

LIVELY GEOGRAPHIES OF FILM
By
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A Dissertation Submitted to the Faculty of the
SCHOOL OF GEOGRAPHY AND DEVELOPMENT

In Partial Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

GEOGRAPHY

In the Graduate College

THE UNIVERSITY OF ARIZONA

2019

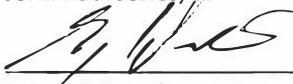
THE UNIVERSITY OF ARIZONA
GRADUATE COLLEGE

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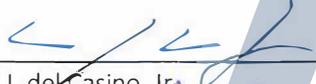
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ARIZONA

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ABSTRACT

Despite nearly 40 years of research on the topic of film and geography, geographers have had little to say about location filming or the relationship between film production geographies and the geographies found in the *mise en scène*. On the one hand, economic geography has focused on the macro processes of Hollywood's industrial agglomeration and the film industry's changing mode of production. Here, the microgeographies of production workers, including those of the location scouts and production designers who are responsible for creating the spatial menageries that we see on the screen, have been ignored. What is needed, therefore, is an approach to film and geography that is capable of bridging economic geography, which provides vital insights into the function of the film industry but ignores the film product, and cultural geography, which fosters rich, textured understanding of cultural products and practices but which overly attends to the film text at the expense of its other dimensions. This dissertation addresses this lacuna by exposing some new dimensions of film geography research that will help align film geography with contemporary findings in geographic thought on practice, embodiment, more than-representationalism, and flat ontologies.

INTRODUCTION

At the corner of Broadway and Third Street in Downtown Los Angeles is a five-story, red brick, and terra-cotta office building, shadowed by its taller and more ornate neighbor, The Million Dollar Theater. Despite its unassuming exterior, hundreds of visitors pass by the lavish theater each day and make their way into the inconspicuous office building. Once inside, visitors are greeted with an “explosion of balconies and stairs and Victorian elevators” (Dishman, in Artsy 2014, para. 4) that comprise one of Los Angeles’s most iconic film sites, the Bradbury Building. Filmed in over sixty movies and television shows since the 1940s, the Bradbury Building has a film legacy that continues today each time someone watches *500 Days of Summer*, posts a geo-tagged selfie to Instagram and hashtags it #BladeRunner, or make use of building during the AMC Locations Tour bathroom break. The Bradbury Building reminds us that where films are made matters. Film locations shape narrative (Symon and Gianopoulos 2016) and produce intellectual, emotional, and affective responses (Fletcher, Lukinbeal, and McHugh 2012). They are fodder for theoretical analyses, influence urban and economic development plans (Stengers 2002; Matthews 2010), and compel fans to undertake pilgrimages (Buchmann, Moore, and Fisher 2010; Kim 2012). Film locations inspire controversial state tax policies (Christopherson and Rightor 2010) based on the assumption that they generate revenue for local business and tourism.

Despite nearly 40 years of research on the topic of film and geography, geographers have had little to say about location filming or the relationship between film production geographies and the geographies found in the *mise en scène*. On the one hand,

economic geography has focused on the macro processes of Hollywood's industrial agglomeration and the film industry's changing mode of production. Here, the microgeographies of production workers, including those of the location scouts and production designers who are responsible for creating the spatial menageries that we see on the screen, have been ignored. What is needed, therefore, is an approach to film and geography that is capable of bridging economic geography, which provides vital insights into the function of the film industry but ignores the film product, and cultural geography, which fosters rich, textured understanding of cultural products and practices but which overly attends to the film text at the expense of its other dimensions.

By and large, research done on film and geography from social and cultural perspectives does so under the assumption that films are texts that shape the material world and the material world, in turn, shapes these discourses. It's the researcher's job, therefore, to critically interrogate these texts to understand how and with what effects these texts are having on society and space. It's important too, though, to interrogate not only the discourses proffered in film texts, but also, as I discuss in Appendix A, the metaphor that films are like texts.

As Mark Graham (2013) of the Oxford Internet Institute notes, metaphors also have powerful effects on how we conceive of, and therefore interact with, the world. When encountering new information, the use of metaphors may subtly preclude one understanding over another. Citing Stefik, Graham suggests that, "When we change the metaphors... we change how we think about things... The metaphors we use suggest ideas and we absorb them so quickly that we seldom even notice the metaphor, making much of our understanding completely unconscious" (Stefik 1996, p. xvi in Graham

2013, p. 4). For Graham, who studies the geographies of the internet, the unhelpful metaphor in question is “cyberspace.” To many, “cyberspace” implies that connecting to the internet is akin to stepping into an alternate dimension of space. Describing the internet in this way, Graham argues, creates a dualism between so-called “online” and “offline” worlds, muddying the already complicated geographies of digital information networks. In so doing, we risk missing the imbalanced relationships of power surrounding the internet, including the uneven geographies of network infrastructure, access to the physical technologies that instantiate the internet, and therefore, access to information. Returning to the technology of film, the application of the textual metaphor has similar implications to the research we choose to conduct on film.

While it is not untrue that film has powerful, discursive elements, the metaphor of text creates a binary similar to the one produce by “cyberspace,” in this case, between the diegetic world of the film, i.e., the film’s signification, and the non-diegetic world, that world that creates and consumes the film. At its worst, this approach creates an illusion that the researcher can sit back and observe the textual or diegetic world without fear of influencing the research subject because it is safely partitioned from the world of the researcher. By divorcing the text from the world, this metaphor precludes questions about the film as it actively unfolds within the world in favor of questions about what the film means within the confines of the film’s diegesis. How do we as film geographers bring our research around to the way that people actually *live with* movies and video in their everyday lives? Asked another way, how do people actually live with the technologies that enable films to be consumed, live with the spaces in which we view them, and live with the socio-technical interactions that produce films?

There are many theoretical argots that I can draw on to elucidate this understanding, such as flat ontology, monist ontology, non-representationalism, or actor-network-theory (ANT). The bulwark of my approach is that every aspect of film, whether it be a narrative, a particular scene, a reel of film playing in a projection booth, a DVD playing in someone's home, a YouTube video consumed on a cell phone, the director watching dailies during a shoot, or the homeowner who rents out their home to a production—in short, whether it be a film text, producer, and consumer—operates i.e., sees, does, makes, stands for, etc.—on the same plane. Following this logic, a film representation is not an immaterial world isolated from the material world in which we live. Rather, films exist as objects in the world the same as any other.

What is perhaps confusing to some about films' ontology is that their presence is limited to particular material arrangements; a film does not stand alone, its presence is enabled differently depending on the space in which it is viewed. In a movie theater films are manifested by projectors, walls on which the film is projected, and the absence of overhead or natural light. At home or on the road, television, computer, and phone screens enable films to exist, in which case the film's materiality is made of plastics, metal, electricity, batteries, and so on. In this sense, films are one more material arrangement in the world and as such, one that conveys a force into the world of which it is a part. It may help to think about films in the same way that Veronica della Dora (2009), has called "traveling landscape objects," a concept she deploys to address the more-than-representational qualities of graphic landscapes. Traveling landscape objects are:

portable graphic images embedded in different material supports which physically move through space and time, and thus operate as vehicles for the circulation of places; worlds in miniature visually and physically possessed by the beholder and yet able to exercise their own agency (della Dora 2009, 335)

This approach does not negate discursive analysis of films or landscape. Rather, the traveling landscape's "object-hood" is regarded as complementary to iconographic analysis" (della Dora 2009, 335).

As the idea of "object-hood" might suggest, della Dora is, like myself, influenced by the work of Appadurai (1986) on the social lives of things and suggests that we consider the biographies of traveling landscape objects, including where they go and what they do along the way. The notion of films as unique objects circulating in the world with their own, independent biographies further prompts us to reconsider the taken-for-granted sameness of films: that each time we watch a given title we are playing back the "same" film and that when our friends and family see that title that they are seeing the same film as we did. Instead, I agree with Sarah Pink who suggests that we consider each playing of a film as a singular event unfolding differently according to the situation in which it's found, just as the event of place is never static but always moves forward, unfolding anew ad infinitum (Massey 2995; Pink 2011a, 2011b). This is what Pink calls "moving forward," as opposed to "playing back." Some cultural geographers might find this to be a reworded explanation of audience positionality and the idea that all films are re-written as they are consumed because every audience member brings a different interpretive framework to bear upon it. However, I find that thinking of films' singular unfoldings as "moving forward" maintains the emphasis of analysis on the film-object's biography, a social life that is part of—but not entirely dependent on—any one viewer. This approach helps keep the emphasis of research from sliding back into an

iconographic-based approach in which viewers' interpretation of a film is the primary (or only) avenue for considering the film's agency in the world.

While this difference between approaches is conceptual and may seem like a modest shift, it is essential because it allows us to ask not only what films mean but what they do. This doing, moreover, refers not only to the general, discursive influence they have on a vague notion of "society" (cf. Latour 2005) but to the countless relationships they participate in and effect day after day. With this understanding in mind, in this dissertation I have attempted to expose some new dimensions of film geography research that will help align film geography with contemporary findings in geographic thought on practice, embodiment, more-than-representationalism, and flat ontologies. Written over several years, the articles in this dissertation and the related research presented, document the evolution of my thought on the subject of film and geography. Therefore, while no one paper does all of the things I just described, all of the papers do at least some of them. It is my hope that this dissertation demonstrates the continued significance and opportunity for geographers that the study of film holds, as well as how film scholars can benefit from geographic thought. Though the appendices of this dissertation comprise three papers, these sit within a larger body of publications and ongoing research on the subject.

In the remainder of this introduction I situate the dissertation appendices within the three areas of the discipline that most inform each, drawing out threads that may not be obvious in the papers themselves. In the first section I elaborate on the transition of film geography from representational to more-than-representational thinking. Namely, I highlight how film geography arose through the representational turn, point to some ways

the field has been pulled along into the post-representational world, and draw connections to the film geography literature review in Appendix A. Next, I shift to cartographic thought and feminist geospatial methodologies, which underlie the research in Appendix B. In this section, I situate Appendix B within a theoretical framework of cartographic anxiety and its objectified (masculine) gaze. In the third section, I draw connections between Appendix B and C and situate Appendix C in cinema mobility literature. Mobility is a key concept to cinema studies and therefore has informed the development of Appendix C. I find that this line of thought expands the significance of my findings in Appendix C, showing that mobility is vital not only to the moving images that constitute cinema but also to the creation of the film location market. To keep Appendix C focused on the topic of market formation, however, this thought is only obliquely alluded to in the paper itself. In the final section of this introduction, I point to work in progress on labor, mobility, and film incentives, which will continue to develop the research presented here.

(More-Than) Representational Geographies of Film

The newly exalted status of representations during geography's cultural turn fundamentally challenged the way geographers conducted research by destabilizing our ability to access and communicate about the world. While the effects of cultural and poststructural theories were expressed differently throughout the discipline, one key concern was the degree of constructivism advocated by different scholars. While Barnes and Duncan (1992) argued that representations do not merely reflect the world but construct it, cultural Marxists understood representations as an ideological mystification

of the true conditions of the world. Still, others assumed a type of socio-spatial dialectic between representations and reality, arguing that, “the power of representations to intervene in the ongoing reformation of material life should not be underestimated” (Natter and Jones 1993, 156; see also Jones and Natter 1999). The concern was keenly felt in the study of film and geography, where authors were tasked with articulating their stance on the relationship of cinema to the “real” world, which subsequently came to be known as the real/reel binary (Dixon and Cresswell 2002; Dixon and Grimes 2004; Zonn, Dixon, Bascom 2008; Sharp and Lukinbeal 2015, 2017). In Appendix A and elsewhere (Lukinbeal and Sharp 2017), I describe how the real/reel binary imposes the idea that film is a representation of reality, which has two consequences. One consequence is that by focusing on epistemology, hermeneutic analysis is the predominant mode of enquiry, “thus keeping the focus of film geography on reading narratives and exposing underlying or hidden meaning” (Sharp and Lukinbeal 2017, 2). Following from this, a second consequence is that there is very little knowledge production and analysis centered on film itself, which is eschewed in favor social concerns such as gender, sexuality, or race.

The real/reel binary is in full swing, for example, in one of the sub-discipline’s first ever and most influential programmatic statements by Aitken and Zonn (1994), “*Re-Presenting the Place Pastiche*.” Here, the authors critique the discipline of geography at large for positioning representations as “subsidiary to ‘physical reality’” before moving on to assert that:

If we, as geographers, agree with many of the commentators of the postmodern condition who see little difference between our political culture and our celluloid culture, between *real*-life and *reel*-life, then cinematic representation needs to be a key part of geographic investigation. (Aitken and Zonn 1994, 5)

One of the problems with this position is that, though Aitken and Zonn are arguing for equal status between geography's traditional objects of study and representations such as film, by establishing a comparison of film to reality, however little the difference, their position actually undermines that anti-foundationalism set out by the postmodern commentators that they appeal to. Nevertheless, as I argue in Appendix A (Sharp and Lukinbeal 2015), the real/reel continued to be used after this. Three years after the publication of Aitken and Zonn's collection, Clarke released *The Cinematic City* (1997), in which he identified this problem by appealing to Shaviro and Deleuze. He writes:

The fascination exerted by film cannot be understood from within the dominant paradigm, which fails to grasp that cinema's (*re*)production of visual and sonoral sensation 'cannot be equated with or reduced to their *representation*.' At issue here is the tension between *representation*, which always already accords to the logic and order of the Same, and questions of *repetition*, which open on to difference and Otherness (Deleuze 1986, 1989). Rather than according to a logic of representation, cinema works alongside the body (Shaviro, 1993) and the city. (Clarke 1997, 7)

Though it has yet to become mainstream in film geography, Clarke's prescient critique of the representational logic of the period in favor of a flattened, more-than-representational interpretation of cinema and geography would start to be adopted by other film geographers such as Crang (2002) and Craine, Curti, and Aitken (2013) in the years following.

Anderson (2018, 1), speaking to the discipline broadly, has noted that two decades following the representational turn and subsequent dismissal, "cultural geography is once again concerned with representations." Whereas new cultural geographers focused on representation as a signifying practice or text, recent engagements with representations have honed in on what they do, how they do it, and

the material-affective encounters of living with representations in everyday life. This change results from a “hermeneutics of suspicion” where the “presumption that people’s access to the world was primarily an interpretive one always already mediated by ‘signifying systems’” (Anderson 2018, 2). What Anderson calls the hermeneutics of suspicion is what I referenced here as the first issue related to the real/reel binary (Sharp and Lukinbeal 2017): that by focusing on the epistemology of film, hermeneutics became a dominant mode of inquiry in which nothing existed outside the textual world. The hermeneutics of suspicion refers to representations as a referential system rather than a practice. What Anderson is describing, therefore, is a shift in cultural geography from what representations stand for to what they do. Anderson describes this shift as a “representation-in-relation to” approach, within which representational analysis, with its focus on signifying systems, is combined with non-representational analysis and its focus on performance and practice. The representation-in-relation to approach recognizes the importance of non-representational theories (NRT) and the emphasis on “practices and materiality over imagery and the symbolic” (Campbell 2012, 400) without jettisoning the cultural politics of representation. For film and media geography, the impact of NRT is therefore significant, positioning representational studies within the broader realm of more-than-representation (Lorimer 2005), opening onto this field a lived world that scholars had hitherto excised from consideration.

In Appendix A, I analyze the literature on media and geography since the 1980s and offer directions on areas of future research, advocating in particular for a more-than-representational approach and focus on film production. This paper marks a shift in my thinking from a focus on the film text and ideas of geographic representations to

understanding what a more-than-representational approach meant for film geography. As a product of this transitional phase, there is a tug of war throughout this chapter between representational and more-than-representational thinking: Though I organized the chapter around the textual metaphor, I argue throughout against the binary logic that girds the metaphor.

The first section, Author-Centered Approach, describes research in geography that has focused on the milieu of production. I argue that this has primarily manifested as either an interest in particular directorial styles (an auteur approach) or a focus on the regional economy of production. Second, I describe a text-centered approach wherein researchers query a film hermeneutically to interpret its meanings. Here, I focus on the epistemological and ontological understandings implicit in this approach and the ATR model broadly. Specifically, I contend that by analyzing a film against that which is outside the film—the context of production, reception, or the analyst’s own positionality—this approach stabilizes and essentializes meaning. This essentialism is antithetical to the poststructuralist foundations on which many proponents of the textual approach are working toward. In the third section, I review reader-centered approaches, which I describe as encompassing research on the plurality of meaning, i.e., where there are as many meanings in a text as there are subjects to read it, and 2) the situated act of consumption. In concluding, I offer ideas on what I think are the most fruitful areas of future research within these three approaches. These areas include 1) thinking the creation of textual meaning through production practice, especially on-location production and the decisions that go into it; 2) approaching film from a monist ontology in which “text” and “context” are conceptualized as occurring on the same

plane; and 3) understanding the situated practice of media conception. Uniting all three of these areas of future research is the critique of the underlying assumptions of ATR that production and consumption be considered separately from the film text. The two appendices following this paper take up this charge by applying a more-than-representational approach to empirical research of film production. These papers attempt to highlight how the production process is more than just a context against which to interpret a film's meaning, but are part of the film text itself.

While media geography has not been as quick on the uptake, a representation-in-relation to approach has become evident in the European take on the field, which they call "geomedia." Geomedia studies is defined by Fast et al. (2018, 11) as "the role of media in organizing and giving meaning to processes and activities in space." They argue that geomedia is about the technologies that deliver mediated content, as well as the places, people, performances, practices, institutions, and organizations that produce and consume media. Central to geomedia studies is the concept of mediatization, which emphasizes how media are always-already part of social institutions and everyday life. Following Hyarvard's (2013, 2-3) definition, mediatization is the study "concerned with the long-term structural change in the role of the media in culture and society, in which the media acquire greater authority to define social reality and condition patterns of social interaction." For geomedia studies and mediatization, representational analysis has become decentralized because media is ontologically a part of the social make-up through its very production and reproduction.

Feminist Geospatial Geographies of Film

In Appendix B, a methodological paper published in *NECSUS: The European Journal of Media Studies*, I demonstrate one approach to how we can research film from a more-than-representational standpoint. To do this, I draw in theories of another representational practice, cartography, which was one of the first representational genres in geography to undergo re-theorization along these lines. While maps, much like photography and film, were once considered objective representations of the world, geography's representational turn brought this authority into question. During the 1980s and 1990s, geographers scrutinized maps as power-laden constructs that legitimized and made visible certain ways of seeing the world while obscuring others. In the early 2000s, the performative turn reached critical cartography, raising questions about the work that mapmakers do in addition to the work that maps do in representational practice. Here, the concentration turned to the mapping process and the way we use maps in our everyday lives. To "move beyond the binary" of maps as either representational or non-representational, Del Casino and Hanna (2006) proposed that rather than focus separately on map texts, on the one hand, and the production and consumption of maps, on the other, we consider what they call "map spaces." This concept simultaneously harnesses the inherent instability of textual meaning and constant need for stabilization with the NRT's processual philosophy of becoming. Thinking through map spaces allows us to see that representations such as maps are never complete, but are perpetually formed anew through their engagement with bodies and practices including but not limited to cognitive interpretation. Critical cartography's focus of moving beyond the binaries reaffirms the need to change the underlying metaphors used in engaging objects like

maps and films. Maps, like films, have an object-hood geography that is separate and complementary to representational or textual analysis. The object-hood geographies of maps and film are not static but rather embedded in the circulation of materials in daily life. This is an unfolding event of production and consumption, of using, viewing, recollecting, and the emotive resonates objects have in daily living. In the paper presented in Appendix B I deploy the metaphor of lively geographies on feminist critiques of GIS and show how a grounded visualisation approach to film production uncovers the geographies of the unscene. In this case, the unscene is the lively geographies of the location scouts which are framed out of the diegetic scene.

There are several parallels between film and television, on the one hand, and cartography, on the other. Both mediums act, in part, as representations of the world, created with a purpose in mind. Both maps and cinema place the consumer in a particular locale, and both influence how the consumer perceives of and interacts with the world. One of the critical differences between the two mediums, however, is that because the spaces of cinema are presented to us one at a time, it can be difficult to grasp their relationship to one another and the world in which they take part. In this sense, these spaces are more like our own experience of space in our daily lives in that we can only be in one place at a time. The grounded or subjective view “from below” that we experience is mimicked by cameras, which, like humans, see from a single vantage point. Maps, on the other hand, present all locations to the observer in one glance and as if from above all locations at the same time, giving the map consumer “mastery” over the locations and the relationships between them. This omniscient “view from above” cannot be recreated by the human eye or camera. The result of these similarities and differences is that

cartography and its analytic counterpart, geographic information systems (GIS), have been recognized by media scholars, geographers, and GIS practitioners as an ideal means to unpack and organize the linear and disjunctive presentation of cinema's spatial components. In dispersing film locations across a two-dimensional plane, whether they be diegetic (of the narrative) or non-diegetic, these locations and their relationships become less immediate and encompassing and thus better suited to analytic thought.

