

**Zen in the Art of Travel Behavior:
Using Visual Ethnography to Understand the Transit Experience**

20 December 2010

Final Report
to the
University of California Transportation Center

by

Camille N.Y. Fink (cnyfink@yahoo.com)
Brian D. Taylor (btaylor@ucla.edu)
UCLA Institute of Transportation Studies
3250 Public Affairs Building
Los Angeles, CA 90095-1656
(310) 903-3228
www.its.ucla.edu

Abstract

Much transportation research has sought to understand the factors influencing people's decisions to travel via one mode or another. Bodies of literature, overwhelmingly quantitative, exist about mode choice and the demographics of travel behavior. Most of this research has focused on the *who*, *what*, *when*, and *why* aspects of travel. Little research has sought to explain *how* people travel, particularly the experiential aspects of travel. This project seeks to fill this gap in the transportation literature by examining travel behavior and decision-making using the firsthand visual accounts of transit users in Los Angeles.

Participants captured their own journeys on transit through photography, in an attempt to gather real-time details about their travel experiences. Analysis of participants' photos and accompanying travelogues show that riders define the temporal and spatial boundaries of their trips in different ways. These visual "texts" also provide an inventory of the most salient physical and social components of transit environments from the perspective of actual system users. For practitioners, these findings suggest that elements of the transit journey that take place outside of vehicles – travel to and from stations and stops and wait times at these points – are significant to transit riders, in both positive and negative ways. In addition, the social aspects of travel and people's interactions with each other as well as the environment around them are important in shaping the ways in which travelers perceive and value the transit experience. This social aspect of transit travel is an important, albeit understudied, component of transit use.

This report contains but a small sampling of the hundreds of photographs and scores of captions uploaded by the study participants. Readers interested in a more comprehensive selection of the photo diaries created for this study can view additional photos at the project's website: <http://www.its.ucla.edu/uclatransitphotos>.

Acknowledgements

This project would not have been possible without the generous support of many. First, thanks go to the University of California Transportation Center for funding this work. Thanks go as well to UCLA student Grace Park, UCLA student Shahin Dastur, and UCLA Lewis Center staff researcher Norman Wong for their assistance in setting up the websites to conduct this research and present the findings (<http://www.its.ucla.edu/uclatransitphotos>). And finally, special thanks go to the dozens of transit users who went to the time and effort to photograph and annotate their experiences in using public transit in Los Angeles. While all of these individuals and organizations helped to bring this project about, the authors alone are responsible for any errors or omissions in this work.

Table of Contents

Introduction	1
Travel Behavior Models and Factors Influencing Transit Use	2
Qualitative Methods and Travel Behavior	5
Using Qualitative Methods: What Do These Data Tell Us?	5
Sociological Approaches to Transportation Research	8
The Transit Experience and Mobility Cultures	12
Visual Ethnography: A New Travel Behavior Research Method	16
UCLA Transit Photo Project: Understanding Transit from the Perspective of Riders	19
Research Methodology	19
Findings	23
<i>Defining the Transit Trip</i>	24
<i>Physical Elements of the Transit Journey</i>	28
<i>Transit System Legibility and Navigation</i>	33
<i>Social Aspects of the Transit Journey</i>	37
Research and Policy Implications	42
Conclusion	44
References	47
Appendix A: UCLA Transit Photo Project Website Schematic	53

Introduction

Travel behavior research suggests that traveler perceptions play a significant role in determining how people move about. A range of factors – including knowledge of opportunities, concern with reliability, and fear of crime – affect people’s travel behavior and, in particular, their use of public transit. While a very large body of literature has examined how factors such as income, education, sex, ethnicity, and age influence travel choices, surprisingly little has examined how individual perceptions of travel modes are shaped by the travel experience. Understanding the impact of experience on the perception of transportation modes and the ways in which this influences mode choice and travel patterns necessitates an individual and nuanced mode of data collection and analysis. An example of this approach explored here is to allow travelers to define what they believe to be the salient experiential aspects of travel on that most decidedly public mode, transit.

This report summarizes our research employing ethnographic methods to examine the experience of transit travel. Ethnography is a method well-suited to capture these experiential elements of travel from the perspective of transit users, but has rarely been employed in transportation planning research. While ethnographic approaches vary, ethnography in the broadest and most general sense involves the collection of observational data during extended participation in a social setting. Visual ethnography is a particular approach that uses visual data sources (including photographs, video, and film) to explore social dynamics and phenomena. Accordingly, the first part of this paper reviews conventional travel behavior research, travelers’ perceptions of different modes and the relationship to transit use, and the less common use of qualitative methods in

travel behavior research. The second part presents findings from our research using visual ethnography to gather information about riders' experiences on transit in Los Angeles. Our findings suggest that travel behavior research could benefit from alternatives to conventional data on transit use that address the transit experience specifically, and a broader perspective on mobility more generally – one that considers both the literal movement of people through space (and the measure of this movement) and more conceptual understandings of the relationship between individuals and travel.

Travel Behavior Models and Factors Influencing Transit Use

Travel behavior research has generally been of two sorts – descriptive and prescriptive. The descriptive studies, of which there are many, are typically authored by academics who examine travel patterns with respect to socio-economic characteristics and attempt to analyze and speculate on the underlying causes of observed variations in travel (see for example, Taylor and Mauch 2000; Pucher and Renne 2003; Rosenbloom 2005; Crane 2007; Pucher et al. 2007; Blumenberg 2009; Blumenberg and Evans 2010). A second, and even larger, body of work uses household travel data, and more recently household activity data, to specify travel demand models used in practice and predict travel behavior given the characteristics of households and firms, patterns of development, and transportation system characteristics. The sophistication of these models has been increasing dramatically in recent years to enable planners to better understand and predict the travel effects of changing (1) land use and development, (2) household and firm structure and incomes, and (3) pricing of fuel, parking, and road use, and so on in auto, transit, biking, and foot travel (see for example, Meyer and Miller 2001; Papacostas and Prevedouros 2001; Johnston 2004; Transportation Research Board 2007).

Collectively, this research has tended to focus on the *who, what, when, and why* aspects of travel, but not on the *how* of travel. Previous analyses of travel behavior, for example, have found that concern for personal safety (Loukaitou-Siders 1999; Loukaitou-Sideris 2006; Loukaitou-Sideris 2009) and destination arrival time reliability (Konig and Axhausen 2002; Furth and Muller 2007; Csikos and Currie 2008; Casello et al. 2009; Iseki and Taylor 2009) are important in determining travel choices, but the experiential aspects of these fears and uncertainties have been relatively underexplored. Do fears of crime victimization square with observed risk? How does better lighting or the presence of security personnel affect crime anxiety among different kinds of transit users? Does real-time bus/train arrival information affect users' travel time uncertainty concerns? Such questions can be difficult to examine using conventional "revealed preference" travel data.

A body of literature has explored the various factors thought to influence transit use specifically, and in general this research examines ridership levels as a phenomenon influenced by aggregate measurable and quantifiable variables. Researchers have identified a number of different factors – external and internal – believed to be related to transit ridership and which have been used in both descriptive and causal studies. External factors are those not directly connected to the transit system itself or specific management and operations policies. These variables often act as proxy measures for the large number of individual factors thought to affect ridership and include socioeconomic, spatial, and public finance influences such as employment levels, vehicle ownership rates, fuel prices, and parking availability (Gómez-Ibáñez 1996; Kain and Liu 1996; Dueker et al. 1998; Kuby et al. 2004). Internal factors are those that are largely controlled by transit agency officials, including fare changes, service frequency and quality, network density, and station and

stop design (Kain and Liu 1995; Kohn 2000; Syed and Khan 2000; Iseki and Taylor 2008; Taylor et al. 2009a; Taylor et al. 2009b). A review of the ridership literature shows that factors outside of the control of transit agencies – specifically auto use, economic, and spatial factors – affect transit ridership the most; of the internal factors, transit service quantity is more important than pricing (Taylor and Fink 2009).

