodological discussions around how social scientists can best study and understand the institutions of knowing capitalism and commercial sociology (Thrift 2005; Savage and Burrows 2007; 2009), how such institutions have created new markets for location data, and what kinds of political, economic, and cultural discussions they engender concerning the future of urban living, consumer culture, and the production of identity within particular fields and hierarchies of capital.
The core outcomes of this project were inspired from a desire to ascertain and further understand the underlying political economies and cultural implications of location data as they inform and reify new fields of marketing and consumer surveillance as evidenced by new approaches to geodemographic segmentation.

More importantly, it became increasingly important to think about the kinds of resistance that might emerge from the intensification of audience commodification and surveillance through new cultural affects of intimacy and consent. Again, this was a significant and unexpected finding of this dissertation, and will necessarily play an important role in informing future research into location based marketing. It is thus in many respects an inquiry into the limits of surveillance—an exploration, in other words, into how new fields of data collection and surveillance are structured by complex intersections of political economy and cultural norms of mobile digital culture—and it reveals how, despite the intensification of surveillance and commodification, there are nonetheless powerful cultural forces that structure the aesthetics, ethics, and affects of location data that point towards complex power dynamic between macro and micro level epistemologies of lifestyle and taste.

This is precisely why I approached this thesis largely from a Bourdieusian theoretical approach in order to understand the complexities of how habitus, capital, and field structure the social relations of location data through a non-reductive epistemology. This approach permitted for an understanding of how location data can structure particular relations of class and distinction, including how location data can reveal regular patterns of lifestyles through mobile analytics; how location data signifies an important source of capital that is informing digital marketing strategies beyond the desktop environment; how the field is characterized by cultural and economic exchanges of location data and notions of value; and how the field is ultimately
structured by political, economic, and cultural relations of production that can be revealed through an inquiry into the politics of consent. Thus, future inquiries into the field of location based marketing must consider the cultural politics of the mobile distinction, or how it is that we can understand the intersectionalities of location data, consent, and the accumulation of cultural and economic capital by institutional and vernacular forces of mobile digital culture.

The cultural and economic value of location data for marketing as it can produce new epistemologies of distinction is perhaps only beginning to be articulated, however, the discourses and themes typically advanced in the field largely focus on how location data signifies a more authentic data point for constructing and influencing consumer lifestyles, practices, and tastes. This is precisely the logic that sustains the mobile distinction and the economies of intimacy. While marketers tend to stress the value of location by appealing to specific cultural and economic discourses of distinction (and clearly, have a vested economic interest to sustain these rhetorics of value), there are also delicate affective dynamics that structure the field that marketers must at one point face, and can be further understood by social scientists. There is a clear opportunity for understanding how location data will continue to inform specific strategies, and cultural politics of consumer segmentation; and how institutions of consent and trust are perceived and negotiated by marketers. This will necessarily contribute to our understanding of the thresholds of visibility, and the valorization of surveillance that produce consumers into knowable subjects.
References


## Appendix A - List of Companies

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## Appendix B - White Papers Analyzed

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<td>Capturing “Near Me” Moments: How Location Based Mobile Advertising is Changing the Mobile Landscape</td>
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<td>Retargeting: Why Your Mobile Marketing Strategy is Incomplete Without It</td>
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<td>Human Nature: Mother’s Little Helper - A global portrait of motherhood, mobile technology and future expectations</td>
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<td>ThinkNear (Telenav)</td>
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<td>Political Advertising: How Political Candidates can Influence Voters Through Mobile Ads</td>
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<td>The Mobile Majority</td>
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<td>Mobile Advertising 101: Understanding the Tech That’s Changing How We Advertise</td>
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Appendix C - Interview Guide

To begin, can you first briefly explain what your company does and what makes it unique in the industry.

How did you get into this business?

What’s your philosophy around mobile or location based marketing?

What’s the biggest challenge your company is facing right now?

What can location tell us about people?

How are you using location data to measure audiences?

How do you know when location data “works”?

<Probe: Can you think of an example of a successful or failed campaign to illustrate this?>

Do you think consumers really want this kind of stuff?

How can the industry convince consumers to get on board?

Last question, if you could bust one myth about mobile or location based marketing, what would it be?

*Could you put me in touch with anyone else you think would be interested in participating in this research?
Appendix D - Recruitment Letters

To whom it may concern,

My name is Harrison Smith and I am a fourth year PhD Candidate at the University of Toronto’s Faculty of Information. My dissertation is exploring emerging digital marketing strategies for mobile smartphone media through geo-locative sensing, and I am particularly interested in understanding how location awareness can inform new models of audience segmentation, new methods for behavioural influence such as through beacons and push notifications, and new forms of customer acquisition and brand management such as through mobile payment and re-wards programs. My research is funded by the Social Sciences and Humanities Research Council of Canada, as part of their ongoing efforts to stimulate research and development in Canada’s digital economy.

I am currently recruiting participants to conduct in-depth qualitative interviews who work in any capacity with mobile marketing, location based marketing, and digital marketing strategy. This can include, but not limited to, retailers, marketing firms, analytics companies, industry associations, business improvement associations, policy analysts, and marketing consultants. As part of the University of Toronto’s standards on research ethics, if you agree to participate you will have the right to be anonymous and I will not identify you or your company in my research unless you explicitly grant me permission to do so. You also have the right to withdraw from the interview at any point. After the interview, I can send you a copy of the transcript and would welcome any comments or additional feedback if you deem it necessary. All interviews are expected to last between 30 minutes to an hour. I am not interested in any company secrets or proprietary information, as this research is intended to further academic research in mobile digital media.
Your participation in this project would be invaluable to completing my dissertation. I would be happy to answer any questions you have prior to agreeing to participate. Please contact me at harrison.smith@mail.utoronto.ca or 647-876-2701. If you have questions regarding your rights as a participant in this research, you can contact the University's Office of Research Ethics at ethics.review@utoronto.ca or 416-946-3273. If you are interested in participating please let me know by e-mail or phone and we can arrange a date that fits your schedule.

Thanks very much for your help.

-Harrison Smith
## Appendix E - Interview Participants

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<td>Leslie</td>
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<td>Ashley</td>
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<td>Lisa</td>
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<td>Anna</td>
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<td>Retail Point of Sale CEO</td>
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<td>Sarah</td>
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### Appendix F - Events Attended

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# Appendix G - Coding Table

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