The theoretical underpinnings for the paper presented in Appendix B are expanded on in my forthcoming edited book, *Media's Mapping Impulse* (Lukinbeal, Sharp, Escher & Sommerlad 2019). In that volume, I argue that what underlies the mapping impulse of media is cartographic anxiety. Cartographic anxiety is the drive to make geographical space legible, knowable, and by proxy, conquerable: to rid the world map of the terra incognita and remove the uncertainty that plagues the discipline of geography. Cartographic anxiety was part of the European scopic regime of the "world as exhibition" wherein, at the closing of the 19th century, the world was increasingly rendered as objects to be viewed (Gregory 1994; Pickles 2004). This rendering of a world as exhibition or picture references a particular type of representation, one that not only relied on mathematics but also positioned the viewed objects as resources for use and capitalization. According to John Pickles, (2004, 84) the "world as picture" was "projected as *ta mathemata*, as a mathematical manifold." This theoretical line of inquiry is an elaboration of my previously published research focusing on the role of cartographic anxiety in the film *Dersu Uzala* (1975) and film form broadly. There, I showed how cinema and television use establishing shots as a fulcrum to orient and reorient the film voyager on their narrative journey. By grounding the audience in a geographically "real"

or believable locale, establishing shots assuage the discomfort caused by cinema's innate cartographic anxiety and place the audience back "in the realm of the knowable" (Sharp 2018, 90).

In *Media's Mapping Impulse* I extend this thesis but position cartographic anxiety within the mathematical view of the "world as picture," which came from the European Renaissance when two scopic regimes were rediscovered and deployed to produce and represent the "sudden birth and growth in mapping" (Conley 1996, 1) or the "emergence of a new map consciousness" (Pickles 2004, 96). Pickles (2004) refers to the coevolution of linear perspective and map projection as the cartographic paradox: two related but distinctly different scopic regimes reliant on mathematics. The paradox that Pickles refers to is that, although these two scopic regimes arose from the same period and region and informed one another's development, they each produce very different representational outcomes. The importance of this cartographic paradox for the current dissertation is that these views of how to render the "world as picture" is apparent in geographic thought through the view from above—cartography—and the view from below—linear perspective, cinema, and feminist perspective on embodiment.

Considering these scopic regimes, in Appendix B I propose that scholars in film studies who are interested in applying cartography and GIS to their research would benefit from taking seriously critiques that feminist geographers have made of these tools. Aimed at a non-geographic audience, this paper is as an attempt to bring geographic theories of critical cartography and feminist geography to a discipline undergoing a "spatial turn." By taking into account not only the view from above but also the view from below, I suggest, we provoke a fuller conceptualization of the cinematic

map than either does alone. Specifically, I argue that by mapping not only isolated film locations but also how those locations came to be on the map in the first place, we alert ourselves to film geographies of the “unscene.” This idea builds on the ideas of Marcus Doel, who argues that in cinema, “the frame refers to what is around the frame – a spatially and temporally contiguous ‘unseen’ that may, in its turn, subsequently enter the frame and so become actualized as a seen/scene...” (Doel 2008, 96). Doel echoes this point later when he suggests that because we must “go” on location, “A location is not a spot... but a ‘line of flight’” (Doel 2016, 3).

It is these lines of flight, or geographies of the unscene, that I bring to the fore in Appendix B as mapped lines. Made up of GPS data collected during a participant observation with a location scout in Los Angeles, these lines document the types of processes that are and always have been part of the film process but which are necessarily cut from view in the finished product. Using grounded visualization, I reflect on my data collection and mapping processes and distinguish some ways these visualizations shine a light on the data itself and cinematic cartographies more broadly. While this paper maps only one day in the life of a location scout, I describe the unscene geographies to which the Story Map alludes at length in Appendix C.

Mobile Geographies of Film

My experiences riding along with location scout Claudia Eastman described in Appendix B helped congeal in my mind a characteristic of the film location market reiterated to me by the different scouts and designers I spoke with, an aspect of their

work that was so obvious as to seem unworthy of note. This aspect of film production was the workers' reliance on independent mobility. This phenomenon further solidified in my mind when I thought back to theories of cinema as a mobile gaze, derived from the creation of the shopping arcade, architectural innovations that enabled the flâneur to enter buildings publicly in the arcade's "transitional space" and gaze upon once-private interiors. According to Friedberg (1993, 68),

"Window shopping" implies a mode of consumer contemplation; a speculative regard to the *mise-en-scène* of the display window without the commitment to enter the store or to make a purchase. Cinema spectatorship relies on an equally distanced contemplation: a tableau, framed and inaccessible, not behind glass, but on a screen... [C]inematic spectatorship can be described as emerging from the social and psychic transformations that the arcades—and the consequent mobility of the *flanerie*—produced.

In other words, there is a foundational relationship between the process of consuming goods by passing them before our eyes through the movement of our body, on the one hand, and the consumption of cinematic images, which pass before our eyes while our bodies remain stationary, on the other. In this sense, **Appendix C** is about a different kind of "window shopping," a kind where the good up for consumption is space and the window through which the shopper looks is that of the car windshield or the computer screen. Although it does not appear in the paper's final draft, this idea of location scouting as a type of "window shopping," along with Cochoy's (2008) idea of the shopping cart as a mobile space of calculation greatly informed my argument. The location scout as flâneur and window shopping seeks to bring mobility to the forefront of the lively geographies of film. Rather than film geographies being focused on an observer sitting outside a diegetic world, lively film geographies are interested in the ongoing dramaturgy of moving forward not playing back. The unscene geographies of

the diegetic world are a part of this ongoing moving forward and are lived through the productive practices of workers in the film industry.

In the market for film locations in Los Angeles, California, mobility is not merely a useful tool for finding and selling locations, but rather was presupposed by cinema's form from its inception. Movies, so named because they are images that move, are typically distinguished from still photography because they are a series of framed images arranged one after the other in order to show the movement of actors and the camera in space. Since its development, one of most beloved functions of cinema has been to take viewers on voyages of different landscapes, places that they might not ever have the occasion to see otherwise (Kirby 1988; Bruno 1997). In many early films, cameras were mounted on either the back or front of a moving train in order to give the spectator the impression of moving through a landscape (Gunning 2011). Film historians have further argued that the development of cinema at the turn of the century was itself prefigured by the new spaces of shopping centers and modes of transportation such as the train ushered in by modernity. This foundational characteristic of cinema has thus been transferred over to the production process. In order for images to be consumed "in motion" (Pink 2009) they must also be produced in motion. This does not simply mean that the camera moves, but that in order for the logistics of the camera's movement to be prepared, the scouts must organize a mobile itinerary for the production.

This paper makes several contributions to the discipline of geography. First, in economic geography, it extends what is currently known about the spatial practices of the US film industry, filling in the work done by Storper and Christopherson, Allen Scott, Neil Coe, and Chris Lukinbeal, among others. In the end of their article "City as

Backlot,” Christopherson and Storper (1986, 319) explain that the re-agglomeration of the film industry in Los Angeles occurred “because its managerial process requires industry-specific knowledge and social interaction, because there are myriad deals to be made, and the input-output relations between firms are largely unstandardized and of small scale.” It is these unstandardized and small scale practices of the film industry that we know little about and that my research uncovers. I am able to do this, in part, because unlike my regional economic predecessors, I apply theories of science and technology studies. This approach helps stir the surface of the industry so that way me grasp the underlying grit of its practices, spatiality, and everyday lives of the people who produce and consume its products.

Finally, this paper advances knowledge in film geography by showing one way that we may conceptualize film in particular and the type of research that the sub-discipline may take up. Specifically, this paper, along with Appendix B, reconceptualizes film geographies as more than—but not excluding—the representations that we see on the screen. In this paper, the geography of film is both the spaces we see on screen *and* the practices that bring those spaces to the screen. Rather than limiting film geography to a constellation of points on a map or scenes in a movie, we should see it as comprising these things and everything that happens in between that make them possible. By highlighting these “unscenes,” or lines of flight, we see that film geographies are much more extensive—physically and conceptually—than a strictly representational approach allows.

Future Research

Having spent several years in and out of Los Angeles and New Orleans talking to different people within the industry, attending industry conferences, participating in tours of film locations and studios, and leading a location filming field class in Los Angeles for Masters students from Johannes Gutenberg University, I have accumulated more data, experience, and ideas about the geography of filming in the United States than is reflected in this dissertation. Some of these ideas are already being fashioned into the beginnings of articles and presentations, while others require more thought and the insight of new literature.

The most developed of these ideas builds Vicki Mayer's (2011) work on below the line labor to illustrate what I see as the bifurcated experiences of below the line labor, especially location scouts, in today's geographically dispersed U.S. film industry that state-level tax incentive programs have produced. In **Appendix C** I write about how location scouting is by nature a mobile enterprise compelled by film and television's uniquely mobile experience. In this paper-in-progress, I articulate a different kind of scout mobility, which is that provoked by the uneven geography of motion picture incentives. Here, some labor, including labor produced by incentives, follows wherever productions go, while productions follow wherever the newest and most lucrative incentive program appears. As such, incentives create at least two broad categories of labor, those with years of experience and those brought to the industry by tax incentives.

A comparison of the careers of two women I interviewed encapsulates the differences in these two labor experiences. The first woman, Nancy Haecker, is a location

scout based in Los Angeles. Working in the industry for the past 20 years, Nancy has made a name for herself. She's the past-president of the Location Managers Guild International and has worked on many significant productions such as *House*, *Call of the Wild*, *the Reverent*, *Kill Bill 1* and *2*, and many more. Nancy is so well respected in her field that productions regularly hire her to scout states where she has little or no local knowledge but where tax incentives have created new production opportunities. The second woman is Krista Toups. Krista is a former security guard from Thibodeaux, Louisiana. Krista was drawn into location scouting after working as a security guard for a film shoot in New Orleans. Caught up in the mystique of base camp, Krista decided to make a career change to something more rewarding. Being a Louisiana native, Krista has a well-honed understanding of the state, its cities, and the places off the beaten path. Unlike Nancy, however, Krista has struggled to make enough professional connections to sustain herself and feels that she must compete with rather than be supported by the more established scouts in her area. Krista will probably never be asked to work out of state, though she worries about the possibility of having to leave Louisiana for the newest state with the best tax incentive, Georgia. If the film industry leaves Louisiana or experiences a downturn such as that produced by the tax incentive cap put in place when I interviewed her in 2015, Krista has to choose between leaving Louisiana and starting over, or making yet another late-stage career change. Speaking of the cap, Krista told me:

If it doesn't improve it may come down to where I'll have to look over there [in Atlanta] and scouting-wise, I wouldn't even know where to begin. It would destroy everything that I've worked for, everything I've worked for for the last 8 years isn't going to be worth crap. I'd have to start over with PA work. I'm not a spring chicken anymore and PA work is grueling. I'm out of shape. This will affect my life totally. I have a lot of friends over there [in Atlanta]. I think all of 'em but 2 work in the film industry and that's why they left. Some were ahead of the curve. Some went when they realized what was happening.

While incentives have been touted by many as a means to redevelop an economy through culture, a growing number of reports reveal that much of the job growth numbers we see are misleading. Jobs created by incentives have at least two overwhelming problems. The first is that they are short-term positions lasting anywhere from a few months to a year, leaving employees scrambling from one contract to the next. The second is that, despite job growth and payroll incentives for local hires, new and local labor struggle to compete with workers who have established their networks and honed their craft. It remains to be seen whether the changes to the tax incentive law issued in 2017 demanding productions provide more professional development opportunities for new employees will have a positive effect. It is clear, however, that more research needs to be done to understand the quality of jobs created by tax incentives and the experiences of those who step in to fill them.

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APPENDIX A

FILM GEOGRAPHY: A REVIEW AND PROSPECTUS

Published as

Sharp, Laura and Chris Lukinbeal. Film Geography: A Review and Prospectus. In, S. Mains, J. Cupples, and C. Lukinbeal (eds). 21-35. *Mediated Geographies/Geographies of Media*, Science and Business Media series, International Handbooks of Human Geography. Thousand Oaks, CA: Sage

With this paper we review past works that have established film geography as a sub-discipline. The paper is organized around the author-text-reader (ATR) model and pays particular attention to its role in defining the area of study and how it is approached theoretically and methodologically. The textual metaphor from which the ATR model is derived is a signifying practice associated with the cultural production of meaning through various forms of representation. Textual analysis is a hermeneutical method that became hegemonic in film studies beginning in the 1970s following Christian Metz's influential application of semiotics to film, which occurred concomitantly with the establishment of film theory as a serious discipline (c.f. Shiel 2001). The method came to geography later during the "linguistic turn" in the social sciences that did not take full effect until the late 1980s (Lukinbeal and Zimmermann 2008). While the ATR model consists of three modalities, researchers have tended to focus on only one at a time (Dixon et al. 2008). An author-centered approach focuses on the pre-filmic processes of meaning creation. Here, the emphasis is on production, labor, the auteur, the generative process of meaning creation, and the overall economic conditions within the creative industries. A text-centered approach analyzes the construction of meaning within the film's diegesis and *mise-en-scène*. Reader-centered approaches investigate film as a spectatorial practice, the audience as market, the situatedness of consumption, the ethnography of film audiences, and film exhibition.

The textual metaphor is not the only way to approach film geography. Moreover, though it has enjoyed a period of dominance within the field (Cresswell and Dixon 2002), it is not without its problems. As Dixon et al. (2008) have demonstrated, because the ATR model relies on the temporary stabilization of textual meaning relative to a specified

context – the conditions of production, the researcher’s own theoretical and intertextual framework, or the time and place of audience viewing and interpreting – the ATR model operates on an essentialist ontology, even as it draws from otherwise poststructuralist theories. A second noted concern undergirding the metaphor is the real/reel binary. This lurking epistemological trap conceives of the reel, onscreen world as a representation of the real, offscreen world. This manner of thinking has significant implications for how geographers approach film. Attempts to overcome the binary have been made by deploying dialectics, simulacra, and haptics. Where dialectics and simulacra maintain the conceptualization of film as text, haptics moves the discussion away from text and optics and onto a reconceptualization of film as an embodied and emotional event. Despite the flaws of the ATR model, because much film geography research up to this point has implicitly or explicitly relied upon it, it remains a useful heuristic for discussing the breadth of film geography thus far (Lukinbeal 2009, 2010). Recently, some welcome avenues away from the text and its attendant binary have begun to appear. Therefore, although we rely on this model as a framework, we also expand upon it to explore the ways that it can be used to accommodate non-textual approaches.

AUTHOR-CENTERED APPROACH

Often, studies of films from the author modality employ the notion of *auteurship*, the idea that films possess a unique aesthetic and philosophical outlook that is inscribed in the film by the director (the *auteur*, or author). Film theorist Andrew Sarris (1962) identified three aspects of *auteurship*: technical competency, aesthetic signature, and the creation of

meaning that derives from the relationship between the director and the film content. In this vein, some geographers have been interested in the spatial meanings found in the works of specific directors, including Bill Forsyth (Aitken 1991); Peter Weir (Aitken and Zonn 1993); Gus Van Sant (Lukinbeal and Aitken 1998); Werner Herzog, Carlos Diegues, and John Boorman (Godfrey 1993); Jacques Tati (Marie 2001); independent documentary filmmakers McGuinness, Fugate, and Palos (Dixon 2008); and Sergio Leone (Starrs 1993). These analyses are classically textual in that they use information about the director(s) as a launch pad for their interrogation of the construction of geographic meaning within the text. In contrast to the emphasis placed on the auteur by the author-centered approach via the textual metaphor, non-textual approaches to this modality position it within a broader economic series of productive practices.

The most common non-textual author-centered approach is to focus on the economics of production, which can be sub-divided into political economy and economic geography. Writers outside of geography have taken a Marxist and/or critical approach to examine how power relations within the media industries contribute to the hegemony of globalization (Bagdikian 1992; Miller et al. 2005). In the current compilation, Brett Christophers's chapter takes this approach, exploring the geographically distinctive nature of media's political economy. Approaching the television industry from the standpoint of labor, Vicki Mayer (2011) has taken a similarly critical approach by illustrating the mutually-producing relationship between television commodities and the subjectivities of the unseen "below the line" labor (anyone who is not an actor, director, producer, or writer) that makes them possible.

The more common approach to film production within geography, however, is to

use economic theories to examine national centers of production. Most notable in this area is the work done by Susan Christopherson (2002, 2006, 2008, 2013; Christopherson and Rightor 2010; Christopherson and Storper 1986, 1989) and Michael Storper (1989, 1997; Storper and Christopherson 1985, 1987), as well as Allen Scott (2005). These researchers have focused on the economic geography of the Hollywood film industry. They have charted the transition of Hollywood from a craft-based industry, through its heyday during the Golden Age when it was underlined by Fordist practices, to its more current configuration under flexible specialization. Flexible specialization is characterized as networks of sub- contracted companies and major conglomerates that are flexible enough to come together around specific projects and then dissolve and re-configure as needed. Further, through sub-contracting, the industry has at its disposal more specialized skills available to hire for specific projects. This reorganization of the industry has created a unique landscape where production is concentrated around specific agglomerations of industry, and yet dispersed by way of location production incentives, tax credits, and below the line talent pools.

Where American geographers have focused primarily on the Hollywood film industry, others have examined the geographies of other global film industries. In this compilation Curtin's chapter explores the historical geography of Chinese cinema through a focus on how the cinema of Hong Kong has been affected by Hong Kong's incorporation into Mainland China. Both Mike Gasher (1995, 2002) and Neil Coe (2000a, b) have detailed the cultural and economic geographies of the film industry of British Columbia, Canada. Where other studies tend to naturalize a national film industry, the case of British Columbia highlights the effects of globalization and the phenomenon

of Hollywood's runaway production. Neil Coe does this by focusing on the economic geographies of capital and labor relations, while Mike Gasher is more concerned with the cultural implications of Hollywood's hegemony and British Columbia's control over their own representation. According to Gasher (1995, 234), "it is the definition of a Canadian reality which is at stake in the struggle for control of the mediascape."

Inspired by Gasher's work, Lukinbeal (1998, 2004, 2006, 2012) has emphasized an approach to film geography that combines cultural studies and cultural economy. This approach makes two demands. The first is that we understand the creation of a cultural text or product as ontogenetic, embedded within the ongoing political and economic practices of the industry. The second is that we recognize that hermeneutical analyses of cultural texts necessitate an engagement with the political economy of the production practices that went into the text's creation. Rather than examining the representation of gender relationships, sacrifice, and territoriality during the American Civil War in North Carolina – all themes that could be key topics of interest in a textual analysis of the film *Cold Mountain* – Lukinbeal's (2006) analysis focuses instead on the politics associated with where the film was made and how this impacted the text. To save money, the producers of *Cold Mountain* chose to film in Romania. To save face, they argued that North Carolina did not offer enough historical realism. This statement, which obfuscates the producer's economic motivation, is questionable however, as the book's setting in Asheville, North Carolina was used just a decade earlier to shoot *The Last of the Mohicans*, a story based on the French and Indian War. Amidst calls for a boycott of *Cold Mountain* at the Oscars for its runaway production practices, one cannot but be critical of the state's own practice of doubling for other locations in film and television.

TEXT-CENTERED APPROACH

Textual inquiry assumes that cultural products and practices, such as landscape or film, are systems of signification that can be interpreted if one knows the “language” in which they are written. This approach to film analysis is not exceptional to geography. As Shiel (2001, 3) notes, “Film Studies has been primarily interested in film as *text* [...] and with the *exegesis* of the text according to one or other hermeneutic.” He goes on to suggest that this approach is largely due to the fact that the origins of film studies lie in literary analysis. In geography, the rise of the textual metaphor can be traced to the linguistic turn and the adoption of post-structuralist theories in the social sciences. It is important to recognize the significance of the linguistic and discursive nature of geography’s adoption of post-structuralist thought, influenced as it was by thinkers such as Foucault, Derrida, and Barthes; it was because of this linguistic-epistemological approach that the textual metaphor became widespread in geography and dominant as a method of research on film in particular (c.f. Natter and Jones 1993a; Cresswell and Dixon 2002; Dixon et al. 2008; Lukinbeal and Zimmermann 2008).