A related area of inquiry considers people's perceptions of transit and travel more generally and the ways in which this influences their mode choices and their responses to particular conditions and events. Various studies have used quantitative survey methods to explore these relationships. Johansson, Heldt et al. (2006), for example, find that a series of non-economic factors affected the modal choices of a group of Swedish respondents, including flexibility, comfort, and environmental attitudes. A German study of personal norms and transit use also shows a relationship between people's attitudes about the environmental impacts of auto use, broader social norms, and their decisions to use transit (Bamberg et al. 2007). In the Netherlands, a study found that psychological prompts related to the environmental and financial impacts of driving – through information and individual feedback – do not result in modal shifts from automobile to transit; the researchers suggest that people's attitudes about the individual benefits of auto travel, such as convenience, outweigh the collective disadvantages of the mode (Tertoolen et al. 1998). A qualitative study using semi-structured interviews to assess individuals' attitudes toward transit and cars finds that perceptions about public transit, particularly service levels and reliability, do influence people's modal preferences (Beirao and Cabral 2007). Guiver (2007) uses focus group data to examine the discourse around different modes and finds distinct differences between the language participants used to discuss buses as compared

to cars as well as their point of relativity as users or non-users. This research indicates that existing perceptions of travel modes strongly influence people's travel behavior decisions. Therefore, strategies to address and alter these perceptions might be central to influencing shifts in modal use.

The body of work examining travel behavior, particularly as it relates to transit use and people's modal attitudes and perceptions, tends to be methodologically varied. Much of the work draws from quantitative methods and data sources, including much of the research on perceptions – although researchers have used focus groups and interviews to understand more qualitatively the ways in which people perceive their modal choices and make decisions about the ways in which they travel. These findings do to a certain extent explore the decision-making processes of people as they consider the range of options available to them and the costs and benefits associated with various modes. While, for example, Guiver's (2007) study documents people's descriptions of the physical experience of travel on bus versus car and their perceptions on and off these modes, little research has sought to understand the travel experience from the perspective of users in real-time – the social, sensory, and emotional things people encounter as they travel and the impact these have both short-term and long-term on their travel behavior decisions.

Qualitative Methods and Travel Behavior

Using Qualitative Methods: What Do These Data Tell Us?

Much transportation research has sought to understand the factors influencing people's decisions to travel via one mode or another. A body of literature, overwhelmingly quantitative, exists about mode choice and the demographics of travel behavior. This research has described in detail *who* uses which modes of transportation, *what* they are

doing (e.g., work trips versus non-work trips), and *when* they are making trips. Research on the *why* aspects of travel behavior has tended to focus on predicting why people choose one travel mode over another, including service factors such as speed, comfort, cost, reliability, and accessibility; these are often quantifiable characteristics that can be used in discrete choice analyses. Little research has sought to explain *how* people travel, particularly the characteristics of travel that are most important from the perspective of travelers themselves.

A few transportation scholars have discussed the merits of qualitative transportation research and the ways in which it both complements and illuminates quantitative findings. Qualitative methods hold great promise in exploring questions of why people choose particular modes, how travel affects their lives, and, in turn, how their lives affect travel decisions. Roe (2000) argues that the dearth of qualitative transportation work reflects a field still strongly grounded in engineering and quantitative thought. Qualitative research in transportation can provide completely new and critical perspectives – such as feminist interpretations of transportation – and these methods could help us “to elicit and reveal subjectively experienced time-space constraints in everyday urban travel, to delineate those experiences and to learn more about how people construct and live their travel routines in different structural settings” (Roe 2000:106).

For example, empirical studies examining women’s experiences in transit environments show that fear can strongly influence their travel patterns. Women are more likely than men to choose particular routes, modes, travel times, and transit environments – or avoid transit altogether – because of perceived safety issues (Atkins 1989; Stanko 1990; Werkele and Whitzman 1995; Ross 2000; Loukaitou-Sideris 2009). While

quantitative data can gauge the spatial and temporal travel behavior of women in the aggregate through measures such as modes used, miles traveled, and trip rates and purposes, quantitative methods and data often fail to reveal the complex causality and decision-making influencing such measurable outcomes. Qualitative data can prove very useful in understanding the impact of fear on the travel behavior of women by providing insight into the ways in which women understand real and perceived threats and vulnerability, the options available to them, and the changes and concessions they make to mitigate the dangers they face. This sort of rich, detailed information is much more difficult, if not impossible, to capture through quantitative methods.

The use of qualitative methods and data in transportation research has begun to gradually become more commonplace in recent years, and has proven a useful tool in probing into the processes behind travel decision-making and changes in behavior (Baslington 2008; Hannes et al. 2008; Papinski et al. 2009; Rocci 2009; Kusumastuti et al. 2010). The qualitative data methods most commonly used are surveys, in-depth interviews, and travel diaries – all of which are employed in quantitative travel data gathering as well. In contrast, ethnography, in which observational data are collected through extended participation in a social setting, has been less widely used in transportation research as a qualitative data collection method. A few studies use analytic frameworks drawn from “critical ethnography” to analyze survey and interview data (Azonobi and Sen 2003; Azonobi and Sen 2004; Reed and Sen 2004), while others have collected ethnographic data through participant observation (Valenzuela et al. 2005; Esbjornsson et al. 2007; Heffner et al. 2007; Symes 2007; Voilmy et al. 2008; Mikkelsen and Christensen 2009). However, the number of transportation studies using ethnography

remains small. This is likely due to several factors, including (1) the relatively large amount of federal, state, and regional quantitative data available to transportation scholars from a wide variety of sources, (2) transportation researchers' lack of familiarity with qualitative research methods generally, (3) an undervaluing of ethnographic data and the information and insight it offers among the many transportation scholars with engineering and economics backgrounds, and (4) the labor-intensive, time-consuming, and expensive nature of ethnographic fieldwork.

[Sociological Approaches to Transportation Research](#)

Yago's (1983) early review of the sociology of transportation literature shows that much of the work at that point was still focused on aggregate, large-scale understandings of the effects of transportation on societal dynamics. Hence, the bulk of the research he discusses looks at the relationships between transportation systems and urban development, economics, and politics; industrial organization; land use; and distributional impacts. While he does discuss transportation and social interaction (the impact of travel time on familial relations, travel-related stress, and travel and behavioral science), he acknowledges that much work at the time remained to be done in the realm of the psychosocial impacts of travel and transportation. In a collection on the subject of transport sociology, de Boer describes the subfield as one where "sociology comes face to face with daily life, with the fact that individuals and groups live in space and time, and not exclusively in social structures" (1986:7). The authors examine the broad social and environmental impacts of transportation systems, including infrastructure projects such as freeways, but also consider the relationship between people and their physical surroundings in a series of essays about street design and car traffic (de Boer 1986). At

that point in time, de Boer did not believe transportation sociology was developed enough to support transportation planning, which he thought “might very well be the most important key to urban and regional planning” (de Boer 1986:7). However, he did see the potential for transportation sociology to contribute to transportation policy and design measures and practices that addressed the political, social, and daily needs of urban residents.

While Yago (1983) pointed to needed research on the relationship between transportation systems and psychological factors such as stress, isolation, and socialization, several studies have in fact used sociological methods to examine travel generally as well as in transit spaces more specifically. Davis, Seibert et al. (1966) and Davis and Levine (1967) conducted early studies of seating patterns and social interactions on buses. The authors acknowledge that buses are sites of social activity, and factors such as social status and identity (particularly related to race) are relevant to the types of behaviors observed. However, this work reflects the burgeoning study of both public space and the sociopolitical context of the 1960s. One of the assumptions underlying the analyses of that era is that interactions in bus space are characterized by the uniform behavior of riders in a setting where little communication or social structure exist (Davis and Levine 1967). Buses were likely less stigmatized spaces at that time because a broader cross section of the population used public transit in urban areas. At the same time, buses may have also been more socially regulated spaces with stricter rules and expectations related to race, class, and gender.

In another relatively early study of buses, Nash (1975) created and described a typology of bus activities and participants, what collectively he terms “a community on

wheels.” He discusses the procedure of bus riding and the challenges that arise, including waiting for the bus, hailing the bus, and claiming a seat as well as interactions between different people on the bus (newcomer riders, regular riders, new drivers, old drivers). Levine et al. (1973) examined behavior on subways with a focus on the sociologist Erving Goffman’s idea of “civil inattention.” They also consider the ways in which people violate the expected rules of behavior and hence the ability of riders to maintain civil inattention. Maines (1977) conducted a social psychology study of the New York subway by recording seating placement, body position, and touching on crowded subway cars and identifying patterns related to sex and race.

More recent studies have used participant observation to understand the “travel performances” of high school students commuting to school on trains in Sydney, Australia, both the ways in which these teenagers conform to rules as well as transgress and challenge those boundaries (Symes 2007); to reveal performativity, the “making” of a trip by passengers, on seemingly mundane journeys on buses and trains in Britain (Jain 2009); and to explore various facets of the train journey for passengers, enthusiasts, and railway workers (Letherby and Reynolds 2005). Another examined seating patterns and the other ways people position themselves in bus space to maintain anonymity, civil inattention, and social organization (Delannay 2001). Other studies of the sociology of public space have looked at transit spaces outside of vehicles, such as an urban bus depot (Henderson 1975), and transit drivers’ experiences, roles, and relationships to passengers (Slosar 1973; Heath et al. 1999). An early study of airplane passengers identified them as an “encapsulated group” in situations that in some ways resemble the characteristics of total institutions as described by Goffman: “These are collectives of individuals who voluntarily or involuntarily

are clustered together in close proximity by ecological constrictions, mechanical boundaries or equipment design, and who share physical but not necessarily social closeness for the purpose of attaining some goal or reaching some destination” (Zurcher 1979:78). Zurcher (1979) considers the ways airplane passengers work to maintain their concept of self and may respond to any challenges; he suggests that different modes of public transit are similar to airplanes because they move groups of travelers through what he terms “people pipelines.”

While public transit spaces were the sites of inquiry several decades ago, this work emerged largely from the sociology and study of public space, rather than from transport sociology generally or transportation and land use planning more specifically. This early research did examine social relations in transit spaces – the ways in which people interacted with physical space and with each other, the social roles people took on, and the sense of community (or lack of) in various transit environments. In recent years, transit has again become the focus of research endeavors using sociological lenses and methodological approaches. This work, particularly research in the area of mobilities, involves data, analytical approaches, and theoretical foundations that differ substantially from either traditional empirical transportation research, or the earlier era of transportation sociology discussed above. We now turn to a review of this more recent transportation-related literature, with a particular focus on the mobilities literature, and suggest that transportation planning research would benefit from a more expansive perspective on the range of factors relevant to the design, operation, and management of transit systems.

The Transit Experience and Mobility Cultures

The travel experience – a broader view of travel behavior as a phenomenon to be understood from the perspective of travelers themselves – has been an area of inquiry in academic fields outside of transportation planning, which tend to use different analytical approaches and kinds of data sources. These fields include urban history, performance studies, cultural studies, and film and literature. The ways these data and texts are analyzed and presented is unlike the more measurable and grounded theory approaches used in quantitative transportation research. For example, the types of source material used no doubt pose challenges, as they must be understood in context – both social and historical – and any examination of fictional accounts would benefit from consideration of the author’s perspective, purpose, and bias; they can be difficult data to handle for those not trained in these methodologies. However, such approaches can provide a wealth of information about the travel experience, the ways in which larger social phenomena play out during travel, and the intimate and often otherwise unarticulated thoughts and feelings of people participating in those spaces and activities (Langan 2001; Freedman 2002; Hutchinson 2003; Halverson 2008).

One example of a historical analysis of transportation shows the rich information that can be drawn from narrative sources, even fictionalized ones. Urban historians have examined the history of public transit in the United States, but Hood (1996) points out that these studies have focused largely on the ways in which transit physically reshaped cities and the politics behind these planning decisions. He uses first-hand accounts of travel on public transit in New York – a site of significant social mixing and contestation of space in terms of race, class, and gender – to conduct a historical analysis of the changing

perceptions of public space between 1880 and 1920 (Hood 1996). The technological developments in transit systems led to the construction of both elevated and subway networks; public perceptions of these modes in terms of service quality, safety, rider demographics, and character as a public space shifted over time. For example, the opening of the Interborough Rapid Transit Company (IRT) subway in 1904 was greeted with enthusiasm and fascination by first-time riders such as the playwright Elmer Rice: “[He] treasured this trip as the highlight of his boyhood. ‘So this was the subway!’ he exclaimed, remembering how he had pressed his face against the window glass and watched the iron pillars flash by” (Hood 1996:316). Later, however, Hood describes how issues of crowding, safety, and class conflict, particularly related to the poor and homeless, altered public opinion about New York City’s transit system as a place of public interaction.

The emerging field of mobility cultures – where travel is understood to be a cultural activity in which people actively engage and an integral part of people’s experiential day-to-day lives – can supplement and validate other methods and sources of information about the travel experience. Its practitioners argue that it challenges the ways in which social scientists, transportation planners, and engineers think about travel behavior. The concepts and cultural aspects of mobility take and expand on Yago’s earlier ideas about transportation sociology. In a recent review of the literature, Vannini identifies mobility cultures as “the cultural dimensions of the practice and experience of physical movement by way of the use of means of transportation” (2010:111). Vannini distinguishes mobility studies from transportation sociology and geography because he says these other perspectives “have tended to view daily practices of movement as ‘dead time,’ inconveniences to be minimized, or otherwise culturally neutral experiences that are

both inconsequential and undeserving of analysis in and of themselves. A mobility paradigm, instead, conceptualizes experiences of movement as transformative of both its agents and users, as well as of the spatial, temporal, and socio-political context of which it is part” (2010:113). For these scholars, mobility is not just a means to an end with one merely traveling from an origin to a destination. Rather, the travel experience itself produces “meaningful places and cultural environments” where the “sociality of travel...manifests itself through the formation of mobile subcultures” around different means of travel (Vannini 2010:114).

These scholars have looked at the ways in which people understand travel and interact in a variety of different transportation environments and modes, including long-distance rail and public transit (Urry 2007; Bissell 2009; Jain 2009; Reynolds and Rose 2009), airplanes (van den Scott 2009; Whitelegg 2009), cycling (McBeth 2009), and yachts and commuter boats (Boshier 2009; Kleinert 2009). The work in mobility cultures has been both very interdisciplinary – with a focus on sociological issues, but spanning a variety of academic areas – and largely qualitative, which Vannini (2010) points out is the result of a “cultural and interpretive turn” in sociology and geography. For Vannini, this new approach to understanding mobility is a significant departure from past research: “This paradigmatic and methodological characteristic also distinguishes the study of mobilities from the sociology of transportation – which is dominated by the application of quantitative research schemes and by a combination of the positivist tradition with a professional, practical, and applied agenda” (2010:112).

Vannini also discusses the experience of travel time as an important facet of mobility studies. Travelers use the time of mobility in very different ways and at different

points along a travel path – what Jain terms the “‘doing’ of passengering” – where travelers actually create and transform travel spaces (2009:93). Thus, the experience of travel is shaped by the types and group configurations of travelers; their activities as they travel; and the technologies they use while traveling. Ultimately these cannot be separated from physical travel space and travel time as these elements are all intricately connected. For Jain (2009), the transit trip is a “journey narrative” with any of a number of storylines for both individual travelers and bus/train space as a whole, but, as Bissell (2009) points out, one whose rules and expectations have been established through countless repeat performances.

The mobility cultures theorists – mainly geographers and sociologists – have sought to reconceptualize travel, mobility, and daily life in important ways. For example, to understand that people are performing as they move through space and time – the use of non-verbal actions, the acting out of identity, and the creation of the travel spaces themselves – challenges the more static, homogenous notion of travel used in traditional transportation research. Mobility cultures scholarship, however, has tended not to view travel through a critical lens of inequality, privilege, and social status. Notable exceptions are a study of the daily experiences and challenges of very poor and disadvantaged bus and bike travelers in Santiago de Chile (Jiron 2009) and a detailed examination of railways and train travel (Letherby and Reynolds 2005). However, while Letherby and Reynolds do explore different facets of identity as they relate to passengers, they acknowledge limitations to the scope of their work: “We have demonstrated...that gender and class are integral to any understanding of trains and train travel. What is lacking – both here and elsewhere – is a systematic consideration of the significance of other differences, both the

discrete variations in experience and interconnections between differences” (2005:189). Our aim with this work is to begin to fill in this gap in the literature.