In order for a text to be interpreted it must be understood in relation to some context – of production, for instance – that might include factors such as the cultural era in which it was produced and the personal vision of the auteur. This juxtaposition between text and context leads to the oft-noted issue of the real/reel binary (c.f. Cresswell and Dixon 2002), the belief that film is a representation of reality. Some examples of the binary have been overt, taking it as a research topic in itself. This can be seen in Benton’s

(1995) “Will the Real/Reel Los Angeles Please Stand Up?” or Horton’s essay where he argues, “All landscapes in cinema are ‘reel’” (2003, 71). Frequently, however, it is more insidious, appearing as the omission of the researcher’s ontological orientation to the object of study, accompanied by slippery language about what the researcher hopes to gain by examining a film. Often, the researcher is interested in a given film because it is taken to be either a particularly astute or a particularly problematic representation of what is understood to be the “real” situation “outside” of the film. An example of this is Klaus Dodds’s (2013) paper examining the depiction of the US-Canadian border in the film *Frozen River*. Introducing the film and topic, Dodds writes:

In marked cinematic contrast to the US-Mexican border, the US-Canadian border, and as *Frozen River exemplifies*, the ‘internal borders’ of the United States, are rather ‘hidden’ in comparison. The *actual border*, as the film *vividly portrays*, is not simply one between the United States and Canada [: : :] *The border, in this film*, is shown to [be] a complex space of alienation, containment, dispossession, and incorporation. (2013, 2–3, emphasis added)

The remainder of Dodds’s article is an interpretation of the film, which acts as foil for Dodds’s discussion of his primary concerns: the material, social, and biopolitical nature of borders. Here, while Dodds maintains a distinction between the “actual border” and the border in the film, or between the real and the reel, he nevertheless implicitly treats the film as an unmediated window to the world, a representation of such caliber that it can be used, in effect, as a case study on which to base claims about reality outside of the film. This subtle contradiction is enabled by Dodds’s failure to account ontologically for his object of study. Making a similar critique, Glynn and Cupples (2014) have also pointed to the often binarizing analyses of media texts in Dodds’s work, as well as to the tendency of Dodds and other popular geopolitics scholars toward conceiving of texts as coherent, self-contained systems lacking in attention to the

theoretical complexities therein. As Glynn and Cupples show, this demonstrates the need for popular geopolitics to engage with the extensive literature of cultural studies (and vice versa). As our own example suggests, this argument should be extended to include the need for scholars of popular geopolitics to engage with the broader media geography community in order to enrich and strengthen the theoretical conceptualizations of both sub- disciplines.

The real/reel binary provides a simplistic ontology that has overt ramifications for film geography. First, it positions film as a secondary object, a cultural text that functions only to reflect lived conditions. In so doing, it enforces a hierarchy of research in which “true” meaning production comes only from first-hand or real experiences and not from second-hand or mediated experiences. This hierarchy strengthens the normative belief in geography that film is mere entertainment (Gold 1984; Harvey 1990). The second implication of the binary is that it constricts research to the geography *in, of, or from* film (c.f. Hopkins 1994). Whereas research on the geography *in* film focuses on the production of meaning that occurs within the film text, research on the geography *of* film examines the spatial practices of film production and consumption. The study of geography *from* film looks at how a text can influence geography outside of the text. The relationship of the real/reel binary to the textual metaphor is especially thorny owing to the epistemological and ontological implications of the textual metaphor. The oft-cited dictum, “There is nothing outside of the text” (Derrida 1998, 158) negates a distinction between the real and reel at the level of epistemology, rather than at the level of ontology, by suggesting that there is no way to look beyond our own linguistic-cultural ways of knowing and thus no way to access an ontological reality outside of the text. The result of

this ontological evasion is that the focus of research becomes a textual analysis of a film's narrative, with an occasional reference to the mise- en-scène and film form. Thus, while geographers frequently use film as a means to explore concepts of gender, sexuality, race, colonialism, or class, very few have paid attention to film qua film (Doel and Clarke 2007).

Three Approaches to the Real/Reel Binary

One of the first responses to the real/reel was to approach it through dialectics, which is to suggest that social life and representation are mutually producing. In their textual analysis of the Michael Moore documentary *Roger and Me*, Natter and Jones (1993a) investigate the portrayal of economic decline on Flint, Michigan, arguing that Moore's elision of traditional "objective" documentary techniques in favor of an overtly politicized narrative renders the film more authentic. For the authors, it is because of the dialectic nature between representations and their contexts of production and reception that geographers need to take movies such as Moore's seriously. In their words, "the power of representations to intervene in the ongoing reformation of material life should not be underestimated" (1993, 156; c.f. Jones and Natter 1999). Significant to this approach is that film is still seen as "representation," signaling the continued belief that film is attempting to be something other than itself. A second way of getting beyond the real/reel complicates the idea of representation by calling on Baudrillard's notion of simulacra.

According to Baudrillard (1994), in the society of late capitalism the signs and

symbols necessary for meaning production have ceased to have any relation to reality and instead are simulacra, a copy without an original. To say that film is simulacra then, is to say that there is no reality other than the film itself, that film is its own reality. While it was David Clarke (1997) who first began to ponder the implications for film geography that a simulacral approach might offer, it has been in Clarke's prolific work with Marcus Doel that there developed a historical account for how the simulacral nature of film came to be. In a series of papers Doel and Clarke (Clarke and Doel 2006, 2007; Doel and Clarke 2007; Doel 2008) document the transition from animated photography of the late nineteenth and early twentieth centuries to cinema. Where anima-photographers were driven to capture and present reality as found, through the adoption of the montage editing technique, cinema became a means to manipulate space and time and thus engineer a reality-effect.

A third approach to the binary has been to treat film as no longer representational, but as a geography in and for itself. This approach eschews the notion of an immobile viewing subject segregated from an object of vision, the film. Bruno (2002) highlights this distinction by juxtaposing the conceptual pairings of *sight-* and *site-seeing* and *voyeur* and *voyageur*, shifting our understanding of cinema from an optical to a haptical affair. Haptics focuses on corporeality and the porous boundary between inside and outside, the skin, thereby repositioning our attention to the sense of touching and being touched (Laine 2006). According to Sharp and Lukinbeal (forthcoming) "This redirection occurs not merely as an add-on to vision, but as an emotional resonance affecting the body." In a similarly tactile approach Craine and Curti (2013) suggest that we treat televisual realities as "bodies among bodies" (2013) and, along with Stuart Aitken,

propose that through our affective relations “we become the image” (Craine et al. 2013, 264). The emphasis placed here on viewing as a (bodily) experience further applies to the reader-centered approach.

READER-CENTERED APPROACH

The reader-centered approach takes as axiomatic “the death of the author,” the notion that a film text is always re-written as it is read depending on the positionalities of the viewers and their contexts of viewing. Following this, reader-centered studies tend to focus on the multiplicity of meanings derived during film reception and effects these interpretations have, as well as the situated act of consumption. Of the ATR model’s three modalities the reader-centered has been the least discussed by geographers. In part, this may be attributed to the theoretical rather than empirical nature of traditional spectatorship research within film studies (Mayne 1993), as well as to the problems of essentialism and relativism that are quickly unearthed within these theories. Essentialism in spectatorship research is when the researcher’s interpretation of the audience’s perspective is taken to be everyone’s viewpoint. Relativism, or the fact that meaning is always dependent on the viewer’s positionality, works to expose that meaning has been made to appear natural, rather than contingent.

Some ways forward into audience studies by geographers have been discussed by Jancovich et al. (2003), who divide practices of consumption into four categories: the audience as market, the situatedness of reception, ethnographies of reception, and exhibition. The first category, the audience as market, focuses on audience demographics

and tastes, as well as how the audience is conceptualized and targeted by the film industry. Ethnographies of film consumption, Jancovich, Faire, and Stubbings's second category, engages the everyday practices and motivations of viewing. Here, the preference of the viewer is of less interest than the social activity of cinema-going and the opportunities for interaction that it affords. The third category, the situated approach, is archival and intertextual in nature; it explores movie reviews, marketing material, news stories, billboards, and other media that help contextualize the reception of a film by a social group in a given era. The fourth category is the place of the audience, which looks at the history and geography of film exhibition sites. Some venues of interest to exhibition studies have been film festivals (Stinger 2001; Elsaesser 2005; Wong 2011), movie theatres (Zonn, Chap. 9, current volume; Jones 2001; Bruno 2002), and the home (Klinger 2006).

One of the most significant elements of film reception to the exhibition studies approach is the historical geographies and architecture of film viewing venues. Allen (1990) has demonstrated how empirically based historical research on film can break down myths about movie going, for instance the belief that cinema has always been a primarily urban trend. Rather, in the United States during the first decade of cinema's commercialization, 71 % of the population lived in small towns and rural areas. Thus, although urban nickelodeons and vaudeville theatres are often cited as cinema's origins, Allen points out that these origins are as much a small town and rural phenomenon, with film exhibition occurring wherever equipment, space, and interest aligned. Allen's research is only the beginning of a fascinating and under explored historical geography of film exhibition in the United States. This history begins with film's origins in the public

spaces of small towns and rural areas, as well as in urban nickelodeons and vaudeville theatres in ethnic enclaves. Pursuing a dream of respectability, theatre owners sought out locations at the edge of shopping and central business districts, giving rise to the movie palace and the transformation of film into an architectural event (Merritt 1979; Hanson 1991). As televisions became readily available reception locations became striated. The movie palaces followed the post-World War II demographic shift to the suburbs and away from the struggling downtowns (Christopherson and Storper 1986). Suburban shopping malls, as they began to appear, were a natural site for housing the increasing size and numbers of screens that theatres maintained (Friedberg 1993). Facing years of neglect, movie palaces across the country fell into decline. Today's cinema theatre landscape is a variegated one, filled with the carcasses of movie palaces, penny-arcade museums, abandoned drive-ins, and monster-plexes hungry for more attendance. While in some cities undergoing gentrification movie palaces are enjoying a rebirth, others have been cut up, spawning a postmodern spectacle: the palace-plex.

The Viewing Subject

The reader-centered approaches cannot be understood without thinking about the people that have populated the festivals, nickelodeons, home-theatres, and roadside attractions of exhibition studies: the viewing subjects. How we conceive of the viewing subject has important ramifications for how we understand and research cinema generally, and the ATR model specifically. The historical trajectory of spectator theory has roots in Marxism, semiotics, and psychoanalysis, all of which came to occupy a prominent

position in film studies of the 1970s through *apparatus theory*, as applied by such influential film critics as Christian Metz, Laura Mulvey, and Jean-Louis Comolli. According to this theory it is through the filmmaking apparatus and the mechanics of film construction (camera movement and angle, for instance) that a film's meaning is brought into being. Moreover, because film is an always-flawed attempt at mimesis it is inherently ideological. Through Lacan's mirror stage this imperfect representation of reality constructs the viewing subject in ideology. The understanding of the spectator through apparatus theory is a voyeuristic or one-way model that creates an automatic binary distinction separating the subject (the viewer) from the object (the film). This voyeuristic aspect of the film spectator has two connotations. The first is of an immobile subject tied to the disembodied gaze. The second is sexual and alludes to scopophilia. These questions have led film theorists to consider who is the "ideal" viewing subject. For the influential feminist film theorist Laura Mulvey (1975), Hollywood cinema is founded on the male gaze, where the male character looks, the audience looks, and the female character is looked at; through the male gaze of the camera both male and female audience members are constructed as male. Hollywood's ideal viewing subject is not only male, however, but also white, young, middle class, and an agnostic Christian (c.f. Mayne 1993). As Gledhill (1998) has pointed out, however, the question of the female viewer identity is more complicated than Mulvey and others have proposed in that it must take into account the different sites of negotiation: the text's production, the text itself, and the text's reception.

While psychoanalytic theories remain strong, the more recent uptake of haptical and affective theories has posed significant challenges to the mind/body dualism of the

voyeuristic approach to cinema as a primarily visual-cerebral activity. Bruno's (2002) haptical mobilization of the spectator and transformation of voyeur into voyageur (discussed above) has been significant for helping conceptualize film viewing as an emotional and bodily experience. Under the voyeur model the notion of film as representation is upheld by keeping the theoretical focus on optics and sight. Due to cinema's much-heralded visual realism, the focus on optics positions the viewing subject as occupying a reel or real space, producing an indexical relationship between image and reality. Through haptical mobilization the spectator is not chained in Plato's cave, but free to wander (Bruno 1993). Additionally, where optical theories produce a heterological subject, haptics produce an embodied subject whose senses work in cooperation. Our attention thus shifts to corporeal experience of the subject; consciousness is not established through the mind/body dualism, but rather resides in the porosity of the skin (Kirby 1996; Laine 2006). According to Laine (2006, 104), "consciousness has no permanent 'place' any- where; rather it arises whenever one touches another, in the mutual act of shaping." This haptical voyage of the spectator is, moreover, architectural in character, as architecture transforms film into cinema by providing a house within which the perceptual journey can take place, one that is "topophilically re-collected for public housing and exploration" (Bruno 2002, 50).

Carrying on Lacan's conception of the subject as formed through the gaze, Crang (2002), like Bruno (2002) and Craine et al. (2013) discussed above, also argues against a subject/object dualism, but does so by suggesting that we understand the image and the observer as always-already united, a coproduction wherein one does not exist without the other. For Crang, this is particularly relevant given the ubiquity of mobile cameras in

today's hyper-mediated society, a fact that draws our attention to the mobile process of observation and capture and its relation to the screened content. Rather than thinking of capture, image, and reception as discrete moments (à la the ATR model), film becomes an assemblage, an active process of connecting people and things in space and time. By shifting our attention to the self's becoming with the image we are able "to move from a focus on the motion of images swirling around an analytically stationary and embattled subject to a view of the subject in motion and occupying the same terrain as the images" (Crang 2002, 27). In other words, while it has been conceptually useful to break cinema into the three modalities outlined here, continuing to do so may blind us to alternative orientations to film geography and the questions that can and need to be asked.

CONCLUSION

What is the future of the author-centered approach? While interest in certain directors will always come and go, this approach has not distinguished itself as being significantly different than text-centered approaches. For auteur studies to move forward they will need to situate the author and authorship within a broader milieu of productive practices and/or historically contingent inter-textual relationships. Where economic geography has embraced the importance of the film production industry, much of the political economy research has not had a geographic focus. Further, political economic or Marxist geographers have failed to give any credence to film or the film industry (excepting Christophers). This is perhaps due to a normative belief that film is mere entertainment or, as David Harvey has said (1989, 322), just "a sequence of images upon a depthless screen" that do not have "the power to overturn established ways of seeing or transcend

the conflictual conditions of the moment.” We find this interesting, considering the emphasis by the Frankfurt School on film and media, as well as in the works of Raymond Williams and Guy Debord.

The most fruitful area of future research for author-centered studies lies at the intersection of cultural economy and cultural studies. Within this there are two different tracts. The first comes out of the approach developed by Gasher and Lukinbeal, which emphasizes a critical engagement of textual meaning through a focus on the economics of location production and the politics of on-location filming. The second emphasizes the underlying power relations, inequalities, and uneven developments of the industry and how these influence meaning production. Meaning production here focuses on how social and economic production practices perpetuate, reify, and naturalize the hegemonic ideologies complicit in their own production.

What is the future of the text-centered approach? As people continue to study film-as-text, issues over the real/reel binary and the infinite deferral of research away from film qua film will continue. A dialectic understanding of the real/reel binary reifies the simplistic ontology of film as mere representation. We therefore see simulacra and haptics as the most productive avenues of future research in the text-centered approach. Simulacra provides a means to discuss representational discourse in relation to film without connoting that film is merely an image. It also helps shift the focus toward geographies of film form and its relation to the diegesis. Rather than segregating the viewer-reader from the text, a haptical approach positions the reader within an ontological understanding of the film viewing experience. A haptical understanding of film moves away from the connotation of subject/object relations, where film is merely a

cultural object/product. In a similar way, geography's engagement with performance and non-representational theories seeks to overturn the focus of studying cultural products by switching the focus to cultural practices, affect, emotion, and the body. Particularly exciting paths of future text-centered research are those that combine simulacra and haptics with author or reader centered approaches. Fletchall et al. (2012), for instance, contextualize how the production of Orange County, California, or "the OC," derives from a simulacral palimpsest of media texts. It is through an understanding of the OC as simulacra that reality television shows depicting this area are understood by viewers, rather than through the actual happenings of daily life in Orange County. Further, they argue that through emotional and geographic realism reality show fans engage in a haptical practice of place-making.

What is the future of the reader-centered approach? The most exciting aspects of reader-centered studies are twofold. The first approach in need of further development is the theoretical advances regarding the viewing subject, especially as this relates to haptics and psychoanalysis. These theories are of most interest because they challenge traditional notions of the spatiality of film reception centered on voyeurism, thus allowing for more nuanced understandings. Where voyeurism allowed us to point out certain underlying power issues relating to the images (e.g. Mulvey 1975), it also delimits a terrain that is constricted by the subject/object and mind/body binaries that lead to heterology, an unsustainable theoretical construct. On the other hand, the promise of affect, emotion, and non-representational theories in geography parallels the emphasis in film studies on haptics, the body, and psychoanalysis. Cross-pollination between these fields is much needed and these theories point the way.

The second needed area of research in the reader-centered approach is engagement with historical geographies of exhibition, especially as this relates to spectatorship and how we understand the production of meaning within the diegesis and *mise-en-scène*. Researchers here have mainly focused on the historical context of viewing within the United States and Britain. Little attention has been paid, however, to comparing the situatedness and spatiality of exhibition across countries. Further, the ATR model assumes a textually-centered spectator. Although poststructural theory has challenged this assumption through concepts of essentialism and relativism, Hanson's (1991) work highlights how, during the 1910s and 1920s, the textually-centered spectator was mutually co-constructed with Hollywood's classical paradigm of narration. The classical paradigm attempted to homogenize meaning across a national scale by eliminating the "empirically variable acts of reception" (Hanson 1990, 55). The development of the Hollywood narrative style would take decades to develop and is not a static construct (Bordwell 2002).

In this paper we have used the ATR model as a heuristic device to discuss past trajectories and future possibilities within film geography. Despite significant drawbacks to this approach, its continued relevance is seen in the work of the many geographers who continue to deploy it, wittingly or not. For this reason, we have found it necessary to provide a clear delineation of how the model has become entrenched in the discipline, as well as how it can be used to move forward. By recognizing the ATR model and its accompanying real/reel binary for what they are – scaffolding that allows researchers to safely and slowly work towards a stronger, more theoretically sound paradigm – it is our hope that we will soon be at a point where we can move beyond this approach to discover

new and exciting vistas of research for film geography.

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Appendix B

Embodied cartographies of the unscene: A feminist approach to (geo)visualising film and television production

Published as

Sharp, Laura. 2018. Embodied cartographies of the unscene: A feminist approach to (geo)visualising film and television production. *Necsus: The European Journal of Media Studies*. Autumn.

[T]he frame refers to what is around the frame – a spatially and temporally contiguous ‘unseen’ that may, in its turn, subsequently enter the frame and so become actualized as a seen/scene... The essential thing about film, then, is not the framed image, but that which comes between the frames: the cut. [1]

For events to occur, they must occur somewhere. It was for this reason that, for Heidegger, the nature of being was immanently spatial. Events in film and television are no different. Because they serve as the stage on which all narrative events take place and are visual-material references to the audience’s lived reality, film locations are integral to world-building and the suspension of disbelief. Film locations provide insight into character psychology, helping viewers create emotional connections to them. Through establishing shots, long shots that periodically re-situate the viewer in the film’s current geographic whereabouts, viewers experience an emotional relief from the ‘cartographic anxiety’ [2] of being unmoored from the physical world, a sense of discomfort produced by cinema’s phantasmagorical barrage of disjointed and geographically vague imagery. As cinema scholars become increasingly aware of the constitutive role that locations and geography play in film they have turned to cartography, in both theory and practice, to better understand this role. In this article, I explore a cinematic cartography that as of yet has still been little discussed: the cartographies of the moving bodies behind the film camera. I refer to this here, in a reference to Doel, as cartographies of the ‘unscene’, which are those practices and places that enable the scene to unfold without actually being visualised in the frame. I place the emphasis on the *scene* rather than *seen* to clarify that these practices and places are no less visual/visible for not appearing on screen.