Visual Ethnography: A New Travel Behavior Research Method

This project uses visual ethnography to understand the experience of transit riders as they move through and along transit networks in Los Angeles. Visual ethnography is a data collection method most commonly used in the fields of anthropology, sociology, and education. While ethnography can broadly be defined as data collected during extended periods of time in a social setting and visual ethnography the gathering of visual materials (e.g., photos, video, drawings), Pink (2001) challenges this notion as too simple in capturing the various ways ethnographers conduct their research and the types of data they collect. In fact, argues Pink, “any experience, action, artifact, image or idea is never definitively *just one thing* but may be redefined differently in different situations, by different individuals and in terms of different discourses...the ethnographicness of any image or representation is contingent on how it is situated, interpreted, and used to invoke meanings and knowledge that are of ethnographic interest” (Pink 2008:23).

Collier and Collier (1986) discuss one of the tools of visual ethnography, the camera, as an instrument that does not tire. They argue that one of the benefits of photography is that it “gathers selective information, but the information is *specific*, with qualifying and contextual relationships that are usually missing from codified written notes. Photographs are precise records of material reality” (Collier and Collier 1986:10). Banks (2008) believes that visual ethnography should be used in conjunction with other qualitative methods (surveys, interviews, focus groups, etc.) rather than as a sole method, and this also helps to distinguish it from other visual endeavors such as photojournalism. However, he

stresses that visual approaches in and of themselves are powerful and have the potential to reveal much information: "...The major strength [of visual research methods] lies in uncovering the previously unknown or unconsidered dimensions of social life; researchers using them should be prepared for the unexpected" (Banks 2008:121).

Urban planners and others examining life in cities have pointed to the value of visual representation in research endeavors. Krieger believes photographic documentation of urban landscapes is essential, particularly in creating a record of the urban world as it exists at a given time: "In decades to come, will we remember what today's cities looked like? The actual environment of the early twenty-first century might well be lost to memory, especially its details, unless we systematically photograph urban life and phenomena today" (Krieger 2004:213). He also encourages the use of other media in addition to photography, including the creation of soundscapes of the city and geocoded video clips (Krieger and Holman 2007; Krieger et al. 2009). These sources of information, argues Krieger, cover a broad range of urban phenomenon and are "not concerned so much with individual sites or places as with the choreography of urban life and the industrial engineering that enables large numbers of people to live and thrive near each other" (Krieger et al. 2009:114). This discussion echoes Jacobs' description of city sidewalks as an "intricate ballet" where many individuals come together to create a coherent yet often improvised performance (Jacobs 1961). These recordings, whether they are visual or aural, can effectively capture this complex display of urban activity.

Pink (2008), a sociologist, has used visual ethnography to study place making and route making in urban settings. She discusses the idea of multi-locality where an urban setting such as "a town can be identified as a particular physical urban place, [but]

phenomenologically it can be experienced as many types of place simultaneously, depending on who is experiencing/making place” (Pink 2008). She finds that in the same urban location, a town in the United Kingdom, multiple narratives emerge from different people, including the researcher herself, a documentary filmmaker, and a disability advocate. In some cases, the narratives overlap or conflict; in others, they diverge. This particular aspect of visual ethnography – its ability to capture multiple meanings – is especially useful in the study of travel behavior. While transportation researchers do consider demographic variables in their studies (such as race, gender, and age), at some point quantitative measures and analyses must assume a level of homogeneity. The individual experiences and the intersection of any of a number of identities, perspectives, circumstances, motivations, and needs in transit spaces are then lost.

Public transit is unique in bringing many people together in a confined space to collectively accomplish the individual goal of moving through a larger space to access a variety of destinations for very different purposes. Transit trips, therefore, vary considerably along many dimensions, and riders’ perceptions of transit may change considerably over the course of time or even during different segments of a particular trip. Because people may interpret the benefits and burdens of transit travel in very different ways, insight into the transit experience from the perspective of riders can be of great use to transit planners and managers. Visual ethnography is a way to capture those slices of experience, and the visual record allows us to consider more fully the paths and routes people take while using transit (both on and off vehicle experiences), the physical and social contexts of these trips, and the meaning people give different facets of their trip in an approximation of the real-time experience.

UCLA Transit Photo Project: Understanding Transit from the Perspective of Riders

This research uses visual ethnography to document and understand both transit spaces as defined by travelers and the transit experience more broadly. Researchers can gather visual ethnography data by capturing visual images themselves, by allowing research subjects to produce the images, or by collaborating with individuals in the field to create a visual story (Banks 1995). We asked participants to gather their own photos and create visual and textual travelogues; we anticipated that these visual “texts” would provide an inventory of the most salient physical and experiential components of transit environments from the perspective of actual system users. For some riders, this presentation might be chronological or procedural (e.g., elements of the ride from A to B) and for others the experience might encompass a less linear format where the built environment or other spatial markers form the narrative backbone of their trips. Ultimately, we believed this information – as both individual photos and more comprehensive narratives – would allow us to understand details of the transit journey that might be overlooked using other data gathering methods.

Research Methodology

Participants for this project were recruited through an online snowball sampling technique. We sent a notice asking for volunteers to various UCLA student and faculty email lists, the membership of a transportation advocacy organization, and a Los Angeles area urban issues blog site. In this solicitation, we asked people to forward the message out to other people who might be interested in participating. Participants had to meet the following requirements: (1) be located in the greater Los Angeles area, (2) have access to transit (bus or rail), (3) have access to a digital camera, smartphone, or camera phone for

photo collection, and (4) have photo upload capabilities (e.g., a computer with internet access). Each participant completed an initial registration form on the data collection website where they were asked to confirm that they met the above project requirements and could document four individual trip segments and upload at least 10 and up to 25 photographs per trip. Given the technological requirements for participation and the snowball recruitment method, the respondents for this pilot study were by necessity not randomly drawn among the universe of Southern California transit users.

Out of this recruitment effort, 89 people registered to participate in the study. While recruiting people to register their intent to participate in the study proved relatively easy, the number of registrants who followed through in completing the four one-way and/or two roundtrips, taking the requisite number of photographs, uploading these photos to the study site, and then adding narrative descriptions of their photographs was considerably smaller. Completing these tasks entailed substantial time and effort on the part of participants; to encourage those registered to complete their participation, we entered those who uploaded photographs and narratives in a drawing for four gift cards for local merchants (1 \$100, 1 \$50, and 2 \$25 gift cards).

We asked riders to capture their transit journeys visually by using their own, and now nearly ubiquitous, digital cameras, smart phones, or camera phones. They then uploaded these photos to a website where they provided demographic information as well as details about their trip, including start/end locations, time of travel, route, operator, trip purpose, transfers, and their familiarity with the route. They also had the opportunity to caption each photo, add more descriptive text, and provide commentary about the trip overall and anything they were not able to capture in a photograph. They were to consider

transit trips as door-to-door trips and not just time spent on vehicles. Therefore, trips may have included travel to and from stops or stations, wait times, and if they made one or more stops between an origin and destination, other activities that occurred while not on a bus or train.

Thirty-one of the 89 people who registered to participate in the study completed at least one trip and uploaded at least one photo, while 24 participants completed multiple trips and uploaded and captioned multiple photographs and were thus included in the analysis we report on below. These 24 participants completed 66 transit trips in total. Owing to our electronic snowball sampling technique for this pilot study, our sample was relatively young, well-educated, and electronics savvy (i.e., had access to a camera phone and the internet). All had at least some college education, which stands in contrast to public transit users as a whole.¹ By other demographic measures, the sample was relatively varied. Our respondents were 58 percent male, and 42 percent female. With respect to ethnicity, 42 percent were white, 42 percent Asian/Pacific Islander, and 8 percent Hispanic, and 8 percent categorized themselves as “other.” Los Angeles has an enormous transit network with local bus, rapid bus, light rail, subway, and commuter rail lines crisscrossing the city. Participants for this study used transit for a wide variety of trip purposes, at various times of the day or evening, and on any of a number of lines or routes. Some people who participated were regular and experienced users of transit; others were riding transit for the first time, motivated specifically by their participation in this project. The sample was split between regular and less frequent users of public transit: 58 percent

¹ The 2009 National Household Travel Survey shows that 36 percent of respondents who used transit have a high school education or less while only 51 percent have at least some college education. Source: 2009 National Household Travel Survey.

of respondents reported making one or more trips per week on public transit, while the remainder (42 percent) reported using transit less than once per week – 13 percent reported using transit less than once a month. Because of the inevitable variation in riders' trip itineraries and familiarity with transit systems, we allowed participants to choose their study "sites" (i.e., the particular lines and the way they traveled to and from stations and stops).