In what follows, I first visit the current cartographic theories and practices used to study film spatialities before moving to feminist critiques of the objectivist and disembodied ontology that underlie these concepts and applications. I argue that the

situated, embodied, and grounded approach to geographic information systems (GIS) advocated by feminist geographers as well as visual anthropologists elicits a richer understanding of the cinematic map than traditional spatial science alone can. To demonstrate this, I turn to a case study of location scouting for a movie made in Los Angeles, California: *Unit Zero*. [4] Practicing grounded visualisation, I retrace my steps of data collection and visualisation and conclude by identifying several ways these visualisations illuminate the data and cinematic cartographies more broadly. Possible analyses of the location scouting practices enabled by this methodology are suggested and will be expanded on in subsequent articles but are not themselves the article's focus. Moreover, while the methodology I propose stems from feminist critique, the effects of gender on scouts' labor practices are beyond this article's purview.

APPROACHES TO VISUALISING SPACE:

CINEMATIC CARTOGRAPHIES MEET FEMINIST GIS

The connection between cinema and cartography points to cinema's innate 'mapping impulse' [5] on the one hand and a desire to re-humanise the map in cartography on the other. [6] Whereas Bruno [7] positions cinema as a 'modern cartography' with a virtual mobile gaze, Conley [8] broadly subscribes to this notion of affective, mobile geography of flanerier and positions cinematic cartography as a cognitive issue in which the viewer charts experiences and emotions onto mental maps of the world. Castro [9] not only positions early cinema as a cartographic effort of mapping the world through the 'cartographic shapes' of atlases, aerial views, and panoramas, but also within the context of topophilic expressions [10] of self-identity and discovery, an

emotional engagement, ‘or primal urge of self-mediation: the desire to understand the relationship between the self and world, body and space’. [11]

While film scholars readily draw comparisons between cinema and cartography, it is only recently that they have embraced the use of GIS to understand cinema’s spatial dimensions. Researchers are increasingly interested in the spatiality of film production, consumption, and narrative action. This scholarship benefits from GIS in the same ways as does any other type of spatial inquiry, namely as a tool for spatial data management, [12] spatial analysis, [13] and data visualisation. [14] In the introduction of their book, media scholars Julia Hallam and Les Roberts laud the use of GIS as a means to turn away from textual analysis, which has dominated their field. To this end, they state, ‘ [w]hat is needed ... is a critical mapping of the multifarious spatialities of film on the one hand, and the expressly visual cultures of geography and cartography on the other’.

[15] Several authors have taken this challenge on, though how they utilise the software differs.

Notably, of the authors interested in querying film production from a cartographic standpoint, as I do here, none have attempted to consider the map from the experience of those who enact it. Lukinbeal, [16] for example, in his analysis of 3,781 film and television film location points collected from the San Diego Film Commission between 1985-2005, used a mixed-method approach to understand why filming in San Diego occurred where it did. In addition to interviews with the San Diego film commission, Lukinbeal showed film and television density and clustering by using techniques of kernel density, point pattern and hot-spot analyses, and Moran’s I to compare all data with individual production types (feature film, television, and made-for-TV movies).

Similarly, Ravazzoli [17] applied density and cluster analyses to location data from the Internet Movie Database (IMDb) to show production clustering around three nodes across Italy. She argues that this distinct fragmentation reveals a selective image of the country that has implications for how the country is perceived locally and nationally.

Instead of looking at many productions in aggregate but continuing the approach of the distanced observer, Cacquard [18] has focused on mapping an individual feature film, *Ararat*, arguing that mapping the geographic components of narrative cinema helps us understand the film's spatiality and, as Ravazzoli [19] also argued, how those geographies may contribute to the production of geographic imaginaries. For Cacquard, understanding the spatiality of a narrative means mapping the locations where the film is set, not where it was filmed. Cacquard's methodology uses graduated symbols to represent locations where characters spend more or less time and different types of lines to show the different ways that action is displaced from one location to another. Each of these studies demonstrate the possibilities offered by the aggregative techniques of GIS to identify macro-scale patterns in film production. However, by taking this strictly Cartesian, inference-based approach rather than a practice-oriented or ground level approach, the lived, contingent details of the filmmaking process are lost. In the next section, I discuss feminist critiques of GIS, articulating as I do so how the study of cinematic cartographies benefits from a more embodied and partial approach.

A view from between? Bringing contradictory positionalities to the cinematic map

Like feminist critiques of science, feminist geographers have sought to interrogate social differences and the power relations that underpin them in our everyday lives. This critical

approach further extends to power relations within academia and the discipline of geography, as well as to the way research is conducted. These ideals of disrupting geography's masculinist culture and its practitioners' long tradition of legitimising the discipline as a science through allusions to objectivity, distance, and deductive reasoning accord with science and technology studies (STS) critiques of science as socially constructed and locally situated. [20] The work of Donna Haraway, in particular, has inspired feminist geographers through her concepts of situated knowledge, the god-trick, and cyborg theory. These concepts have been used to reconsider the researcher's positionality within research and relation to research subjects, as well as how we conceptualise geography's technological visualisations through GIS, which has been critiqued as masculinist and as operating from a view from nowhere. [21]

Haraway's work has focused on blurring traditional boundaries of Western thought such as those between male and female or biology and technology. In dismantling these dualisms, Haraway finds evidence of the cyborg, an organism-machine hybrid. The cyborg helps Haraway articulate the fluidity and overlap between entities naturalised as whole and bounded. To shift to a cyborg perspective, Haraway [22] writes, we must occupy these mutually-contradictory positionalities simultaneously because both reveal experience and knowledge that the other cannot.

Cartographically, we may think of these contradictory positions as the detached, omniscient, and objective God's eye view from above, which grants broad and abstracting views of the world while obscuring the viewing subject and also the grounded, subjective, and self-reflexive view from the ground. The partial view from below is articulated through Haraway's concept of situated knowledge. Rejecting the

privileged positionality of objectivity and its associations with masculinity, capitalism, and war, in ‘Situated Knowledge’ Haraway establishes a new feminist philosophy towards identity politics and the role of women in the study of science. Arguing against the ‘god trick,’ she states,

I am arguing for politics and epistemologies of location, positioning, and situating, where partiality and not universality is the condition of being heard to make rational knowledge claims. These are claims on people’s lives. I am arguing for the view from a body, always a complex, contradictory, structuring, and structured body, versus the view from above, from nowhere, from simplicity. Only the god trick is forbidden. [23]

Looking back to the work of Lukinbeal, Ravazzoli, and Cacquard, the takeaway from Haraway’s work is not that the cartographic view used by these authors is ‘wrong’ but that it, like the view from below, is partial. When we choose to inhabit both positionalities rather than one or the other we are able to come to a richer, if always incomplete, understanding.

Feminist (geo)visualisations

In geography, Haraway’s work has been extended to address issues of reflexivity and the apparent disunity between feminist epistemologies of embodiment and masculinist epistemologies of objectivity. [24] As a ‘science’, GIS is often understood as unable to accommodate data collected on subjective experiences [25] such as sensory knowledge, affect, or emotions. Through Haraway’s cyborg, however, we learn that, rather than strive for epistemological unity, i.e. between the user and technology, we ought to remain open to the shifting boundaries between our bodies and machines. This rearrangement of

power allows us to decide what our relationship with technology is. Thus, although GIS is often criticised as innately masculine,

geographers can decide whether their cyborgs will be masculinist or feminist. By engaging with technology, women have the opportunity to reconstitute it – a political action. [26]

Feminist research has further pointed out how geography and GIS rely on vision to construct knowledge and concomitantly position knowledge from a masculine, ‘God’s eye view’. Concerning GIS, Kwan [27] argues that ‘the problem is less the use of vision or GIS-based visualisations per se, than the failure to recognize that vision is always partial and embodied and to acknowledge the risk of privileging sight above the other senses’. Addressing the critique of vision through a feminist GIS practice requires the recorporealisation of ‘all visualisations as embodied and situated practices’, [28] something Haraway [29] calls ‘feminist visualisation’. For Kwan, feminist visualisations destabilise dominant ways of seeing, but to do so we must practice reflexive knowledge production, clearly articulating a politics of partiality rather than omniscience, or as Katz [30] writes, practicing minor theory rather than mastery.

With the proliferation of data and visualisation tools, GIS increasingly makes feminist geovisualisations of partiality and embodiment possible. It further enables inductive research models that, when combined with GIS data visualisation, ‘allow [s] non-hypothesis based conclusions that are nevertheless academically acceptable’. [31] To this end, Knigge and Cope [32] have developed the methodology of ‘grounded visualisation’, which combines grounded theory with methods of visualisation. Grounded theory is a qualitative approach to data collection and analysis that entails iteratively questioning, comparing, and coding data to allow theories about the data to emerge.

Citing Slocum et al., [33] Knigge and Cope [34] describe geovisualisation as ‘any recently developed novel method for displaying data’, [35] ranging ‘from the use of paper maps to the use of GIS and other highly interactive tools for exploring data’. Knigge and Cope, therefore, argue that GIS visualisation can be combined with qualitative methods ‘to identify themes and processes, raise new questions, and begin to build theories’. [36]

This iterative visualisation process was deployed by Kwan and Ding, [37] who combined geocoded life path data, interview text, photos, and sound clips in a GIS. For Kwan, the study of narratives as ‘geo-narratives’ complements the life-path methods of time-space geography because both are a chronological ordering of spatial events. Life paths [38] are lines drawn (or digitised) on a map to represent the movements and spatial decisions of a research subject who then describes to the researcher what factors and decisions contributed to the path that is shown. Following the new mobility turn, [39] methods that capture mobile experiences such as Kwan and Ding’s life path approach have come to the fore, [40] including methods that incorporate GPS tracking devices to look at pedestrian mobility and travel time [41] or to analyse urban tourism habits. [42] Inspired by this, I applied similar mobility tracking and extra-textual data capture techniques when undertaking the research for this article to learn about the spatial decision-making of my research subject, Claudia Eastman, and thereby Claudia’s lived enactment of the cinematic map.

To record Claudia’s path, I used a cell phone GPS tracking application, Motion-X GPS. To capture Claudia’s rationalisation of this path, in addition to other non-cognitive dimensions of the experience, I used interview, video recording, and photography. Although visual representations such as video and photography are historically associated

with objectivity, [43] they are, like all methods, partial and constructed. Moreover, as Jacobs [44] has argued, lumping these methods in with ‘visual methods’ occludes their non-visual elements. In Jacobs’s [45] words, ‘film is a better fit in the body of research methods that are multi-sensorial, multi-modal, practice-based and targeted towards how we experience our lived environment’. According to Pink, when we record videos while walking with a research subject, this simultaneous act of movement and recording is an inscriptive operation in that. This is because 1) ‘there is usually a relationship between the walker’s routes and a mapped reality’, and 2) ‘while footprints in the grass may be transient, the trace of the video walk is preserved in the record’. [46] The video does more than represent a certain event and the bodies within the frame, however; it rather produces a new experience of empathy and connection between the bodies on screen and those in the audience. Citing MacDougall, [47]Pink [48] asserts that videos are ‘not just the images of other bodies; they are also images of the body behind the camera and its relations with the world’. In this sense, making video recordings with the research subject is a reflexive practice that actively situates the researcher and the partiality of their observation within the research.

GEOVISUALISING THE EMBODIED CARTOGRAPHIES OF THE UNSCENE

The location department of a film production is made up of crew members responsible for locations: finding them, securing them for use, and managing them on shooting days. In their day-to-day lives, these location scouts and managers not only experience the cinematic cartographies that academics analyse but create them. Film commissions and private location libraries have databases of address data; location scouts use Google maps

or its equivalent to find and save locations and identify how close each location is to one another; location managers make maps of each location indicating where trailers should be parked and explaining to the crew how to get there.

The glimpse of location scout Claudia's activities that I tracked, recorded, and visualised in Story Map are part of and continuous with the film's *mise-en-scène* in that they are a vital component of actualising the locations that appear on screen (Figure 1). And yet, to achieve geographic realism and the suspension of disbelief, these activities are simultaneously framed out [49] of the final product to inspire in viewers' minds a map of the characters rather than of the crew. This selectively framed cinematic map is then reproduced by cinema scholars who narrowly focus on only the locations that are used in the final product or on where the narrative is set. As a slice of the ongoing and spatially contiguous relationship between film and film production, the data is continuous with the film, the rest of the film's production process, and even film production throughout Los Angeles and the world. Thus, although this data is spatially and temporally specific, it is part of the ongoing connections between the rest of the cinema's embodied and unscene cartographies, thereby making it potentially endless.

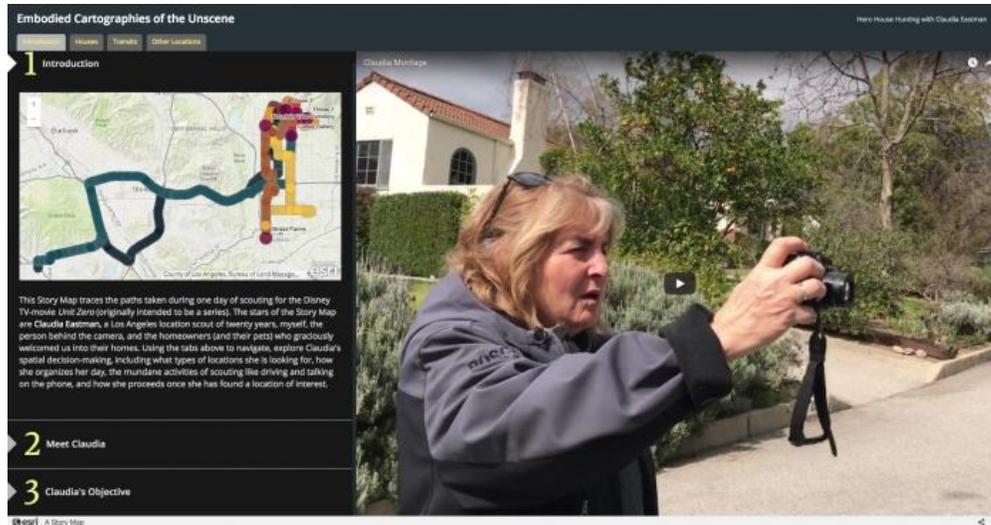


Figure 1. Story Map of Embodied Cartographies of the Unscene (Story Map link: <https://goo.gl/UMrFY9>).

Tools and data collection

The GPS data and videos were created over the period of one day, from about 8 in the morning to 5 in the evening. On this day, location scout Claudia Eastman was scouting for the Disney channel for the pilot of a new television series that was eventually released as the made-for-TV movie *Unit Zero* (Figure 2). The movie, which is about CIA agents, takes place in Langley, Virginia. Claudia's task was to find the 'hero house' – that is, the home of the main character, Jackie. To prepare for this, Claudia had read the script, noting each location that it required and paying special attention to the description of the home, the manner in which characters and the camera were described as approaching the home, and the descriptive qualities of the main character whose home it would be. It is important to note, for instance, that Jackie is not only a CIA agent but also a single mother of three, as this impacted how Claudia performed her scout. Specifically, we notice that the locations that Claudia considers are filtered through her understanding of

what Virginia looks like, but also how Claudia imagines the socio-economic status of a government employee and single mother and what such a person could afford in Virginia (Figure 3).

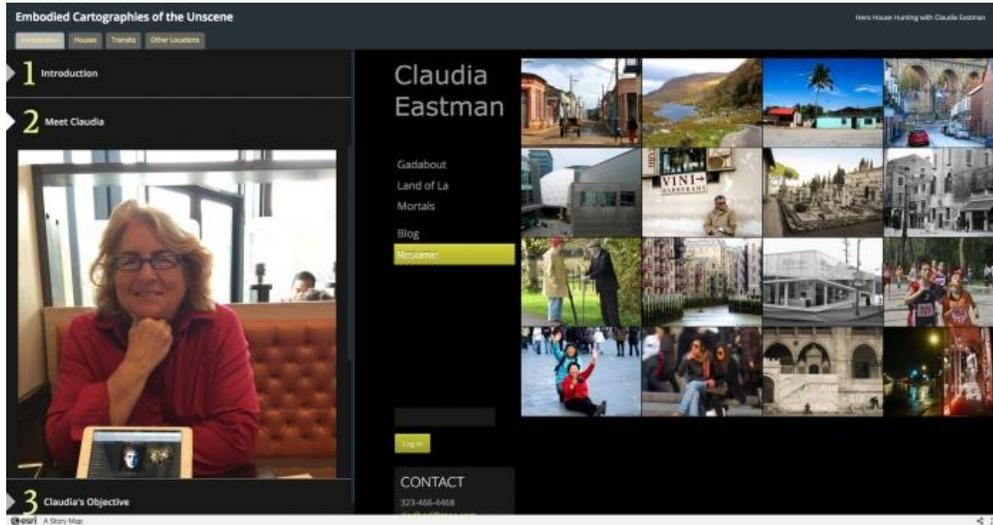


Figure 2. Location Scout Claudia Eastman.

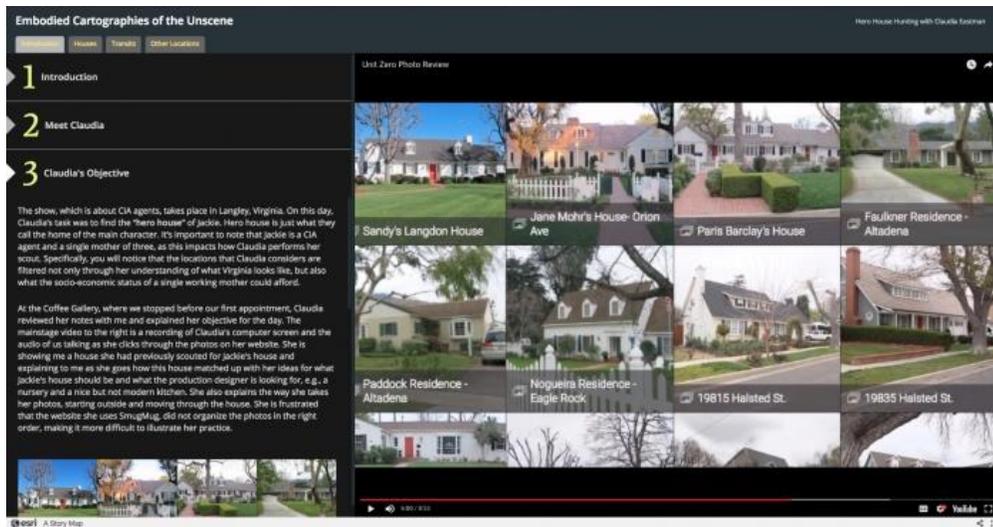


Figure 3. Claudia's Location Scouting Objective.

The point data used to make the map were recorded using the smartphone application Motion-X GPS, which records a GPX table of X, Y point locations and a time stamp. Points were recorded every ten seconds. The data was uploaded as a GPX file to

the ESRI software program ArcMap, where it was converted from a GPX file to an ESRI shapefile. This data shows the location of Claudia and I and a time stamp indicating the order in which each point was recorded but not the time of day. Once the data was converted, I uploaded it to ESRI's online platform, ArcGIS Online (AGO), where mapping and Story Mapping took place. Story Map, one product offered on AGO, is a web application that combines maps with narrative text, images, and multi-media content to make 'room for the non-spatial components of a story'. [50] In addition to the GPS data and with the permission of Claudia and each of the homeowners, video, photographs, and audio recordings were made throughout the day and accompany and contextualise the GPS data. The focus of the media data collected was thus on capturing Claudia's scouting protocol within the homes and on the way she interacts with and evaluates the landscape as she drives. Story Map is made up of two primary elements: the map, which shows the spatial dimensions of a given phenomenon, and the story through which the map and its significance are communicated. In what follows, I discuss how I created the maps and how I operationalised these within Story Map's framework (Figure 4).

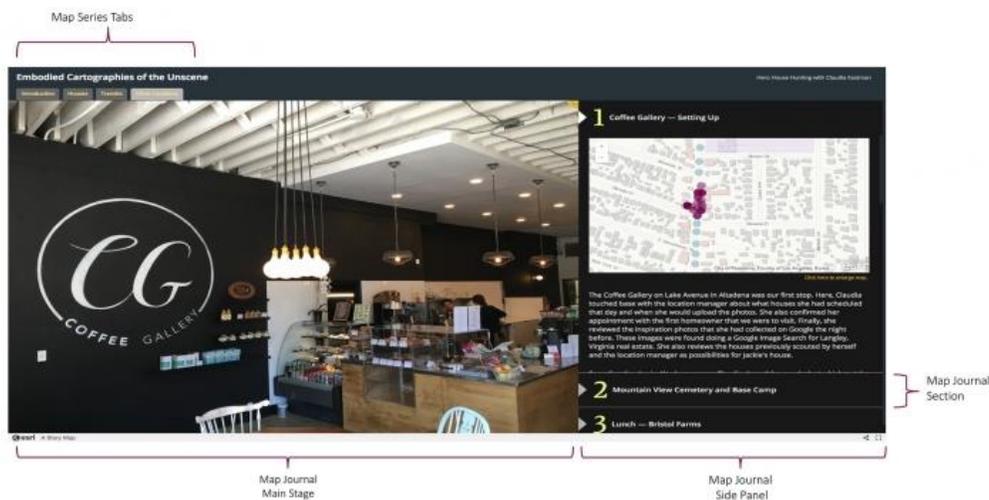


Figure 4. Format of Story Map.

The web map

Following the conversion of data, the next steps were symbolisation and abstraction, where the cartographer emphasises the spatial importance of the data by highlighting some aspects over others. To discover the story that my data was telling, I considered different symbolisation options (Figure 5). Should I keep the data as individual points or transform the points into a straight line? What attributes could be added to help give the points contextual meaning? I chose to keep the points as they were rather than converting them to lines because the points highlighted that the day was made up of many discrete practices rather than one continuous movement or event. From here, I symbolised the data by the primary activity undertaken at a given moment. The categories I started with were ‘cold scouting’, that is, when the scout drives around looking at places with little to no predetermined locations in mind, and visiting pre-scouted locations (‘return scouting’), or when the scout is returning to places that were scouted before. In this case, the pre-scouted locations were ones where Claudia had left flyers the day before. In other cases, however, a scout might be returning to a location found on another project, one that someone recommended, or one that the location manager asked them to visit. This symbolisation, I reasoned, would demonstrate the scout’s relative allocation of time per activity – cold scouting in person compared with looking at locations on Google, uploading photos compared with taking photos – and thus the priority of activities in her overall workflow.

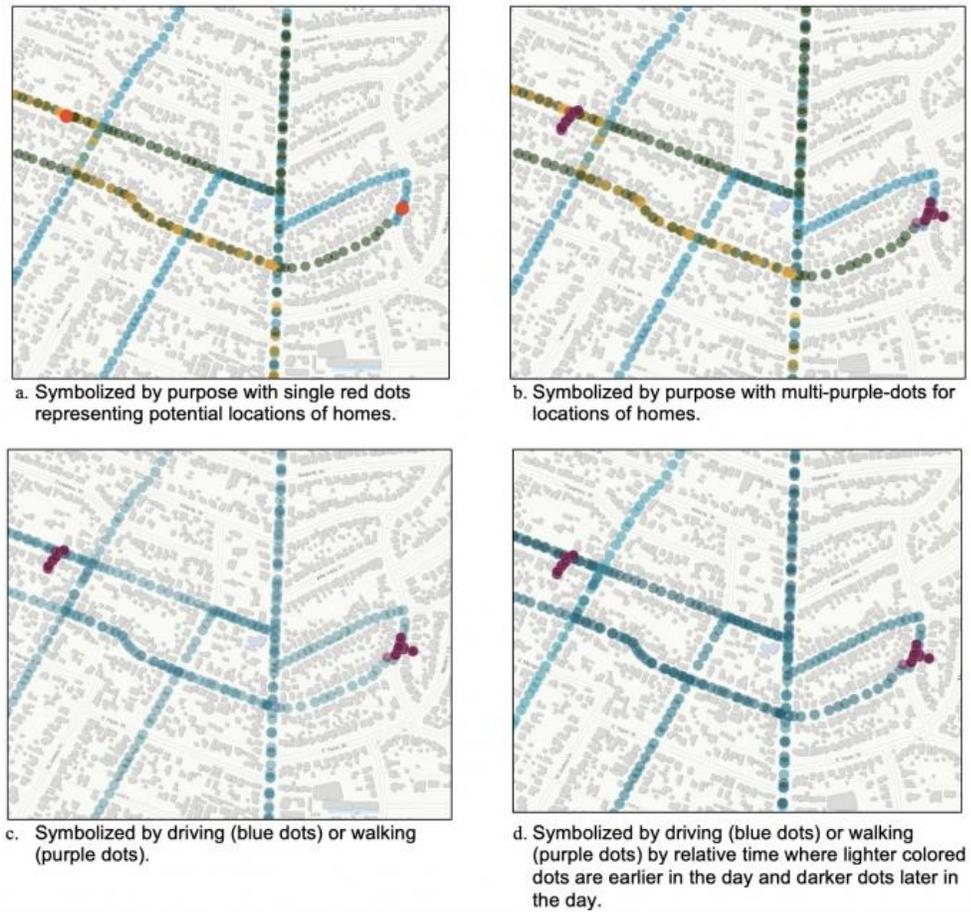


Figure 5. Exploring different symbolisation and abstraction schemes.

While cold scouting and return scouting seemed straightforward, I was unsure of how to categorise the rest of the day's events, such as driving to the coffee shop, driving to lunch, being at lunch, visiting a convenience store, and driving home. Giving each of these their own symbolisation made the map overwhelming and meaningless, so I created two more categories: 'other', which included miscellaneous driving activity, and 'on location', which included points corresponding to location visits. Not wanting to lose the details of these 'other' events, I created a new column and entered descriptions such as 'going to lunch'. These, then, became available through popups, visible when needed but otherwise unobtrusive. This second field helped add depth to the initial categorisation.

With the addition of this field, I decided to add new codes to my original fields. Notably, I added ‘cold scouting’ to activities that I had initially tagged as being primarily about following up on previous scouting or going to lunch. However, I soon began adding ‘cold scouting’ as the secondary purpose for every activity and realised how limiting such a categorisation was in the first place: There was never only one ‘purpose’ at a given time. Claudia’s activities were not either/or but rather both/and.

To represent where Claudia stopped, I first reduced each location to a single point. This would be ideal for display because it would lead to a single popup for each location. Due to the time intervals at which the GPS recorded points, and because we covered relatively little terrain while on foot, the details of these points are less telling than the overall day’s path. In some places, only a handful of points were recorded and many overlap, either because so little movement occurred over time or because in each house we traversed multiple stories, causing points to gather on top of one another. The second concern I had with representing locations was that like driving paths, not all locations were ‘equal’ in that some were ‘key’ sites (potential film locations) and others were ‘supplementary’, needed primarily to support Claudia while she did her job finding the key sites. From this, I realised how little of our day actually involved what I had at first considered to be the ‘most important’ aspect of the job – actually looking at locations. In all, less than 3% of points were recorded while looking at a potential location, 4% were recorded doing supplemental tasks, and 93% of points were recorded while driving. Based on my conversations with numerous location scouts about their process, Claudia’s allocation of time is not unusual; rather, it reflects the time-intensive nature of traditional, in-person scouting compared with new trends in digital scouting.

Becoming aware of how much time was spent in the car compared with on location prompted me to create a new symbolisation of the data that helped compare the time spent in the car versus time on foot. For this, I kept the location data as multiple rather than individual points. The last way I symbolised the point data was by coding each subsequent trip in the car in a different colour value. This symbolisation serves as proxy for time, which my GPS did not record. Each transit relates to a different numbered segment in the ‘Transits’ side panel of the Story Map (discussed below). Here, where available, videos and notes about that segment of travel are presented. When looking at the map of transits with many different coloured point-lines overlapping and running into each other, we become aware of the spatial-temporal overlap of the day’s events and, extrapolating from this, of the entire production’s events (Figure 6).

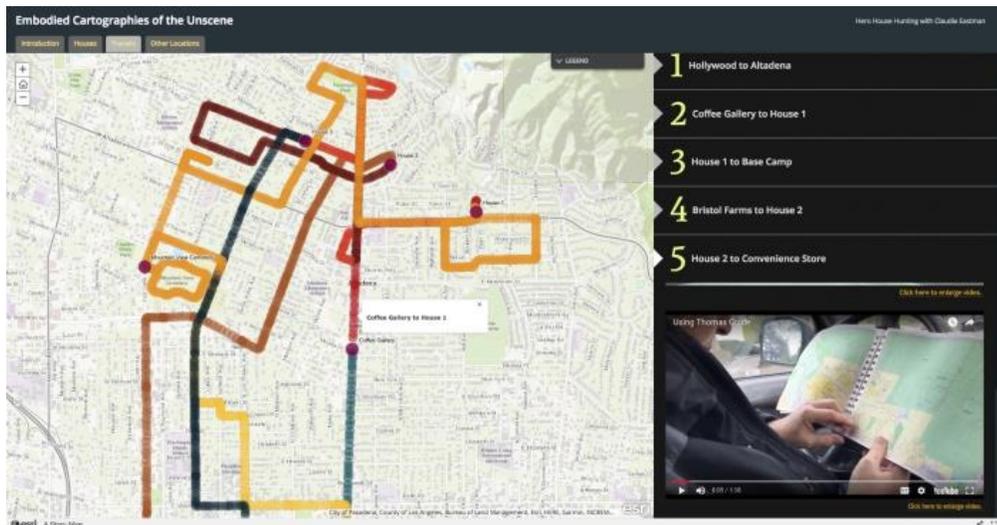


Figure 6. Transits.

ESRI's Story Map

While Story Map authors can use computer code to embellish the appearance of their stories, ESRI's goal is to make Story Mapping as easy and accessible as possible. To do this, they offer the user five premade templates with customisable options. Each template has a different format that enables (or limits) certain types of stories to be told. Choosing the best template for your story is the first step to making a Story Map. In most cases, the Story Map author would know the story in advance in order to think about how best to communicate their message. When using Story Maps as a grounded visualisation, however, threading the data through the different templates is useful for learning what kinds of stories your data is capable of telling.

My first thought about which template to use was based on the initial assumption that the most critical aspect of the data was the locations being considered to play the hero house. With this in mind, I chose the Map Tour template because it focuses on discrete points on the map and allows the user to jump between points using thumbnails at the bottom of the screen. Once I started this process, however, I realised two things: 1) the template limited the amount of media that can accompany each point on the map to one image or video and so is best when the author only wants to give an idea of what occurs at that location; 2) by focusing on discrete locations, this template obscured the time spent between those locations. With this in mind, my next effort used a Cascade template.

Cascade is one of two templates (the other is Map Journal) that requires the story's audience to scroll down continuously to be presented with new maps and media, making these best for telling linear narratives. Because Cascade allows the author to work with the entire screen rather than one section, Cascade is also ideal for stories that are media-heavy. As I began putting maps, images, and movies in place, however, I discovered that I did not know what piece should come next because there was no definitive, over-arching narrative that I was trying to tell. I thus moved on to the Map Series template. This template allows the author to organise data into separate tabs or pages within the application, enabling the audience to jump around between tabs, thereby taking the emphasis off linear storytelling. At the same time, it also uses a side panel that expands to accommodate the information or media you choose to include. I began by creating tabs for every type of spatial experience, e.g. one for each house, one for each segment of driving (which I call 'transits'), and one for each time we stopped for other reasons, for instance at the cemetery to see the base camp of another production.

With these tabs in place, I found that the application lacked organisation: all of the tabs were hierarchically equal with no unifying themes. Thus, while the map series is ideal for providing the user with the ability to self-direct their experience of the application, this prevented a clear narrative from forming – the opposite problem of the Cascade. To overcome this, I configured a compromise between the strongly linear format of the Map Journal with the leap-frog format of the Map Series by creating separate Map Journals for each type of activity and embedding these within the tabs of the Map Series. The result is four thematic tabs at the top of the application, within which are panels that are subdivided by unique activity. Each subdivision of the panel contains

information (text, pictures, videos, maps) for a unique spatial event. So, for example, the tab called ‘Houses’ contains a numbered panel for each house that we visited, with ‘1’ being the first house we visited and ‘3’ the last house (Figure 7). Similarly, the tab for ‘Transits’, which contains all of the point and video data collected while driving, has a panel with each successive transit (trip in the car) listed in temporal order. Thus, unlike some Story Maps that seek to tell one overarching narrative, this Story Map does not attempt to convey any particular message. Rather, it provides the user with a series of smaller thematically-grouped temporal narratives from which they can draw their own conclusions about the day’s events. By creating both thematic and temporal organisation of the data, the Story Map acts as a bivariate visualisation. This bivariate structure disrupts the logical flow of metanarrativity, enabling dynamic interrogation.

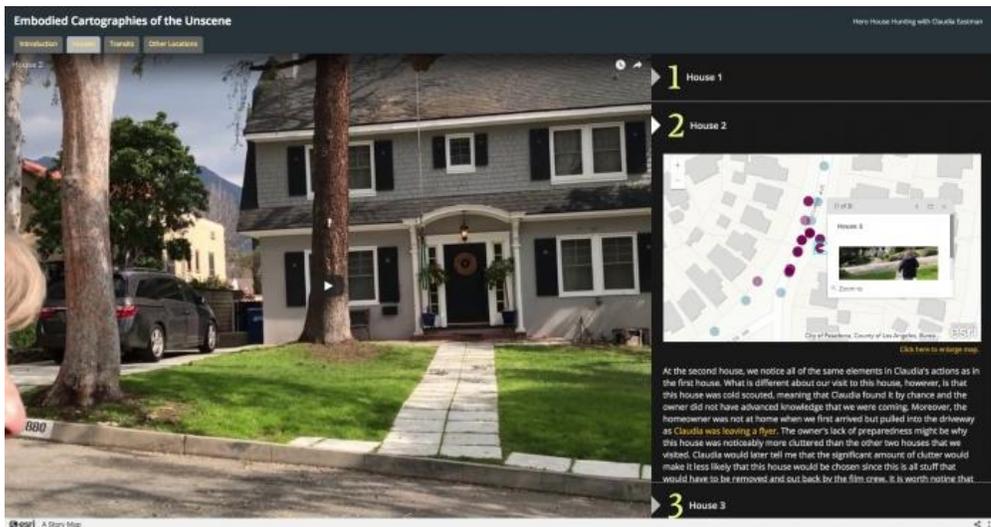


Fig. 7: Houses.

DISCUSSION AND CONCLUSION

Feminist GIS and grounded visualisation provide new avenues through which to investigate cinematic cartographies. When we weave together the view from above and from below, we are able to think critically not merely about the map's underlying epistemologies but more importantly the implications this epistemology has for how we understand the geographies of cinema. Until now, a large swathe of the cinematic map has been occluded by a masculinist, top-down approach to what cartography and GIS mean and are capable of. The Story Map created here is a visual record of a process that is otherwise only visualised through the final product, the movie, which bears only the trace of these activities. This cinematic map is a snapshot in time of *Unit Zero*, a map that started when the project was initiated and which will continue on indefinitely as it is picked up by others even after the movie is complete. This geovisualisation reveals several things about the data that mapping and GIS analysis alone obscure. These observations, in turn, create more questions and thus pave the way for future research on topics of scout mobility, use of technology, labour, and the experiences of homeowners and homeowner decision-making.

First, after trying to determine the best way to categorise the data, I found that location scouting, like most things in life, is not something that can be perfectly summed up in a table. Instead, like the map and its crisscrossed and overlapping paths, scouting activities blend together and run into each other and are not limited to just the time spent at a potential location. Cold scouting happens on the way to an appointment for a previously scouted location, this morning's locations get uploaded on lunch break, and

keeping in touch with your boss happens while keeping homeowners happy to host you. In this sense, it is possible to say that, for a location scout, scouting is never *not* happening, as information about the world is always being stored, if not for the current project then the next.

A second observation that the Story Map visualisation illuminates is the proportion of time spent doing things like driving to Altadena from Hollywood, driving to lunch, or organising ourselves in the coffee shop. This allocation of time reinforces the mobile nature of the scout's job and the living, tangled cartography of filmmaking. Spending the day in Altadena means Claudia does not have a desk at which to take her lunch, strong wifi whenever she is ready to upload pictures to the cloud, or a place to wait for her next appointment. Like the film locations in her portfolio, places like the Coffee Gallery and Bristol Café become part of her geographic repertoire of work and part of the map that leads to the ultimate product of the film. Unglamorous, make-shift office spaces are part of the cinematic map too.

Finally, working with the data as a series of discrete points rather than a line suggested that the cinematic map is a process made up of many individual practices rather than a single, static event in the same way that it is more than the film that it culminates in. Returning to Pink's argument that video walks with research participants convey an empathetic understanding of those both in front of and behind the camera, the video walk method dovetails with feminist geographers' calls for embodied, partial knowledge production, or the view from somewhere. The methods used here – my own active presence with Claudia while she scouted, my presence in the recording material, the presentation of the material in an interactive website, and finally, the time taken to

write out the iterative geovisualising process – all strive to position the researcher, the researched, and the data within its context. In so doing this methodology takes seriously the cyborg philosophy of inhabiting two mutually-contradictory positionalities simultaneously, in this case the objective view from above – the map – and the subjective view from below – everything else.

ENDNOTES

- [1] Doel 2008, p. 96.
- [2] Bruno 2002; Avezzù 2015; Sharp 2018.
- [3] Doel 2008.
- [4] *Unit Zero*, 2017.
- [5] Castro 2009.
- [6] Caquard & Taylor 2009.
- [7] Bruno 2002.
- [8] Conley 2007.
- [9] Castro 2009.
- [10] Castro 2010.
- [11] Lukinbeal & Sharp, Media's Mapping Impulse Introduction.
- [12] Klenotic 2013; Caquard & Fiset 2014; Hallam & Roberts 2014; Aertsen et al. forthcoming.
- [13] Lukinbeal 2012; Ravazzoli 2014.
- [14] Caquard 2014.
- [15] Hallam & Roberts 2014, p. 25.
- [16] Lukinbeal 2012.
- [17] Ravazzoli 2014.
- [18] Cacquard 2013.
- [19] Ravazzoli 2014.
- [20] England 2006, p. 288.
- [21] Bondi & Domosh 1992; Roberts & Schein 1995.
- [22] Haraway 2006 (orig. in 1985), p. 122.
- [23] Haraway 2007 (orig. in 1988), p. 589.
- [24] Cf. Rose 1997.
- [25] Gordon & Schirra & Hollander 2011.
- [26] Schuurman 2002, p. 261.
- [27] Kwan 2002, p. 649.
- [28] Ibid..
- [29] Haraway 1991, p. 199.
- [30] Katz 1996.
- [31] Schuurman 2002, p. 260.
- [32] Knigge & Cope 2006.
- [33] Slocum et al. 2005.
- [34] Knigge & Cope 2006, p. 2026.
- [35] Slocum et al. 2005, p. 12.
- [36] Knigge & Cope 2006, p. 2026.
- [37] Kwan & Ding 2008.
- [38] Hägerstrand 1970.
- [39] Sheller & Urry 2006.
- [40] Cf. Fincham & McGuinness & Murray 2010; Büscher & Urry & Witchger 2011.
- [41] Isaacson & Shoval 2006.
- [42] Kellner & Egger 2016.
- [43] Cf. Bazin 1960; Barthes 1981.
- [44] Jacobs 2016.
- [45] Ibid., p. 481.
- [46] Pink 2014, pp. 5-6.

- [47] MacDougal 2005, p. 3.
 [48] Pink 2014, p. 8.
 [49] Cf. Lukinbeal 2005, p. 16.
 [50] Graves 2015, pp. 25-26.
 [51] Cf. Del Casino & Hanna 2006; Kitchin & Dodge 2007.