We purposely did not give participants instructions or examples of what to photograph as we wanted them to explain their transit trip using elements and a narrative storyline that made the most sense to them. However, we did not want them to overlook features of their trips they might consider unimportant or uninteresting and so we provided them with some very general guidelines (see Appendix A). We told them that elements of a transit trip important to one person may be less so for another person and that they might find certain things salient on different trips or even on different parts of the same trip. We suggested that participants jot down notes and details about their trip to facilitate the reporting later.

We also addressed the issue of taking photographs on transit for any participants who had concerns about this activity. We reminded them that cell phones and digital cameras have become part of our daily existence, and cell phones in particular are commonplace in public places where people use them to talk, to take pictures, and to record video. We did not anticipate the photo gathering for this project to be much different than what participants likely did regularly with their cell phones or cameras. However, we encouraged them to avoid any situations where they felt uncomfortable or at risk, where their activities might make other people around them feel uncomfortable or at

risk, or where there was direct confrontation or hostile behavior. No participants reported any incidents involving the photo gathering; several participants did mention in their trip comments that there were photos they wanted to take but did not feel comfortable doing so (these usually involved photos of other riders on vehicles).

Findings

Participants submitted photos from both bus and rail trips that spanned very different parts of Los Angeles. Most trips were commutes to work or school, or were shopping-related. People both traveled alone and with others; the frequency of trips varied with some individuals using a particular route almost daily and others never having traveled on that mode or line. While most participants did not report being unable to take photos they wanted to take, people noted issues about gathering photos for 11 of the 66 trips completed. The individuals who discussed situations where they could not capture a desired photo described one of the following factors: (1) they felt uncomfortable or self-conscious about taking photos of other passengers, particularly on buses (*"There were heaps of photo opportunities that I would have liked to capture (i.e., bus rider's faces and expressions) but, for the purpose of this project, I did not find it appropriate to "impose" on the other rider's personal space"; "I found I was more comfortable taking pictures of men than women – which really surprised me"*), (2) they could not take photos because the vehicle was too crowded (*"There were a few times I wanted to take some photographs, but I couldn't get my camera because I had too many things in my hands and there was no place to sit/set my things. The bus was full of people"*), and (3) they did not have time during their trip to stop and take pictures (*"I wanted to take some pictures around Union Station but did not*

mostly because of the time crunch we had trying to shepherd 20+ people to a baseball game on time”).

Our review of participants’ photographs and text revealed the variety of ways in which people understand, experience, and document their transit journeys in Los Angeles. Out of this review, four general themes emerged from the analysis of participants’ photo logs related to (1) concepts of what constitutes the transit trip, (2) perceptions of the physical elements of the transit system, (3) learning to use and navigate the transit network, and (4) the social aspects of the transit experience. These different topics are explored in the following sections with examples from the submitted photos and text.

Defining the Transit Trip

While we asked participants to think of their transit trips from door-to-door, most respondents started and ended their trip narratives at stops and stations. Most people arrive to use transit via other modes (e.g., walking or biking), but the spatial and temporal boundaries of their trip surprisingly to us often did not include these parts of the journey. It may be that travelers associate transit trips with particular transit elements – transit facilities and vehicles – and their movement through or presence on those parts of the transit network as they walk into a station, wait at a stop, or sit on a bus or train. (Similarly, drivers may not be inclined to report on the time and effort spent walking to and from parked cars, despite their importance to a trip by automobile.) In addition, their identities as transit users might end when they leave the realm of the transit system. In other words, once they have exited a station or walked away from a stop, they have reentered the mainstream and “normal” world of travelers who are not using what can be a stigmatized form of transportation in most U.S. cities.

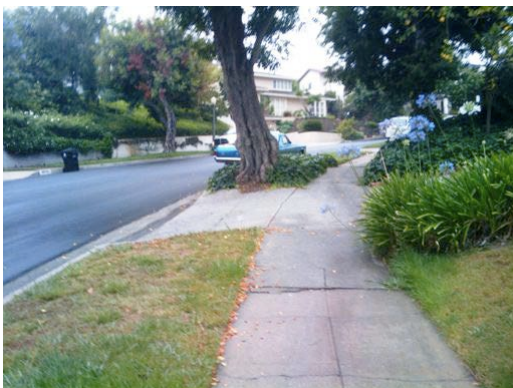
Some respondents, however, did define their transit trips in terms of activities before and after using the transit system itself. Several people discussed the walk to and from their stops or stations such as this respondent who lives in downtown Los Angeles:



Caption: Warner Brothers Bldg

Description: I like walking by this building, which used to be the Warner Brothers' downtown HQ...now it's a jewelry center, just like every other building in this part of downtown.

This same respondent walks from the end of his bus trip through Holmby Hills, a wealthy neighborhood near the UCLA campus. He provided a series of photographs of different parts of the long walk from the bus stop to campus, including a signalized intersection crossing he strongly dislikes, a house he particularly likes, and a number of hills he has to go up and down:



Caption: big hill

Description: When I lived in West Hollywood, I would bike to UCLA every day. It was a really nice bike ride, except for this damned hill, which was really pretty tough. Now I walk up the hill. Sometimes I get winded.



Caption: Hilgard and Wyton Crossing

Description: I HATE CROSSING HILGARD. This intersection is awful. I really really hate it. I hate that I have to press a damned button in order to cross. I hate that it takes MINUTES for the signal to change to walk. I just hate it. Things that I hate about it: 1) when you press the button and wait and wait and wait and wait and wait 2) when someone sees their bus coming and just dashes out into traffic in order to catch the bus 3) when you press the button a second after the cycle that would have given you a “walk” signal, but you missed the window of opportunity, so your request-to-walk gets put into the queue for the next cycle. This makes me go blind with rage.

Another respondent also described anxiety related to crossing the street near a bus stop:

“This is one of the most stressful moments of the trip. What if the bus comes when the light is red? To jaywalk or not to jaywalk?”

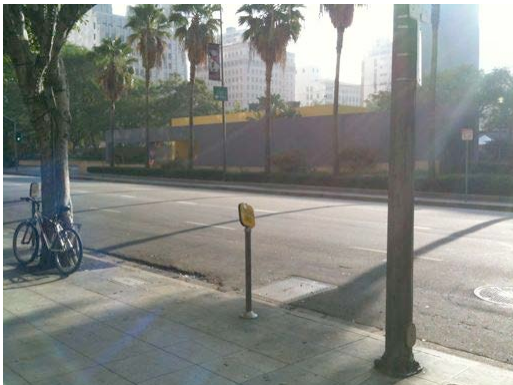
Challenges while traveling on foot to stops and stations were also reported by other respondents. One woman walks to a Metro station for the first part of her work commute and she described a particularly treacherous stretch of sidewalk:



Caption: The walk down Vermont to the Vermont/Sunset Metro Station

Description: Although the walk is only about 2 blocks with generous sidewalks, they are long blocks and they have many tree roots buckling the sidewalk. Towards the end of this block there are two curb cuts for two different banks that are always very busy with cars going in and out making it dangerous for pedestrians to cross.

In describing the shortest path from his office to the Metro station, one respondent describes a more ideal, but now inaccessible route:



Caption: Pershing Square from across Olive Street

Description: As the crow flies, the shortest distance to the station from the office building would be diagonally across Pershing Square. I've seen historic photos of the park where it had pathways through the center from all directions. But now movement in and out is constrained by parking garage ramps added in the 1950's and office/concessions buildings.

One participant using a less common mode of transportation, skateboarding, discussed this as a regular part of his transit trips:



Caption: supplemental transportation

Description: I've been skateboarding for almost 9 years now. Skateboarding has allowed me to view the urban landscape in a very different way from most people. It is a relatively good supplemental form of transport (i.e., to take to and from bus stops, etc.)