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Appendix C

Motion Pictures, Mobile Markets:

Making the Film Locations Market in Los Angeles, CA

One *goes* on location. One is never just ‘on the spot’ and ‘on the ground,’ least of all right here and right now, since to be ‘on location’ is to have *taken one’s leave* of some other spotted ground: the studio, the backlot, the computer-generated imagery. [...] ‘On location’ is an instance of place deixis and time deixis, which—like ‘here’ and ‘there,’ ‘now’ and ‘then,’ and ‘this’ and ‘that’—cannot be located without further specification that is neither definitional nor propositional, but situational. A location is precisely that which eludes every attempt to *pin* (or *pen*) it down into its (proper) place. At best, a location can only ever be momentarily *anchored*, but such a fleeting stabilization is illusory, since the context that would enable such an accomplishment is forever shifting. In other words, a location never takes its (final resting) place because it is always in the process of taking place. So, rather than seek to *spot the difference* between two stills, a spot shot during filming and a spot projected whilst screening, we should seek to spot the line that ‘takes flight’ between these other two spots that ostensibly appear to stay still. A location is not a spot, then, but a ‘line of flight.’ (Doel 2016, 3)

Despite long-held interest in geography in the power of media to produce new geographic imaginaries and in the conditions of production that make this possible (Sharp and Lukinbeal 2015), there has been little research on the relationship between the geographies we see on the screen—Sebastian’s apartment in *Blade Runner*, for instance—and the processes that occur outside of the film frame to put them there—why the Bradbury Building? What little research there is about filming that occurs away from a backlot or soundstage, called “on-location” filming or “location shooting,” has occurred in economic geography. This research places little or no import on the cultural products being made or the physical and built environment of where filmmaking occurs. Instead, authors have focused on the scale of the firm and the region, shedding light onto the film industry’s regional agglomerations (Christopherson and Storper 1986; Storper and Christopherson 1987, 1989; Lukinbeal 2002, 2004; Scott 2005) and the competition between states and countries for runaway production¹ that results from government-

¹. Productions that re-locate shooting from the media production epicenter of Los Angeles usually to take advantage of lower costs made possible by tax incentives, cheap labor, or both.

funded motion picture tax subsidies (Christopherson 2006; Christopherson and Rightor 2010; Gasher 1995, 2002; Lukinbeal 2006). Meanwhile, in cultural geography, researchers have been content to query the film text as a representation of broader socio-spatial relationships occurring outside of the screen, but without considering the specific practices that produced those images.

In this paper, I seek to bridge this gap by asking: *By what processes are the geographies that we see in film and television brought to the screen?* In answering this question, I uncover part of the film industry that has hitherto gone unnoticed by both film and geography research, which is the market for film locations. The film location market is made up of the individuals, organizations, practices, values, objects, and technologies—agents, in short—that enable the use of material landscapes and locations (commodities) for film and television production in exchange for payment. Part of the difficulty of “pinning” down this market, as Doel (2016) suggests about film locations more generally, is that they are deictic, that is, they cannot be defined or located outside of the singular contexts—location scouting and the many factors that impact it—that enact them as such. What constitutes a film location commodity is therefore a moving target, residing not simply in the geography itself but in the unique arrangement of agents and value regimes, or what Appadurai (1986) calls the “commodity context,” brought to bear upon it. To understand the film location market, then, we must ask how this commodity context manifests. Put another way, how are those in need of a film location able to encounter those with locations to offer? The answer, I suggest, is that the market for leasing seemingly-fixed property to the film industry, including the enactment of location commodities and means of encounter between buyer and seller, the market’s

spatiality, and ultimately, the process or line connecting these geographies “on location” with those seen on screen, hinge upon mobility.

Mobility is not simply a useful tool to finding and leasing locations but rather was presupposed by the market from its inception. As such, mobility suffuses this market to such an extent that without it the market would cease to function. Drawing on interviews² with location scouts and managers, production designers, property owners and managers, and location services in Los Angeles, CA, and New Orleans, LA, I discuss three means by which this market is enacted through daily practices of mobility. These are 1) the scouts’ use of the car, or their automobility, 2) the digital mobility of the locations themselves by way of photography and related information communication technologies, and finally, 3) the embodied mobility of the scouts’ photography. These processes produce a mobile space of calculation (cf. Cochoy 2008) that qualifies certain locations as commodities and others not. To make this argument, I first lay the groundwork by explaining what the “LA School” of urban geography has taught us thus far about the geography of the film industry and the rise of the contemporary film locations market following the Paramount Decision and the industry’s subsequent transition to flexible specialization. Next, I establish a theoretical intervention into this literature using approaches to markets and economies from science and technology studies (STS). I argue that STS’s attention to the material composition of the social relations that enact markets

². In-depth, open-ended interviews were used in this research because they are a good method when working with “‘experts’ from whom you hope to learn how certain practices, experiences, knowledges, or institutions work – *or at least, how your participants talk about these things working*” Secor (2011, 199). To learn more about the practices of film locations work, interviews were augmented with participant observation, a method used to gain insider knowledge and learn about the taken-for-granted aspects of what people do and how they do it. Individual subjects were selected for participation with the help of Locations Manager Guild International (LMGI) and the Art Directors Guild, who identified individuals within their guilds willing to participate in the research process.

helps us fill in gaps left by previous authors about how individual locations are taken up for use by the film industry. Finally, drawing on the new mobilities paradigm and non-representational approaches to visual culture studies, I identify two regimes of value (Appadurai 1986) that participate in the enactment of the film locations market and its socio-spatial formation.

From Street to Set and Back Again:

A Geographic History of Film Production in the United States

In the United States, at the end of nineteenth century, filmmaking companies re-located production activities from New York and New Jersey to southern California, and especially Los Angeles. Compared to the north-east, southern California offered a milder climate, brighter, more even sunlight year-round, and a diversity of landscapes in which to set scenes. By the 1900s and early 1910s, most films being made were shot on location in the streets of downtown Los Angeles, on the coast at present day Santa Monica, and in the suburbs of Hollywood, Edendale, and Glendale (Shiel 2012, 31). By 1910, film companies began investing in studio spaces and the extensive geographic range of production across the Los Angeles basin contracted and centered on Hollywood. Studios enabled filmmaking to move from the street to the set, where factors of lighting and mise-en-scène could be more easily controlled and time was saved by reduced travel. In 1914, the first major studio backlot, Universal, was built, setting a precedent that others (MGM, Paramount) would soon follow. At 230 acres (now 415), Universal contained all the things we associate with modern filmmaking, such as soundstages, sets, and offices (Shiel 2012, 57). These self-contained studio “cities” became paradigmatic of what is

known as the “studio system” and Hollywood’s “Golden Age,” the period from 1910 to 1940 in which production was characterized by vertical integration. In this system, every stage of filmmaking, from scriptwriting and set building to marketing and theater screenings, was handled by one company.

Of particular significance to the studio system was that each production company had control of the distribution of their films by partnering with or owning the theatres in which they were screened, requiring that these theatres show that studio’s films exclusively or nearly so. With a guaranteed revenue for their films regardless of aesthetic caliber, the studios were able to maintain their expensive, long-term contracts with stars and the other laborers across their various production departments. In 1938, this oligopoly led to the antitrust case, *The United States v. Paramount Pictures, Inc. (1948)*, also known as the Paramount Decision, which forced the studios to end their blockbooking and blindbidding³ practices and ultimately to sell off their theaters. The Paramount Decision completely changed the way Hollywood movies were made. It is now recognized as the beginning of the industry’s transition to flexible specialization, a change discussed at length by Michael Storper and Susan Christopherson. Without the guaranteed returns promised by complete vertical integration from the film to the movie house, it was no longer profitable to batch produce low-budget films that may or may not sell at the box office, and studios were forced to change their strategy by making fewer films with larger budgets and more innovative techniques. By the 1970s, profits of the major studios suffered significantly. Long term employee and star contracts were

³. Blockbooking was the practice of selling several films to a theatre at once, while blindbidding was the practice of selling them to the theater without letting them see them first. By doing this they were able to pass off low quality films hidden in a bundle with better ones.

replaced by project contracts (Storper 1989). Many sold off large portions of their backlots and kept only offices and soundstages, which they began to rent out to smaller production companies. To save money and enhance realism (part of their strategy to make films more innovative and spectacular), filming on location became attractive again. At this time the establishment of small companies specializing in motion-picture related services began to increase dramatically (Storper and Christopherson 1987). Whereas in the studio system a production company would have their own in-house locations department, this domain, along with other, previously internal operations, such as carpentry, lighting, and costumes, were taken over by a specialized, external fleet of individuals or small firms that were hired on short term contracts for individual productions.

Essential to the functioning of the vertically disintegrated industry is that it is dependent on a network of many specialized firms and individuals participating in market transactions to handle the individual stages of the motion picture production process. According to Storper and Christopherson (1987, 112), there are two types of transactions: those involving the search for new projects and those handling the negotiation of existing projects. These transactions have traditionally occurred through face-to-face interactions and therefore accrue greater costs with distance. As such, they encourage the continued agglomeration of production companies and services in the Los Angeles area despite the rising costs of labor and property in the city and the ever-increasing state incentive programs designed to lure filmmaking away (Storper and Christopherson 1987; Storper 1989; Scott 2002, 2005; Scott and Pope 2007). It is important here to highlight, as Storper and Christopherson (1987; Storper 1989) do, that these market transactions are not

formulaic, but are unstandardized, highly tailored to the individuals undertaking them, and require the use and ongoing maintenance of a network of contacts in order to be executed. In short, they are socially embedded (Granovetter 1985).

Perhaps it is because transactions between motion-picture related businesses are so contingent that we know very few specifics about how they transpire. Although there is a sub-set of geographic literature focusing on why movies are made where they are, these authors have limited their scope to the interactions between firms and regions, so we know next to nothing about the emergence of the film locations market following the demise of the studio system and the subsequent shift from soundstages to location shooting. Who participates in these transactions and how are decisions made? The work of Christopherson, Storper, and those who have built upon their work (Lukinbeal 2004, 2006, 2012; Scott 2002, 2004; Scott 2005; Scott and Pope 2007) has done much to shed light on the nature of the film location market at the national and regional scale, yet there are still many processes within these geographies that continue to be “black boxed.” Specifically, by whom in “the industry” and by what means is the film locations “market” comprised? Rather than highlight the variability of agents and processes within this market, it is assumed that as soon as “the industry” realizes a particular locational need, that location is supplied by “the market”—demand is presumed to automatically create its own supply. Little attention or scholarship has explored how the “right” location is found, brought into the market, and made available for use. In other words, little to nothing is known about how these markets are enacted on the ground or the micro-geographic decisions that are made during specific media projects. It is for this reason that I turn to

the literature on the geographies of marketization, which will help attend to the processes by which certain locations get taken up into the film industry and others not.

MAKING FILM LOCATION MARKETS

The geography of marketization is one manifestation of the larger process of economization by which actors and the relations between them are rendered “economic.” The emphasis on process in this description signals its origin in the broader turn to performativity within STS and the geography that draws from it. Economic performativity is a call to acknowledge in explicit terms how and with what effects the study of economics as a discipline participates in the production of “the economy” (Caliskan and Callon 2009). In this formulation, the ideas of a singular, pre-given economy or bounded objects called “markets” are thrown into doubt, as is the notion that the task of economics is merely to describe, model, or represent such an entity. Instead, markets and economies are thought to be made or *performed by* these discourses, alongside many related, heterogenous elements, or *socio-technical agencement*⁴ (STAs), including political and legal frameworks, computer software, organizations (corporations, NGOs), human individuals, and nonhuman material devices (cars, desks, computer screens). While traditional economic conceptions of the market are of an “abstract space” in which buyers and sellers easily encounter one another and negotiate a market price, this approach often ignores markets as they actually exist (Callon and Muniesa 2005). To

⁴. Though often translated to English as “arrangement” or “assemblage,” because these translations lose the emphasis on the agency innate to the different elements in the ensemble and therefore tacitly attribute power to “those who do the arranging and assembling” (Caliskan and Callon 2010, 9), the original French term is preferable.

address this deficiency, Michel Callon and associates have proposed to complicate market transactions by beginning with market microstructures.

Because the socio-technical agencement involved in market-making is unique to each market formation, it is not possible to predefine exactly what components are necessary to make a market. Nevertheless, as Caliskan and Callon (2010; cf. Ouma, Boeckler, and Lindner 2013) argue, most markets do share a “family resemblance” and key elements that enables discussion of them and their constituent parts: 1) agents, 2) commodities, and 3) encounters. These three components frame the remainder of this section.⁵

Agents

Agents are the human and non-human entities that participate in formation and ongoing maintenance of the market. Lukinbeal (2012) has emphasized film commissions—government entities responsible for ensuring that political, legal, and insurance policies are followed for on-location filming within their jurisdiction—as key agents operating between locations and productions. In my own research, I have found that commissioners are only one sliver of the process by which shooting locations are secured for a film a production. Besides commissioners, I have found that agents involved in the location process are many and diverse.

Location scouts and managers are individuals subcontracted by a production

⁵. It should be noted, however, that although these are presented in one order, they do not actually occur one after the other but unfold according to the particularities of individual market transactions.

company because she or he understands the local landscape. They are the mediating agent between the production team (director, writer, production designer, producer) and the property owner. While a location manager does some scouting, their overarching function is to coordinate the scouts, manage the paperwork for locations (film permits, lease agreements), organize the logistics of going on location such as making maps for the crew to get to the location and managing the physical space of filming on shoot days to ensure that no unsanctioned activities occur in the space delimited by the production. *Production designers* are responsible for achieving the overall look of a film and each individual scene, working closely with the director to achieve her or his vision. These individuals are important to understanding the location selection process because they are the person reviewing the location options provided by the scout and often have the final say along with the director. *Property owners* are individuals who own (or manage) the property that is being considered by a production. Hosting a film production may be routine practice for these individuals or it may be a completely novel experience. Property owners are one means of understanding the locations themselves and their “biographies” (Appadurai 1986), which in turn helps us understand a location’s entrance into the commodity state (discussed below). Finally, *location services* are companies that represent property owners who would like to be considered for filming. In addition to human agents, many non-human agents participate in the market, including the locations themselves, labor laws and the thirty-mile zone,⁶ organizations such as the Locations Manager Guild of America, computers and software, the internet and online message

⁶ The thirty-mile zone (TMZ) is area within which labor is paid standard union wages without per diem or mileage costs, as agreed upon by the Teamsters Union, International Alliance of Theatrical Stage Employees (IATSE), and the Screen Actors Guild (SAG). The TMZ centers on the intersection of Beverly Blvd. and La Cienega Blvd.

boards, cameras, cars, and cell phones (Figure 1).

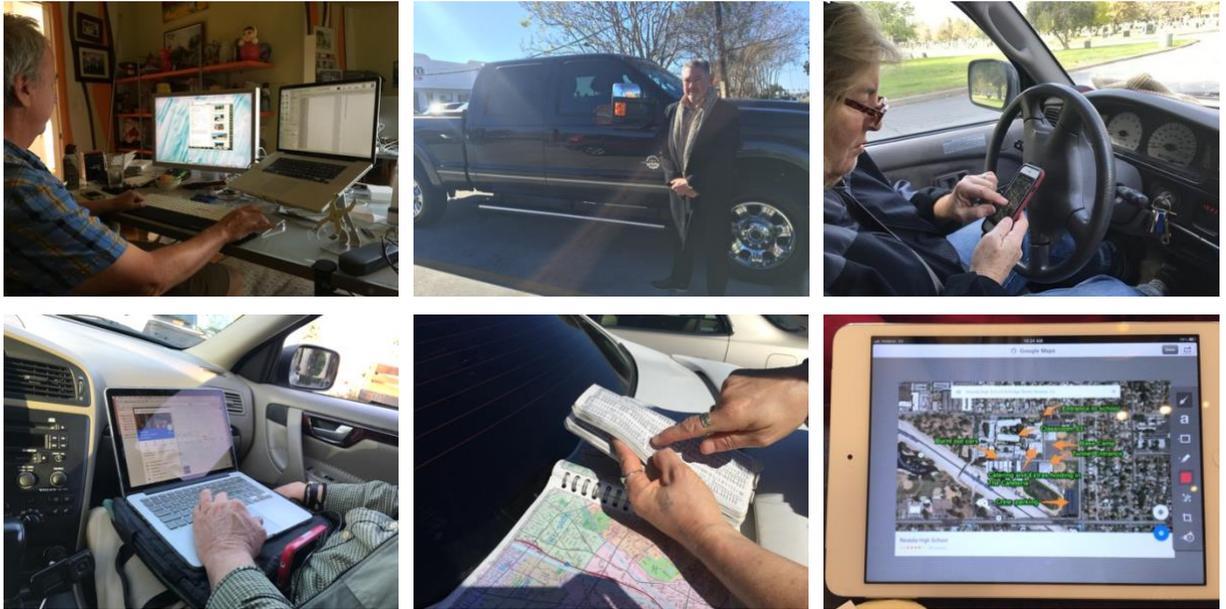


Figure 1. Assemblages of human and non-human location scouting agents.

Crucial to understanding the functioning of these market agencies from an STS approach is that agents are not merely atomized, human individuals endowed with an innate economic behavior (*homo economicus*), but are distributed assemblages of humans and non-humans with different degrees of calculative capabilities. This distributed agency does not simply mean that a human agent uses a tool. Rather, the calculation is performed by the two together, working as one. Because agents are socially embedded, their calculativeness is a product of their position in the network of agents and the material arrangements and systems of knowledge that enable or foreclose certain decisions and actions (Callon 1998, 4-6). Here, “calculation” is understood as an agent’s ability to 1) organize entities or options within a single calculative space (e.g. a grocery store, a spreadsheet), 2) compare, manipulate, and draw relations among those entities,

and 3) produce a new entity, such as a result or a decision (Callon and Law 2005; Callon and Muniesa 2005). Though calculation may involve the application of mathematics, it does not have to. For this reason, Cochoy (2007) has developed the neologism *qualculation* to attend to the qualitative decision-making aspects of framing entities within a space, as well as *calqulation*, or the process of collective calculation.

Commodities

Though anywhere in the world is hypothetically available to filmmakers, different calculative logics such as the needs of the script, the film's budget, the cost of locations, tax incentives, infrastructure, and labor are applied until the geography is whittled down to cities and finally to specific sites (a home, park, street corner, restaurant). Because every film project is different, there can be no single calculation as to how a property within a city is chosen over another and therefore no pre-given understanding of what *specifically* constitutes the commodities of the locations market. According to anthropologist Arjun Appadurai (1986), rather than attempting to discern which things are or are not commodities, we should consider the commodity potential of all things and the situations in which that commodity potential is actualized. By focusing on "things" rather than their exchange, what we see is that a thing is not always a commodity, but passes into and out of "commodity-hood" at different moments in time: "A commodity is not one kind of thing rather than another, but one phase in the life of some things" (Appadurai 1986, 17). The moment at which a thing becomes a commodity, referred to as its *commodity phase*, is when it becomes entangled in a "situation in which its

exchangeability (past, present, or future) for some other thing is its socially relevant feature” (Appadurai 1986, 13). This commodity situation is further broken-down into *commodity candidacy* and the *commodity context*. The commodity candidacy of a thing is the characteristics of the thing by which it can be evaluated and judged according to different regimes of value. The commodity context is the situation that helps transform a thing from commodity candidacy to the commodity state (Appadurai 1986, 15).

The idea of commodity context is useful for illuminating that it is only in particular arrangements of agents that the commodification process is enacted. A private residence that is not for sale or rent would generally not be considered to be in the commodity phase because its most important feature is not its exchangeability but its function in sheltering a family. This changes, however, when the home becomes entangled in a calculative process by a film location scout or production designer. Suddenly, a situation manifests in which the home’s exchangeability has been made socially relevant because a different value regime is brought to bear upon it. It is through this process that members of the film industry produce commodities and a market where there was none before.

Encounters

In order for commodities to be exchanged they must be brought into the presence of someone willing to exchange something for them. As Callon and Muniesa (2005, 1240) note, the proliferation of e-commerce and online trading has brought to the fore countless ways by which supply and demand can be brought together.

This is as true of the film locations market as any other. Though we know little about how locations were chosen at the beginning years of the industry, there is truly a multiplicity of ways that encounters occur today between industry employees and locations. One is “cold-scouting,” which involves location scouts (and/or the production designer or director, depending on the project) going out in their car for a specific project to find and photograph unique landscapes and structures that may work for a given scene in a project or may simply come in handy later. These photographs can come to constitute the scout’s portfolio, which are sometimes made available freely on the internet (without postal addresses) as a means of advertising their skills, services, and the locations that “come with them.” In Los Angeles, many property owners have begun advertising themselves as film locations, making it easy for scouts or other members of a production team to easily identify locations that will be easy to work with.