Although other participants did not always extend their transit trips beyond stops and stations in their photo essays, a number of comments suggest that people do, to a certain extent, think about the other non-transit segments of their own trips and those of the people traveling with them. Several respondents submitted photos of bikes on racks at the front of buses or on trains. Another person discussed a station he uses regularly and the way his coworkers modify their travel behavior because of perceived safety issues: *"Some of my coworkers will walk two extra blocks to the next closest station because they believe it is safer, especially at night."*

Physical Elements of the Transit Journey

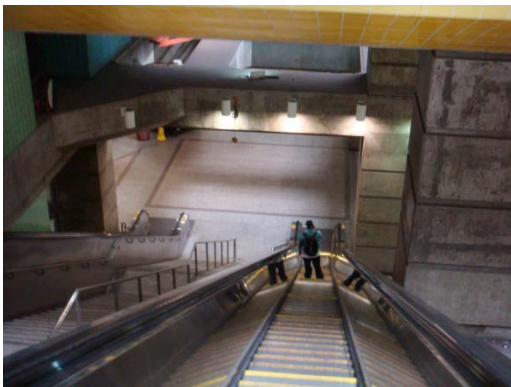
Participants often discussed physical space – both the elements and features that helped facilitate their trip or they found appealing and things they found to be unpleasant or challenges as they traveled. The submitted photos include many pictures of stations and stops, and particularly pleasing or unpleasing things related to design and use. A number of respondents said that station design affected their transit experiences in both positive

and negative ways. One person discussed the problematic architectural and environmental design elements at a station he uses frequently; these issues then affect riders' sense of safety and security and their behavior in and around the station:



Caption: Approaching the station entrance

Description: The station entrance faces away from the street, which creates a large, concealed space that seems difficult for law enforcement to patrol. Vagrancy and loitering are common at this particular station. The building in the photograph has ground floor retail and has been fully renovated during the station's existence, but the owners have done little to connect to the station entrance area (note the burglar bars over the doors and windows). Overall, the entrance feels uncomfortable, and most people walk through quickly.



Caption: Inside the station

Description: Actually it look[s] old and seems not totally completed (although it is completed) and the light inside the station is dark. Seems not safe enough for [a] female alone at night.

Participants discussed other physical features of transit spaces in terms of maintenance that affected their aesthetic experiences on buses and trains. One participant described in detail the graffiti marks found on Metro train seats:



Caption: Scratch graffiti on seat back

Description: There is virtually no spray paint graffiti to be found anywhere on the rail system. Perhaps this is because law enforcement is on the lookout for this type of vandalism, or maintenance workers are quick to remove it. Scratch graffiti, on the other hand, is prevalent. It is more permanent, and is visible on most surfaces on board the trains. Unlike spray paint graffiti, which requires a spray paint can, virtually any sharp object can be used, including ones that are small, easily concealed, and inconspicuous.

Another photo showed an ashtray overflowing with trash while a trashcan sat empty just a few feet away. For another rider, the dirty windows on her bus hampered her view of the landscape outside of the vehicle.

Crowding at stations and stops was a common topic with participants discussing it in different ways – from the sheer number of people to the way people congregate and organize to the temporal patterns that make crowding predictable. For example, one participant included a photo of a crowded Metro platform and described the way this type of crowding is mitigated on other transit systems:



Caption: Passengers waiting for the train

Description: This is the view from the stairs leading from the mezzanine to the platform. The majority of passengers will board the Red Line to North Hollywood, while a small number will wait for the Purple Line to Wilshire/Western. In some cities, there are markings along the edge of the platform showing where the doors will be when the train arrives so that passengers can line up by the door locations in advance. Without these, passengers tend to spread out across the entire platform, as shown here.

Another rider described the high school students who travel on his bus route and the particular stops where many of them board and alight, resulting in very crowded buses for parts of the journey during the school year:



Caption: Beverly at Belmont High School

Description: I love this stop because virtually everybody gets off at this stop to go to the Belmont School, which means the few remaining of us can finally sit down!

A photograph of a crowded train across the platform at a Red Line Metro station, prompts one rider to comment: *"I was able to catch another picture of a different train car while we*

were stopped at 7th and Fig. Folks are literally packed into the train car going to Union Station after work! Aren't you glad you used Dial? Don't you wish everyone else did?"

A number of respondents discussed the aesthetics of stations and stops, and particularly public art in the Metro. One respondent compared the design of a Metro station to those he experienced in another city:



Caption: To the Platform

Description: Farecards having been purchased, we headed down to the train platform, decorated with murals at this station. Again, a nice contrast to the monolithic, Soviet-style stations I was used to in DC.

Another transit user submitted a number of photos of public art pieces she liked at different stations as well as posters placed along the walls inside the Metro trains:



Caption: "Eyes fly high to nest"

Description: The Soto station is one of the most beautiful that I have seen. Very inspirational-looking, as if something in a scrapbook room.

For other riders, the appropriation and creative use of space resulted in useful amenities that did not exist before. For example, one person enjoyed a feature at a bus stop, but one that was not always reliably available:



Caption: Shelf

Description: Every morning, I use this as a shelf for my coffee... it's a bit of the side of the building by my bus stop. It's filthy, but what're my options? Sometimes if this ledge is exceptionally filthy, I will use the newspaper box in the background as my coffee shelf. I need a coffee shelf because I always have to sift through the contents of my backpack to find my bus tickets.

Another person described a creative and necessary use of windows in the Metro station: *"I usually wear ties to [work] meetings..., but sometimes don't leave myself enough time to put one on before departing from the office. Sometimes I'll look for a reflective surface to use as a mirror so I can put on my tie while waiting for the train. The glass elevator shafts work somewhat well for this...The train windows make very good mirrors for putting on ties, much better than the elevator shaft windows. The train windows work especially well in the dark tunnels, when little light is coming through."*

Transit System Legibility and Navigation

A number of respondents described features of the transit system that facilitated their movement or confused and complicated their trips. One participant found the

transition from a Rapid bus to a Metro station very clear and easy; however, at Union Station in downtown Los Angeles she found it difficult to locate the Gold Line Metro platform because of the lack of signage and the long walk from the bus plaza to the Metro system entrance. Another person described the inconsistent signage along the Metro Purple line:



Caption: Station marker at street level

Description: Despite this portion of the subway being renamed the “Purple Line” in 2006, all of the station signage is still in red. This can be confusing for new riders.

Various respondents expressed very different perspectives about features of the transit system they liked or disliked. One participant commented on the monitors found in many Metro stations that he found to be a very useful feature in comparison to transit systems he has patronized elsewhere:



Caption: Bus Departures

Description: This incredibly helpful monitor displayed bus arrival and departure times at Wilshire/Western station as well as train times and other helpful information. This is incredible compared to the dilapidated LED screens I was used to in DC.

Other riders, however, complained about these same monitors. One person commented on a photo of a broken monitor: *“According to this monitor, it was about 4:30 in the morning. And the train was coming. But it wasn’t.”* Another person discussed the relative usefulness of the posted times: *“These screens show system announcements and train arrival times. However, the displayed times are not real-time predictions; they only show a pre-programmed timetable. This is virtually useless when trains are not running on schedule.”*

Signage and wayfinding were other topics participants discussed in terms of the physical elements of transit system, and riders had different opinions about the ease of usage. One participant described the signage on Red and Purple Line Metro trains and the way in which the design is not especially user-friendly for riders unfamiliar with the system:



Caption: Train destination sign

Description: With both the Red and Purple Lines arriving on the same platform, passengers have to pay attention to the small destination sign on the side of the train to ensure they are boarding the correct line.

Interestingly, another participant commented on the same train signage, but suggested it was easy to use in comparison to systems elsewhere, with any difficulties more a reflection of Los Angeles transit riders than poor sign design: *“It’s also surprising how confused so many people get because [they] accidentally board the wrong train, even though each train plainly says where it’s going. For goodness sake, in NYC the same platform will often have a dozen different trains to choose from. L.A. denizens are still a bit under-transit-literate.”*

Another person described a photo of a Metro Gold Line map located inside a train: *“Straightforward and easy to use and clear.”*

A number of participants mentioned the monitors onboard many buses and their potential to aid travel and wayfinding. Many people found the Transit TV programming broadcast on these monitors to be boring, irritating, or of low production value. While transit agencies undoubtedly benefit financially from contracting with Transit TV, they may be inadvertently annoying, or perhaps over time alienating, their customers in the process. However, the real-time locational map on one side of the monitor was a feature that both regular and new bus riders reported finding helpful. Unfortunately, participants noted that in many cases the monitors were not functioning properly or the maps were too small to see and be of any real use. One participant discussed a related issue where physical visibility hindered easy navigation for light rail riders:



Caption: View of the station through the train window

Description: There are no electronic signs on board the train to announce the next station, and audio announcements are often drowned out by rail noise. This means passengers must rely on station signage visible through the train windows for wayfinding. This is not always easy, since MTA washes the train windows infrequently.

In this case, the physical maintenance of transit vehicles would make the system much more rider-friendly and ease anxiety about missing a stop or station.

Social Aspects of the Transit Journey

While sociologists and geographers have examined the social aspects of the transit experience, transportation planners have explored this aspect of travel behavior much less. Many of the photographs and text submitted by participants reflect the ways in which people interact, participate, and negotiate with a diverse array of individuals in transit spaces. And while people may work to disengage during much of their time on transit – by talking on cell phones, listening to iPods, sleeping, reading, or staring out the window – the reality is that transit environments are complicated social spaces with a multitude of physical, verbal, and emotional exchanges transpiring at any moment (Slosar 1973; Nash 1975; Goffman 1980; Hutchinson 2000; Fleetwood 2004; Letherby and Reynolds 2005; Bissell 2009; Jain 2009). The photos submitted by participants for this project suggest that people are aware of the social life surrounding them as they move through transit space

and time. In some cases this awareness may involve conflict and aggravation, the stereotypical qualities of the transit experience. However, in many other cases, the social aspects of transit are entertaining, enlightening, or pleasantly unpredictable.

One rider described his morning trip on a commuter bus as routine and familiar, but also compelling without requiring any real social commitment or engagement:



Caption: Usually pretty empty

Description: The bus is usually pretty empty...and I pretty much know everyone who rides it...at least I know their faces. Some of the riders know each other and have conversations on the ride in to work. A lot of admin assistants at law firms in Century City ride this bus (they pick it up at Union Station -- I think most of them ride in on the Metrolink)...their chatter reminds me of riding the subway in NYC when I lived there...you always got juicy office gossip about an office you have no connection to.

For another respondent, a photo of the metal mesh on the side of a bus stop shelter elicits mention of an unexpected encounter with another passenger, an interaction that proves to be the highlight of his trip:



Caption: waiting

Description: The bus took a really long time to arrive. 30 minutes must've passed. Luckily a very friendly and interesting older gentleman came and had a chat with me while we waited.

In discussing another photo, this participant describes his ongoing interaction with the man from the bus stop: *"I met Marcel waiting at the bus stop on Olympic/Westwood. He was a retired medical doctor. When he was younger, he traveled the world. He talked about the transportation systems of different countries and about his ideas about why Los Angeles has such a difficult time with figuring out its transit 'problem'...It was very nice to meet Marcel. Meeting Marcel was a perfect example of what people miss out when they are boxed up in their automobiles."*

Transit systems can also act as catalysts for social activity by concentrating people at particular locations. In this sense, the social aspects of transit begin to extend outside of the physical realm of the transit network. One rider describes the social scene she regularly observes at a Metro station:



Caption: Vermont/Sunset Station

Description: As you can see, it has very generous sidewalks surrounding the station. It lends itself to a large pedestrian activity hub. Because there are many lines that stop here, there's a large amount of street activity. The Kaiser and Children's Hospital are also here so that adds to the vibrancy. There are regular street food vendors that help add life here.

In other cases, people's social interactions with their fellow passengers were less direct and more subtle. One rider recognized the unspoken communication happening at a stop where an ongoing activity in many ways made the wait a shared and more bearable group experience:



Caption: Looking for the bus

Description: The man in the red shirt was looking for the bus -- an action that each of us waiting for the bus took turns doing.

People also use transit to observe and understand the social world far beyond the transit system. The window on a bus is literally that – a window – but

also a means to take in the diverse physical and social landscape of Los Angeles in a way that is much more difficult or even impossible when traveling by car. A participant described the racial and geographic story of one part of Los Angeles through his observations of the demographics of a bus line:



Caption: #206 going North on Normandie.
Description: The majority of bus passengers on this line are Latinos, although if you travel south of the 10, a lot of African Americans come on board.

He also described the cultural richness of the neighborhoods his bus passes through by discussing photos he had taken out the window: *“There are a number of these corner mini-malls along the 206 route. Exotic restaurants packed in next to check cashing joints, donut shops, and cell phone dealers”*; *“Riding through Korea Town. There are many great Korean restaurants within walking distance of the 206”*; *“This is my neighborhood since it’s within walking distance of my residence. Mostly Latino businesses with a few Thai and Philipino. If you like pupusas (from El Salvador) this is the neighborhood for you.”*

Transit spaces are indeed sites of social contention and conflict. Transit vehicles can be and often are crowded, unpleasant, unpredictable spaces. However, to categorically dismiss transit as devoid of meaningful social interaction or to assume that transit serves no viable purpose other than transporting large groups of people under miserable and

uncomfortable conditions is to ignore the value and depth of the transit experience. A number of the photos submitted show that people do engage in transit spaces – with other riders, their immediate surroundings, and the larger social world. And many of them recognize and appreciate the social opportunities transit affords them:



Caption: Outside looking in

Description: I thought the brightly lit interior with people, so distinct and so clear in the night, was like Wes Anderson's movie "The Darjeeling Limited." It was the concept of the whole train having so much life because it was so compact, so full of people.

Research and Policy Implications

To regular riders of public transit anywhere, the pictures and observations presented here are likely familiar and unsurprising. To transit planners and managers understandably focused on fare policies, bus replacements, run cutting, and schedule adherence, much about these users' perceptions of and observations about their transit trips would appear often tangential and largely beyond their control. As these photo diaries suggest, the transit experience is a rich and complex mix of the social and spatial. While governments are motivated to subsidize and operate buses and trains in order to get people to needed destinations, users' perceptions of these services are visceral and varied.

In contrast to walking, biking, and most driving trips (when travelers are usually able to park near both their origin and destination), fixed-route, fixed-schedule transit services necessarily involve considerable travel by other modes – usually by foot, though sometimes by bike, car, or even skateboard – to link transit stops and stations to trip origins and destinations. These “off-system” aspects of the transit journey are important to many travelers, in both positive and negative ways. Attractive architecture and a vibrant street scene can enhance a walk to or from a transit stop or station, while steep hills, tree roots under broken sidewalks, busy driveways, and frustrating pedestrian street crossings can all detract from using transit in ways that some transit planners and managers may not fully appreciate.

And while the focus on transit vehicles is perhaps understandable, the out-of-vehicle transit experience is not entirely outside of the control of transit planners and managers. Stop and station design can heighten or reduce fear of crime (Loukaitou-Sideris 1999; Loukaitou-Sideris et al. 2002); signage can clarify or frustrate wayfinding; graffiti invisible at ten meters distance can be glaring to users in close proximity to transit system seats and walls; crowding can significantly increase the physical burdens of transit travel; the lack of amenities to facilitate the consumption of usually prohibited yet ubiquitous food and drink may be bemoaned by users; and public art may be uplifting and important to some travelers, and invisible and irrelevant to others.

As the photographs and narratives presented in this report suggest, little things can make a big difference to transit users. Signs that are out-of-date or not working can be more frustrating to users than no signs at all; these can be monitored and repaired more regularly. Transferring is stressful for passengers worried about missing their

connections; drivers can watch for potential passengers waiting for a pedestrian signal – or darting through traffic – to cross a street in order to catch their bus. Cupholders are now standard in cars, but entirely absent at stops and in stations. These seemingly little things can tip the balance between a pleasant transit trip and a stressful one.

Finally, public transit is perhaps the most explicitly social of all travel modes, and the venue of many unexpected social interactions – both positive and negative. Our participants reported more positive than negative social encounters, though this may reflect both our small sample and a sample selection bias: whether regular or first-time transit riders, all of the participants approached their journeys with heightened senses of awareness. Overheard conversations, friendships born out of the shared boredom of waiting for a bus, lively street activity, and the evolving cultural identities of passengers as transit vehicles move through neighborhoods resonated sufficiently strongly with participants to warrant inclusion in their photo essays. Such social interactions and perceptions are part and parcel of public transit travel, yet largely ignored in the transit planning literature.