Advertising manifests as canvas

signs on the sides of buildings, film commissions’ portfolios of public land, and fliers mailed directly to the homes and offices of location professionals by property owners, who obtain these addresses from the California Film Commission (Duffy, personal interview 2017). To save time driving around and knocking on doors, those involved in

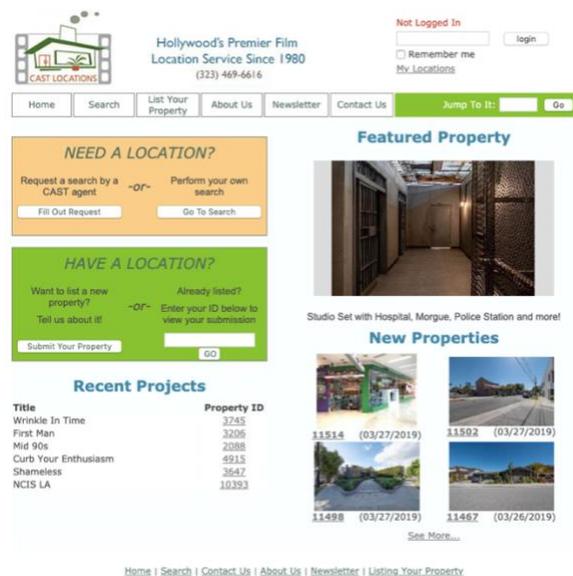


Figure 2. Homepage of Cast Locations, a prominent Los Angeles film location service interviewed for this research.

location decisions may opt to use a private location service such as Cast Locations (Figure 2) or Universal Locations, companies that contract with property owners to receive 20-30 percent of property owners' compensation in return for advertising the property on their website. Subsequent encounters occur during file pulling, when the production designer and/or director reviews the possible locations found by the scout, and when the production designer or art director are designing locations.



Figure 3. One of many signs advertising a film location in the Arts and Warehouse District.

Both initial and subsequent encounters are facilitated by several market devices, including cars that transport scouts to locations, photographs and computer screens that mobilize locations to interested parties, and different forms of advertisement, such as signs and fliers. What is important to see in these encounters is that, while some encounters may be fortuitous, many are not.

The movement and decisions of scouts, for instance, is not entirely random or free, but follows channels or routes that are shaped by social and physical factors such as training, personal experience, existing social relationships, mediated information, transportation access, road conditions, automobile capabilities, as well as gendered, social, and economic access to all of the above. The Millennium Biltmore Hotel is one of the most filmed locations in all of Los Angeles not simply because it is a masterpiece of Beaux Arts architecture, but because it is someone's job to maintain connections with members of the film industry, offering soirees and other

social events at the hotel. In other words, the market for film locations is not characterized by pre-defined spatial coordinates, as in the case of a studio backlot, and there is no set meeting place such as an auction hall or grocery store where encounters occur. And while the notion of a “frontier zone” (Mitchell 2007) into which non-market elements are displaced is useful for thinking about the market and its constitutive outside, this metaphor implies a spatial cohesiveness that may or may not actually exist. Rather, here, marketization is embodied in and actualized by a calculative space constituted by scout-device-agencements, a mobile workforce with a mobilized gaze (digital photographs and communications) that enacts a *marketsite* (Kear 2018), a localized convergence of ideal market conditions. In the remainder of this paper I situate these mobile devices in mobilities literatures and discuss three such devices, the car, the computer, and the camera. Each is integral to facilitating encounter and allowing calculation to occur.

MOTION PICTURES, MOBILE MARKETS

While mobility has long been a phenomenon of note in cinema studies, the last decade has seen a surge of research on the topic of mobility from the social sciences. This line of inquiry, dubbed “the new mobilities paradigm” (Sheller and Urry 2006, 2016; Büscher and Urry 2009; Cresswell 2010; Shaw and Hesse 2011; Sheller 2014) takes as its starting point the fact that our lives are often constituted as much by movement as they are by standing still and yet much of social science research implicitly takes stillness as its starting point. In their programmatic statement on the topic, Sheller and Urry (2006,

208) describe the turn to mobility as a hybrid of transportation studies and social relations research, achieved by “putting social relations into travel and connecting different forms of transport with complex patterns of social experience conducted through communications at-a-distance.” For Sheller and Urry (2006), this paradigm is not meant to be a metatheory, but rather a means of opening up new questions and methodologies. Two ways that this occurs are by challenging dominant theories of 1) sedentarism, and 2) deterritorialization. Sedentarism, which is associated with humanistic understandings of place and “dwelling,” is the understanding that “stability, meaning, and place” are “normal,” while “distance, change, and placelessness” are not (Sheller and Urry 2006, 208). Deterritorialization, Sheller and Urry (2006) write, refers to ideas about the decreasing significance of the nation state as a container of social relations, positing instead a deterritorialized world of nomadic, cross-border flows of people and things. The problems with these approaches, they argue, are that while sedentarism romanticizes notions of fixity and permanence, theories of deterritorialization and nomadism naively celebrate movement as always a liberating force.

Discussions of detachment and deterritorialization go hand in hand with attachment and reterritorialization. Thus, “the new paradigm emphasizes how all mobilities entail specific often highly embedded and immobile infrastructures” (Sheller and Urry 2006, 210). Using Normark’s (2006) example, they point to gas stations, the fixity of which presuppose the mobility of cars to get to them. Often, there can be no mobility without immobility. In order for someone to travel back and forth between home and work, these places must be stationary and locatable relative to the person moving. In order for a spectator to go on a cinematic journey, they must sit still to

look at the screen (Bruno 1997). While cinema spectatorship opens new locations and landscapes to public viewing by obliterating the space between the spectator at home and the mobile landscape on the screen, this is only able to happen by *inverting* the experience of the film's production team, for whom the landscape is *immobile* and who therefore must physically mobilize *themselves*. While this is the case for the entire film crew, it is the initial mobilization of the location scout and the subsequent mobilization of locations through photographs that first enables these landscapes to become part of a calculative process and thus part of a film in the first place.

When I asked location scouts to name their favorite work tools, they often name a few idiosyncratic items—spare batteries, a box cutter—that they won't leave home without. Notably, however, in order to leave the house at all, the scout relies on her or his personal vehicle, which is part of what I have come to call the four C's of scouting: a car, camera, computer, and cell phone. Whether it's an old sedan packed with equipment (Figure 4) or a brand new truck with all the bells and whistles, a scout cannot function without her or his private vehicle. For all scouts, the vehicle is needed out of sheer practicality of physical movement; if they need to find a specific place with a given look, scouts may know



Figure 4. Signs to direct crew to basecamp filling the backseat of scout Stevie Nelson's car; Claudia Eastman's trunk filled with gear used to secure a location during shooting.

exactly the place, or they may drive all over town to find it. For this reason, the branch of mobility studies focusing on automobiles, or rather 'automobility' (Urry 2000), is relevant here.

The 'auto' in automobility highlights the fact that these are personal vehicles designed to mobilize the individual. In many cultures, cars are invested with feelings of individual freedom and "the self-directed life" (Featherstone 2004, 2). For Friedberg (2002, 184), the car is a "viewing machine" (184), a high-speed version of the flaneur operating in much the same way as trains and cinema. In an automobility-themed issue of *Theory, Culture and Society*, authors came together to discuss issues such as automobility and national identity (Edensor 2004), our embodied, emotional, and affective relationships with our automobiles (Sheller 2004), automobility as an autopoietic assemblage (Urry 2004), and automobiles as historical objects of mass consumption (Gartman 2004).

According to Urry (2004), the dominance of automobiles as the ideal mode of transportation has fundamentally reconfigured society. This dominance is due to their being both flexible and coercive. By flexible, Urry means that cars enable a certain amount of "freedom" on behalf of the driver that is not attainable using the fixed paths and structured time tables of public transportation. The driver of a car can go almost anywhere whenever they desire. Urry takes this notion further, arguing that, "Cars extend where people can go to and hence what they are literally able to do. Much 'social life' could not be undertaken without the flexibilities of the car and its 24-hour availability" (Urry 2004, 28). Because cars enable humans to travel greater distances whenever they choose, the geographic organization of social life has responded in kind; what was

formerly close together—home, work, school— are now further and further apart. This spread of the urban environment requires or *coerces* people into becoming drivers, prompting Urry to label it an autopoietic or self-sustaining system. This is the case with the film locations market, which is a particular socio-spatial formation that could not have come into being to fill the needs of the flexibly specialized film industry in the way that it did were it not for the flexibility and mainstream use of personal vehicles at the time that this shift occurred. Thus, while train travel and window shopping normalized mobile perception such that cinema’s mobile experience of the world could be apprehended (Kirby 1988), it is the *automobile* that has opened up the near-infinite number of spaces, places, and landscapes that we see on the screen today. To understand this, we need to understand why personal vehicles are so integral to the scout’s work.

Mobilizing the Scout-Car Agencement

Personal vehicles are used by location scouts in several different ways depending on how far along the production is. First, it is used to find initial locations. This may mean driving haphazardly and hoping to find the right place, checking out a place they have been to before, or stopping in the middle of some other activity. Production designer Jeanine Oppewall (Figure 5) suggests these different capacities when she describes location scouting for the 1950s-era crime-drama *L.A. Confidential* (1997):

[Location scout] John Panzarella and I started together on *L.A. Confidential* more or less around the same time and we spent maybe 10 weeks together—part of every day—in the car, looking. Some days I'd have an idea for a part of the city we should go to and scrounge around, and sometimes he'd have an idea and we'd go to that

part of the city and we'd scrounge around. And some of the places I found by myself, like the Tower Theater. (Oppewall 2017)

Here, we see a glimpse of how much time is spent in the car looking for locations during the production phase and also the free-form use of the car, which needs to be available to visit a part of town whenever a new idea strikes. The need for a freely available vehicle is especially true for television shows, which often shoot new episodes each week. It is also instrumental to productions with small budgets, which can't afford to pay labor for months of leisurely location scouting. For these, finding and securing locations must be accomplished as fast as possible to ensure that the production stays on schedule and budget. As one scout described it, producers want locations served up to them like the menu of a drive-thru restaurant: once the options have been given to them and they've made their choice they expect it "coming out the window" two minutes later (Eastman 2015). To attain this agility, the vehicle must be permanently at the scout's disposal.

Scouts may also consider places they have previously scouted and that are already in their personal portfolio. In these cases, the scout will need to re-examine the location to make sure it hasn't changed drastically and to obtain recent, project-specific photographs of it. Other leads are also common: the scout has seen the spot before, but it is not included in their portfolio; they call a colleague and ask for recommendations for a



Figure 5: Production designer Jeannine Oppewall. Source: *mtholyoke.edu*

specific look; they use online location services provided by the film commission; if they are in Los Angeles, they post a query to the discussion board *LocoList*; or they search the internet. “Google scouting,” or finding locations through internet search, is an increasingly common practice that many scouts, especially those newer to the business, turn to at some point but which most scouts, especially the veterans, are not proud of. When asked whether they often found locations through the internet, one new member of the profession described using Yelp and Google Maps to find images of business interiors. While scout Claudia Eastman used Google to research what homes in Langley, Virginia look like, for example, she complained of the new generation of scouts who are too quick to use internet resources in lieu of cold scouting. In a parody of new posters to LocoList, she joked: “Hi, I’m looking for a house with a door and two windows. Has anyone seen one?”

What’s worse than Google scouting oneself, however, is when the director starts Google scouting, often failing to consider that just because a location looks perfect on the internet does not mean the owner or jurisdiction will be film-friendly, the cost is in their budget, or that the location is well-situated relative to other shoot locations and parking. Location scout Robert Mendel (Figure 6) described just such a “nightmarish” situation:

It's like nine-thirty at night and he [director Gus Van Sant] emails, saying 'I just need a fabulous menswear store. Like this.' And he sends me this [picture]. And then I gotta Google search myself and make sure I haven't missed something cause what if Gus finds the fucking thing we're embarrassed. And I find this menswear store in Pasadena and I drive over at ten-thirty at night and I go, 'This is it!' (March 2017)

In this case, although Mendel found the menswear store on the internet first, he still drove out to the location that night to verify in person that it met the production’s aesthetic and logistical needs.

When a potential location is found, the scout will find the owner or another first-contact person, introduce themselves and their project, and inquire about whether the owner is interested in making the location available for filming. Most scouts agree that it is best practice not to show a location to a director until the scout has confirmed interest by the property owner. In the case of the menswear store, however, Mendel admitted that he presented it to the director immediately after finding it that night because it met most of their needs. The next morning, however, Mendel returned to the store as soon as it opened to secure it. To help ease his way into a conversation with the clerk, Mendel bought a hat (charged to the production) and mentioned the film casually so as not to betray how desperately they needed the owner to agree to enter into the market and at a price point within their budget.



Figure 6. Location scout Robert Mendel at base camp for *Don’t Worry, He Won’t Get Far on Foot* (2018).

Once the scout finds a few potential locations, the car will be necessary to go on “tech scouts,” or the scouting event in which the scout shows the locations in person to

the director, producer, production designer, and craft department (or some combination thereof), feeling out whether the location will or will not work. Third, the car will be used to carry out the more banal functions of the scout, such as meeting with owners to photograph their property, setting prices and signing leases, and to visiting the film permitting office to file for permits once the locations are secured. Finally, if the scout is also a location manager, then the car will take them to and from the set each day and transport all the necessary equipment for that job, such as signs, caution tape, maps, traffic cones, and notices to the public.

While many locations are iconic and regularly used by the film industry, there is a constant pressure on location scouts by producers and directors is to find new, never-before-seen locations to add to the project's production value and to encourage the suspension of audience disbelief. It is perhaps for this reason that scouts pride themselves on their ability to find new places in a city like Los Angeles, which has been inhabited by the film industry for over a century and that presumably would have been filmed from every angle. Finding new locations is accomplished in part by simply putting in the hours behind the wheel searching and in part by choosing to see common locations differently, reimagining what the ordinary landscape could be. Visualizing a landscape as a film location requires creative thinking and the ability to envision locations in ways that may be counter to that location's typical use. This creative envisioning of the landscape is illustrated in the continuation of Oppewall's story on how she found what became the "Tower Theater" (Figures 6 and 7) for a key scene of *L.A. Confidential*, Oppewall explained:

I went downtown one Saturday night for a music event and we were going back toward Hollywood to get something to eat. The freeway was jammed so we got off at an exit we didn't normally get off at. And I was driving down the street and of course I'd done a lot of research and I had known that there was a movie theater chain called The Tower Theaters in Los Angeles. Didn't exist anymore. Gone out of business. And I saw that tower, and I saw the T-intersection and I knew that that would work right away. And I yelled at my friend, 'Stop the car! Stop the car!' And I jumped out on Hollywood Boulevard and went running up the block and stood and identified several houses that could work for the scene and I looked at the Tower and I thought 'Well that's an art deco tower, it's perfect.' It was an old post office. Everyone keeps saying to me, 'Where did you find that theater?' And I say, 'I found the tower and everything else we built.' (Oppewall, March 15, 2017)

It is this ability to visualize locations as a “star” in a role, or standing in for some other type of place, that constitutes, in part, the value regime that activates a location’s commodity phase.



Figure 7: The art deco style post office being transformed into the Tower Theater during production of *L.A. Confidential*. Source: Jeannine Oppewall.



Figure 8: The Tower Theater as seen in *L.A. Confidential*. Source: Jeannine Oppewall.

For other productions and production teams, however, more practical concerns take precedence. This was the case for the project Robert Mendel was working on, Gus Van Sant's "passion project" *Don't Worry, He Won't Get Far on Foot* (2018). The film tells the story of how controversial cartoonist John Callahan (Joaquin Phoenix), who was paralyzed at age 21 following a drunk driving accident, gained sobriety and learned to draw with limited use of his upper body. The film was something that Van Sant

desperately wanted to shoot but didn't have a budget for. Because of this, making the film was highly stressful for the crew, but also meaningful because, as production designer Jahmin Assa put it, working with Van Sant is "unorthodox, in a positive way." I interviewed Mendel and Assa together on location at the home of Donny (Jonah Hill), Callahan's Alcoholics Anonymous sponsor. When asked how the film's locations came together, Mendel and Assa had the following conversation in which they describe how Donny's house was chosen as an easy "break" while wrapping numerous scenes filmed at a hospital in Inglewood:

Assa: We came here, I started showing Gus the pictures of here and I was like, "We need a break. Like, I can't with the money I have. You're better off spent than if I have to go into place early, which means we're not saving enough on the location to find a blank place that I can dress and re-dress and bring in all this expensive props and do the whole thing, while I'm wrapping the whole hospital."

Mendel: With his abbreviated staff, cause it's a low budget movie.

Assa: Yeah, I've got seven full trucks of stuff at the hospital 'cause we played two hospitals there, we played two different offices, the time periods, it's an amazing location, Daniel Freeman's. It's going to be a bummer when it's gone... At one point we had the whole movie planned in Inglewood. He loved the hospital. I took him there and I went on an exercise and said, 'Look, I can find twenty-six out of the sixty-five locations here.'

Mendel: We could emanate from the hospital and find some liquor stores in the neighborhood or some street looks.

Assa: But even before that, at the hospital we were going to do, I could do John's apartment, I could do the church, I could do the Catholic charity's office, Suzanne... We could literally do two-thirds of the movie there. And then we'd come out for this, which isn't so far from Inglewood and we'd go back and it just became like, we'd have to own that place for too long. Started to feel really constrictive.

Mendel: And it wasn't cheap.

Here, the production's limited budget puts the burden of mobility in sharp relief, translating to a limited geographic range, prompting Assa and Mendel to try to find as many locations in the Inglewood area as possible, indeed, two-thirds of the needed locations at one hospital facility alone. In this case, the "perfect" location is one that can

play multiple roles—hospital, church, apartment, office—as well as two time periods, along with other nearby locations like liquor stores and street scenes. In the end, however, while the production might have saved money by not moving the crew and props, renting the location for such a long period of time was cost prohibitive.

For both scouts and designers, the car-driver (Urry 2004) is an essential agent in the material arrangement constituting the film location market. It is by means of the car that the initial encounter between a scout/designer and a location occurs and it is only once that encounter occurs that calculation can begin. The car-driver agencement is in this way very similar to Cochoy's (2008, 32-33) shopping cart, which:

frames a 'picking zone', in the very same way a flashlight in the dark traces a temporary limit between an accessible world to actors and another that does not (yet/anymore) exist for them. In other words, the shopping cart has the ability to frame a 'moving calculative space.'

Instead of a shopping cart being pushed up and down rows of goods in a grocery store, however, it is the car-driver driving up and down roads of offices, homes, parking lots, and fields, framing each as a possible choice and bringing its commodity candidacy into consideration. Put another way, scouts and designers perform a type of "window shopping," where instead of strolling through the arcade or shopping mall's transition space past shop windows contemplating the goods on display, the window and framed view are part of the car, which acts as the transition space separating the consumer from the "shops" and their contents. The scout or designer only need decide which shop to enter and peruse. Through this process, potential locations are identified by the scout and organized into the space of the computer. Here, the mobile shopping experience is

recreated virtually for the benefit of the production team by means of the location's photographs so that collective calculation may occur.

Mobilizing Locations through the Cloud

The mobility of images has been studied by several authors in anthropology and visual studies (Edwards 2003; Edwards, Gosden and Phillips 2006; Edwards and Bhaumik 2009; Pinney 2009) from the approach of Appadurai's (1986) "social lives of things," according to which the movement of images "as material or digital 'things'" from one context to another is recognized (Pink 2009, 6-7). Edwards (2012, 226), for example, discusses the act of "placing," or the ability of material photographs to be arranged differently in space and time to convey different meanings. Family photographs may be arranged in the home in places of honor, while ID photos, carried around with us every day to represent us and our place in the world, have been known to be removed from the ID by loved ones at the time of a person's death, becoming "a precious object that carries a direct physical connection with the deceased" (Edwards 2012, 227). Thinking of photographs as material or digital things that move helps us see that, while the car mobilizes the scout and enables her or him to visit potential locations, the camera mobilizes locations as photographs, allowing the scout to circulate them for consideration by the producer, production designer, director, or other relevant persons. Here, the idea of "motion pictures" is not that the contents of the photos are moving (though sometimes location videos are taken instead of photographs), but that pictures taken by scouts as material artifacts—or what della Dora (2009) has called "traveling landscape objects"—

literally move from one geographic coordinate to another via multiple internet-connected technical devices such as cameras, camera-phones, and computers. Currently, the computer is where location photographs are saved, forming the scout's personal portfolio. For many, these photographs are uploaded to a personal website such as Locations.org, SmugMug, or ImageEvent, where they are made available either to the public or to select, password-holding individuals. Since the advent of digital cameras, nearly all productions will require that the photos be transmitted to the production team over the internet via either the scout's personal website or the website or cloud service determined by the production. This makes a digital camera and internet enabled computer, like the personal vehicle, a non-negotiable component of the job. This was not always the case, of course, and only became widespread as recently as 10 years ago.

One of the first websites created especially for location scouts was Locations.org. The creator of this site, location scout Marino Pascal, explains that he developed the site to cut down on time spent in his car in Los Angeles traffic. In an interview with the Location Managers Guild International, Pascal explains:

I live on the East Side and the production offices are always on the West Side. I spent a long time in the car commuting to 9:00 am Show & Tells. I hated it. So I thought, if I could just show the pictures through the internet, maybe I could stay in bed longer. The directors loved it because they could stay in bed too. It also eliminated the need to be done by 6pm to FedEx location folders to the East Coast or wherever the client happened to be. (Marino Pascal and Locations.org, para. 7)

Here, Pascal refers to location folders that had to be priority shipped out by 6PM. Prior to digital cameras and high-speed internet, these folders, overnighted to the production office or carried into the office with the scout, were the standard means of communicating and displaying the locations the scout had selected. These were manila

folders (Figure 9) crafted together into several taped pages of other manila folders, each page covered with 5-by-7 location photographs. To achieve a panorama style photograph, three photographs would be taped together in such a way that two photographs could be folded inward and outward to either fit neatly within the folder when folded, or to display the panorama when unfolded. The transition to digital photography and networked technologies greatly reduced time spent commuting to “Show and Tells,” but it also changed how the show and tell process works.



Figure 9: A manila folder booklet made by Claudia Eastman. Photographs of the location “Newhall Land” are taped to several folders to guide the viewer through the different aspects of the location. This folder was the last one that Eastman kept from her collection after switching to digital.

Whereas the production team would need to wait a day or more to see what the scout had found, they can now see options almost instantly. The degree to which this immediate turnaround has come to be the industry’s expectation was exhibited during scouting of the pilot for the Disney made-for-TV movie, *Unit Zero*. In this case, the location manager asked the scout, Claudia Eastman, to upload her photos to the project’s shared cloud space as soon as possible. When Claudia tried to do this, however, it turned out that the hosting site, SmugMug, was down. Not making the pictures immediately

available to the production team to consider would have slowed down the schedule so Claudia solved the situation by uploading them to her personal online portfolio. She directed the team to this site, reducing what could have become a breakdown of the day's workflow into a minor irritancy. While many scouts put their photos on their personal website and direct the production team there, it is not unheard of for location images to be shared informally via email or text message. Tools designed especially for sharing photos have also appeared, enabling cloud collaboration (Graham 2009) from disparate locations. One location scout describes the benefits of such a system (PIX) thus:

Instead of putting (images) up on my website, I put them in the PIX system, and then we can have a conversation with me in Wyoming, the other location scout in Montana and the entire art department in Louisiana... The production designer could point with a red arrow, saying, 'I'd like more of this and less of that.' It's really like we're all in the same room. (Lori Balton, quoted in Longwell 2012, para. 12)

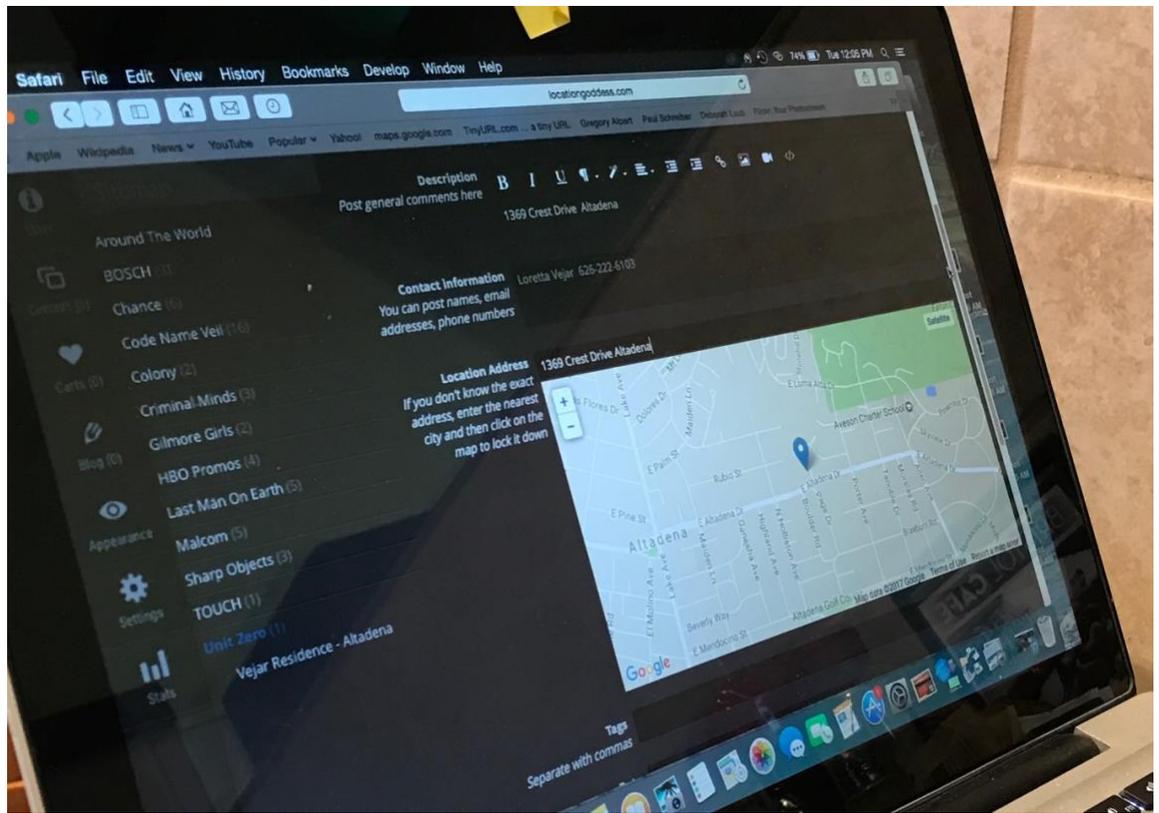


Figure 10: Over lunch, Claudia Eastman uploads the morning’s location finds to her personal website, tagging details such as address, owner name and phone number, and the location, including a map.

While different scouts and managers prefer different websites for this service, each with their own advantages and disadvantages, they are more or less organized in the same format. Once the viewer is logged in, they are presented with a set of folders pertaining to the project. Once that folder is “entered,” more folders are presented, possibly one for each scripted location, and within each an option provided by the scout. Depending on the website, these folders may or may not have a cover photo identifying the most significant feature of the location, the front exterior of a hero house, for example (Figure 11). Once more we are presented with a type of transition space in which the viewer does

not stroll, but rather *scrolls* past an array of framed visuals hoping to entice the viewer “in” and become a consumer. Once inside this commodity context, the goods on display are not merely objects, but rather are an embodied, mobile, and visual experience. To better understand this, it is useful to first consider recent theories in visual culture studies about the nature and mobility of photographs.



Figure 11. A transitional space on the *Unit Zero* SmugMug.com website showing the “window displays” of possible hero houses.

The Embodied and Mobile Production of Location Photographs

For most of the history of photography, the ontology of the photographic image has been characterized by two positions. The first, realism, posits that photographs are the only art form able to produce an objective recording of the world. This position has been most famously argued by Andre Bazin, who described photography as the first recording technology “unhindered by the intervention of man,” and by Roland Barthes, who described the photograph’s ability to indisputably attest to the existence of a photographed object as the “this was” of the photograph. The second position is representationalism, which takes the opposite stance. From this perspective, photographs are not mere objective reproductions of what was in front of the camera at the moment that a picture was taken, but rather are artifacts that represent deeper social and cultural values of the person taking the photograph, and hence of the society or culture from whence that person comes. “The problem with these two positions,” Larsen (2008, 144) writes, “is that they purify technology by privileging either the technical or the social character of technology.” This distinction, Larsen continues, finds its antidote in actor-network theory and non-representational geography. Whereas actor-network theory encourages us to consider the hybrid formed between technology and the “social” (cf. Latour), non-representational geography turns our attention to the “bodily doings and technical enactments rather than representations and meanings” (Larsen 2008, 146). For Larsen, whose purpose is to reconceptualize the way we study tourism photography, a hybrid and non-representational approach to photography shifts attention from what is photographed and its meaning to the acts of shooting and consuming photographs as

performed enactments. This in turn allows him to study both the practice of tourism photography as well as the way that advances in networked digital cameras and camera phones afford a heightened mobility of images and thus new social relations surrounding them.

Larsen's (2008) idea of photography as a performed enactment dovetails with Sarah Pink's work on "images in movement." According to Pink (2009), images are "in movement" not simply because they are material objects in circulation, but because they are fundamentally imbricated in the world in which they are produced and consumed, which is itself always in movement. To make this claim Pink draws on the work of Tim Ingold and Doreen Massey, both of whom are key figures in geography's (and the social sciences more generally) performative turn. According to Ingold, movement is fundamental to the ways that humans perceive their environment, while Massey argues that place is an event that is always in a Deleuzoguattarian state of becoming, produced by a coming together of material and immaterial things. Following from this, Pink argues that the environment around us is always in movement because it is always in a process of becoming, or "moving forward." The implication of this is that:

Images are inevitably produced and consumed through the event of place and that they are produced, viewed and become meaningful in movement... This means that cameras, photographers, video makers, subjects, collaborators, and elements of the environment that are bound up together in this process – these are all implicated in the constitution of the image and the place. (Pink 2009, 8)

To illustrate her point, Pink uses an example from Google Street View, for which images are acquired by a car with a 360-degree camera mounted on the roof. The camera stops at set intervals to take a picture that, when later uploaded to the internet, are stitched together to present the experience of seamless movement for the consumer. This visual

experience is “the outcome of a moving digital camera on its way through an environment, that represents a route through, and indeed that becomes a component of, an environment... [The images] can, moreover, be consumed through the *experience of movement* across the screen” (Pink 2009, 11). Thus, even still images may be produced and consumed in movement and thus embody a mobile experience.

This notion of images in movement helps us understand the experiential dimension of potential locations that scouts must convey in show-and-tell. During this time, the location scout attempts to “sell” the production team on the locations that he or she has chosen. This involves the scout “walking”—or more precisely, describing through movement—the director or production designer through each location via the photographs collected for each individual location. The verbal descriptions of the locations include the pros and cons for the purpose of the project, some of which can be easily gleaned from the photographs, while others not. This might include, for instance, that there is a large parking lot nearby where basecamp can be set up, that although a building looks old it has recently had an electric update and will be able to accommodate contemporary equipment, that it is very close to another location that the director really likes, or that the location owner is very familiar with the site being used for filming, etc. These descriptions are, in short, the location’s commodity candidacy, or features that make its exchangeability socially relevant and assessing a location’s merits on these criteria makes up, in part, the scout’s regime of value.

Perhaps the most important element of a film location’s commodity candidacy is the degree to which the location matches up with the script, or rather, how the scout or designer interprets the script, a line of thought that opens onto the value regimes that

scouts and designers bring to a potential location. When asked how you know whether a location is the “right” one, Jeannine Oppewall answered:

It's a whole lot of unspoken stuff that you take into account. One is what's the action in the scene? Does it serve the action in the scene? Two, what does the place look like? Three, what kind of *poetry* does it have in it? Does it *ask* you to be in your movie? It's a shaman kind of thing.

These questions are tricky and reveal that there is no way to objectively identify a location based strictly on a description because there can never be an objective, one-to-one translation of written descriptions into its exact visual counterpart (Mitchell 1994). Rather, this calculation, and thus the commodity candidacy of a location, depends on the imagination of the scout or designer, the feeling they get from a place, and the mental negotiation that they undertake to decide whether what they are looking at suitably matches up with how they understood the script, plus any input given to them by the designer or director.

While the roles of scouts and designers often overlap, there remains differences in the value regimes each brings to a location and the calculative process. Production designers, who look for a location’s “poetry,” are a film’s affective engineers (cf. Thrift 2008). Designers see locations not only as a translation of the script onto the landscape, but also as a spatial experience, envisioning how the location can be transformed to provide an experiential texture that may be implied or non-existent in the script.

For example, when making the movie *Her* (2013), production designer K.K. Barret (Figure 12) noticed the script’s lack of concise place descriptions other than that it



Figure 12: Jeannine Oppewall and K.K. Barrett.

Source: Gettyimages.

was set in Los Angeles fifteen years in the future. An obvious visual style for a film set in L.A. about a man who falls in love with his computer operating system, Barrett thought, would be dystopian. Barrett decided that instead, he wanted to create an environment that felt both “familiar and unfamiliar,” soft but also isolating, and that didn’t distract from the focus on the main character’s personal evolution and bubble of space. To achieve this, the movie was shot partially in Los Angeles, partially in Shanghai, and stitched together after shooting to appear as one city. The curvilinear buildings of Shanghai were used primarily for scenes shot outside at street level where these buildings are highly visible in the background; scenes that took place indoors were shot at skyscraper-level, presenting the skyline of Los Angeles and avoiding obvious street-level landscapes that Angelenos

would instantly recognize. The creation of this composite universe was so complete for Barrett that he commented, “You almost start to believe it yourself.”



Figure 13: Scenes from the film *Her* (2013) showing the Los Angeles and Shanghai skylines.

Compared with production designers, the calculative logic of a scout tends to be more literal. Through the task of translating textual descriptions into material landscapes, the scout acts as peripatetic geocoder, a tool used to transform relative locations and place descriptions into absolute locations as coordinates on a map. It is worth noting here, though, the meaning of the word “scout,” which is a person who goes to a location in advance of the main party to collect information about that area and bring it back. Thus, unlike a piece of software or a drone, the production team relies not just on literal, descriptive facts about the location but also on the scout’s physical experience of being in that space, of their movement, captured by the scout’s itinerant path around the property, their photographs taken in movement, and the subsequent way the photos are organized. As the description of the manila folders above suggests, the arrangement of these materials is not random, but rather is carefully controlled to tell a particular story. “Selling” the location to the production team is not simply about how the location looks but about communicating the dimensions of the space and the feeling of moving through it.

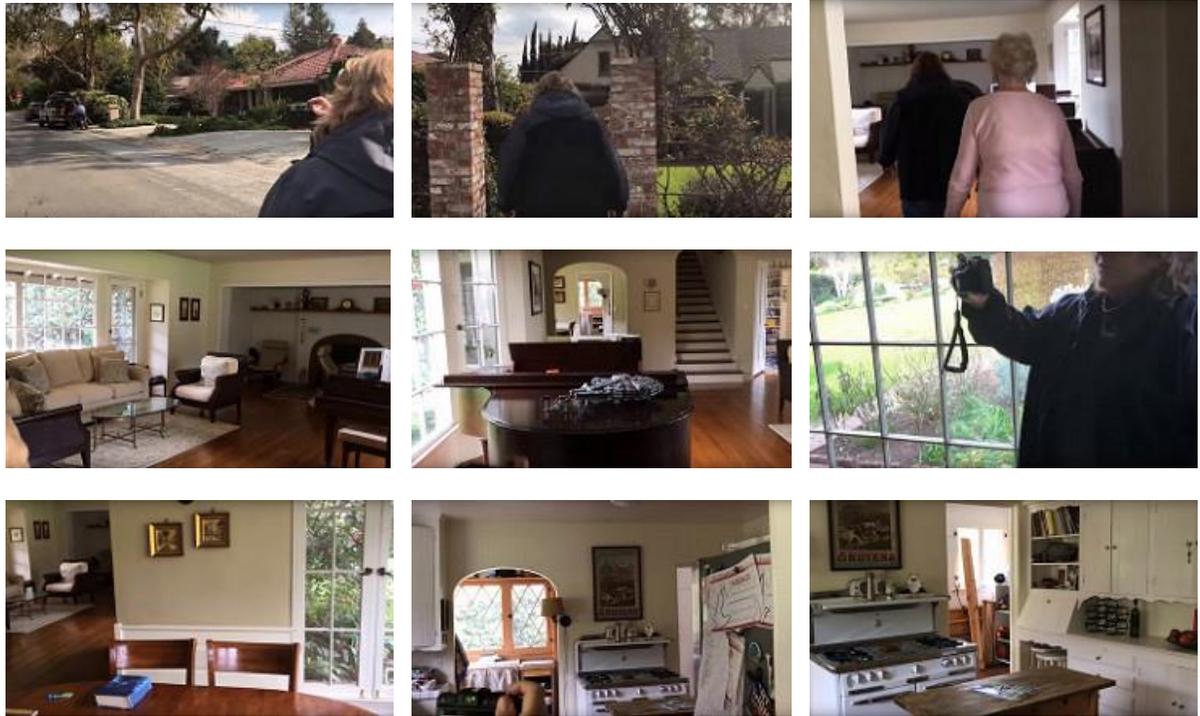


Figure 14: Location scout Claudia Eastman photographs a house, moving through each room taking shot and reverse shot.

This mobile experience is achieved by the way the photos are organized or framed by the scout for consumption (encounter) by the director and production designer. Photos begin with a distance shot of the location and a reverse shot, as if you were looking at a location, a house for example, and then you turn around to see what would be caught by the camera were the angle to change to capture action. Following this, the camera moves to the front door, capturing the entrance before stepping into the home and taking a picture of the foyer. Next comes the living room, followed by a reverse shot. Gradually, the home is visually catalogued following the itinerate path of a scout-flaneur. The visual embodiment of mobility suggests that the scouts' photographs of potential film locations are not merely snapshots in time of isolated locations but are part of their larger, ongoing, embodied, calculative journey. The scouts' photographs, produced and consumed in

movement, simultaneously contribute to the production of the mobile, calculative space in which they are produced. Along with the car-scout, the photographs enact the commodity context and thus produce the space of the film locations market.

CONCLUSION

The effects of the Paramount Decision forced film studios to divest themselves of much of their holdings and sell off large portions of their backlots, necessitating a shift to location production and creating a new environment in which each process of the filmmaking endeavor, including how locations were found, was governed by market transactions. Although we know much about the industry's turn to flexible specialization and sub-contracted labor, we know little about the details of how the film locations market grew from this point on.

The fine-grained focus that an STS approach to markets provides—including attention to market microstructures and the plethora of agents involved—allows us to pull apart this otherwise abstract market space and discuss the nuance of its spatiality and the film industry's footprint on the landscape outside of backlots. Without attending to the market's agents (such as scouts, production designers, cameras, and cars) their practices (driving, walking, photographing, uploading), and their calculations (assessing aesthetics, proximity, dimension, etc.), it would be difficult to discuss the film location market, its geography, how it affects people who are or will become a part of it, or how it shapes the geographies we see on screen. Furthermore, unpacking the blackbox of the film location

market opens new entry points to the study of media content and its impact on our relationship to the world.

Through the scout-car assemblage, the frontier region (Mitchell 2007) between market and non-market is mobilized, embodied in the movement and practices of the scout. While the locations exist regardless of whether the scout demarcates them as potential film sites or not, it is only through this demarcation by the scout that the encounter between buyer and seller and the commodity context is initiated.

The commodity context of a film location is initialized, in part, by bringing the scouts' and production designers' different value regimes to bear upon a property. One value regime that I've identified here is innate to the individual scout, who acts as a peripatetic geocoder. This involves a negotiation between the script and how this is interpreted visually by the scout and then mapped onto the landscape. From a practical standpoint, locations need to have certain features such as parking, proximity to other locations, flexible property owners, and a film friendly neighborhood. These factors are the scout's value regime, while the degree to which a location matches up to these factors constitutes its commodity candidacy. Once the descriptive locations are identified on the ground, they can be placed together in a calculative space, an online portfolio or cloud space to allow for logistical assessment to occur.

The second regime of value is, in Jeannine Oppewall's words, a "shaman sort of thing." It includes factors not easily described in words, captured instead by the scout's mobile experience of the locations themselves and their photographs taken in movement. These photographs are then arranged so as to facilitate the comprehension of this

movement by the production designer and production team during show and tell. The production and consumption of these images in movement is necessary for the production team, especially the production designer and director, so as to imagine the possibilities of what the space could become as well as the physical inhabitation of these spaces by the film crew at the time of shooting and the ability of the movie to move within the limits of the space. Thus, like cinema itself, which “was developed as an apparatus that combined the mobile with the virtual gaze and turned it into a commodifiable experience” (Friedberg 1993, 110), the mobile and virtual gaze of the scouts enacts a similar commodifiable experience, one that has the potential to transform a given space into a film location.

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