Conclusion

Studies of mobility and travel have emerged from both the social sciences and the humanities in a variety of disciplines such as sociology, geography, cultural studies, literature, and performance studies. While these works use very different data, methodologies, and time frames, many of them share some general commonality by exploring users' perceptions of travel modes and often considering the ways in which identity and status relate to travel experiences and decisions. The majority of research focused on the sociological and performative aspects of transit spaces fails to cross the theory-practice

divide and, while providing insight into behavior and interactions on public transit, does not subsequently point to more concrete policy and planning implications.

The findings from this pilot study suggest that transit planners and managers concerned with people's decisions whether or not to travel by public transit need to consider aspects of the transit experience that reach well beyond the bus or train door. The rules of behavior and discourse on buses, trains, and at stops are a central part of the transit experience – both positive and negative – and transit drivers, attendants, and guards all can, though often do not, play important roles in creating positive social environments. The location and design of transit stops and stations can importantly shape perceptions of safety, security, vibrancy, and beauty that both subtly and directly affect the transit experience. And while transit managers rarely have direct control over the pedestrian networks that link transit stops and stations to trip origins and destinations, the evidence presented here suggests that improving the walking experience – in terms of sidewalk quality, driveway design, and street crossings – is critically important to users' perceptions of public transit (Liggett et al. 2001; Loukaitou-Sideris et al. 2001; Loukaitou-Sideris 2006). This report contains but a small sampling of the hundreds of photographs and scores of captions uploaded by the study participants. Readers interested in a more comprehensive sampling of the photo diaries can find many additional images at the project website: <http://www.its.ucla.edu/uclatransitphotos>.

We hope to expand this analysis in the future to include a broader cross-section of transit travelers. While camera phones are now nearly ubiquitous, the time and ability to upload and annotate photographs is not; this suggests that a more labor-intensive effort of orally debriefing travelers on their trips and collected photographs may enable us to

broaden our cross-section of riders. Sampling issues notwithstanding, the wide array of factors captured in the hundreds of photographs submitted by these two dozen transit travelers suggests that the transit experience is nothing if not varied – both positively and negatively. Public transit is many things to many people, and very much in the eye of the beholder.

References

- Atkins, S. (1989). *Critical paths: Designing for secure travel*. Design Council, London: 96 pages.
- Azonobi, L. M. and S. Sen (2003). *Comprehensive social equity study for the Baltimore Urban League*. National Transportation Center, Morgan State University: 42 pages.
- Azonobi, L. M. and S. Sen (2004). *Environmental justice in transportation planning and policy: Some evidence from practice in the Baltimore-Washington DC metropolitan region*. National Transportation Center, Morgan State University: 51 pages.
- Bamberg, S., M. Hunecke and A. Blobaum (2007). "Social context, personal norms and the use of public transportation: Two field studies." *Journal of Environmental Psychology* 27(3): 190-203.
- Banks, M. (1995). "Visual research methods." *Social Research Update* Winter (11).
- Banks, M. (2008). *Using visual data in qualitative research*. Los Angeles, Sage Publications Ltd.
- Baslington, H. (2008). "School travel plans: Overcoming barriers to implementation." *Transport Reviews* 28(2): 239-58.
- Beirao, G. and J. A. S. Cabral (2007). "Understanding attitudes towards public transport and private car: A qualitative study." *Transport Policy* 14(6): 478-89.
- Bissell, D. (2009). *Moving with others: The sociality of the railway journey. The cultures of alternative mobilities: Routes less travelled*. P. Vannini. Burlington, VT, Ashgate Publishing Company: 55-69.
- Blumenberg, E. (2009). "Moving in and moving round: Immigrants, travel behavior, and implications for transport policy." *Transportation Letters* 1(2): 169-80.
- Blumenberg, E. and A. E. Evans (2010). "Planning for demographic diversity: The case of immigrants and public transit." *Journal of Public Transportation* 13(2): 23-45.
- Boshier, R. (2009). *Wet and boisterous: The lumpy "romance" of commuting by boat. The cultures of alternative mobilities: Routes less travelled*. P. Vannini. Burlington, VT, Ashgate Publishing Company: 195-209.
- Casello, J. M., A. Nour and B. R. Hellinga (2009). "Quantifying impacts of transit reliability on user costs." *Transportation Research Record* 2112: 136-41.
- Collier, J. and M. Collier (1986). *Visual anthropology: Photography as a research method*. Albuquerque, NM, University of New Mexico Press.
- Crane, R. (2007). "Is there a quiet revolution in women's travel? Revisiting the gender gap in commuting." *Journal of the American Planning Association* 73(3): 298-316.
- Csikos, D. R. and G. Currie (2008). "Investigating consistency in transit passenger arrivals: Insights from longitudinal automated fare collection data." *Transportation Research Record* 2042:12-19.
- Davis, M. and S. Levine (1967). "Toward a sociology of public transit." *Social Problems* 15(1): 84-91.
- Davis, M., R. Seibert and W. Breed (1966). "Interracial seating patterns on New Orleans public transit." *Social Problems* 13(3): 298-306.
- de Boer, E. (1986). *Transport sociology: Social aspects of transport planning*. Oxford, Pergamon Press Limited.

- Delannay, M. (2001). Maintaining anonymity: The social organization of riding the bus. University of Wisconsin-Madison, Department of Sociology, MS: 41 pages.
- Dueker, K.J., J. G. Strathman and M.J. Bianco (1998). Parking strategies to attract auto users to transit. Transportation Research Board Report, National Academy Press, Washington, DC: 105 pages.
- Esbjornsson, M., O. Juhlin and A. Weilemann (2007). "Drivers using mobile phones in traffic: An ethnographic study of interactional adaptation." International Journal of Human-Computer Interaction 13(2): 37-58.
- Fleetwood, N. (2004). "'Busing it' in the city: Black youth, performance, and public transit." The Drama Review 48(2): 33-48.
- Freedman, A. (2002). "Commuting gazes: Schoolgirls, salarymen, and electric trains in Tokyo." Journal of Transport History 23(1): 23-36.
- Furth, P. G. and T. H. J. Muller (2007). "Service reliability and optimal running time schedules." Transportation Research Record 2034: 55-61.
- Goffman, E. (1980). Behavior in public places: Notes on the social organization of gatherings. Westport, CT, Greenwood Press.
- Gómez-Ibáñez, J. A. (1996). "Big-city transit, ridership, deficits, and politics." Journal of the American Planning Association 62(1): 30-50.
- Guiver, J. W. (2007). "Modal talk: Discourse analysis of how people talk about bus and car travel." Transportation Research Part A 41(3): 233-48.
- Halverson, C. (2008). "John Steinbeck's 'Sweetheart, the cosmic American bus.'" College Literature 35(1): 82-99.
- Hannes, E., D. Janssens and G. Wets (2008). "Destination choice in daily activity travel: Mental maps repertoire." Transportation Research Record 2054: 20-27.
- Heath, C., J. Hindmarsh and P. Luff (1999). "Interaction in isolation: The dislocated world of the London underground train driver." Sociology 33(3): 555-75.
- Heffner, R. R., K. S. Kurani and T. S. Turrentine (2007). "Symbolism in California's early market for hybrid electric vehicles." Transportation Research Part D 12(6): 396-413.
- Henderson, M. (1975). "Acquiring privacy in public." Urban Life and Culture 3(4): 446-55.
- Hood, C. (1996). "Changing perceptions of public space on the New York rapid transit system." Journal of Urban History 22(3): 308-31.
- Hutchinson, S. (2000). "Waiting for the bus." Social Text 18(2): 107-20.
- Hutchinson, S. (2003). Imagining transit : Race, gender, and transportation politics in Los Angeles. New York, Peter Lang.
- Iseki, H. and B. D. Taylor (2008). Style versus service? An analysis of user perceptions of transit stops and stations in Los Angeles. Annual Meeting of the Transportation Research Board, Washington, DC.: 209 pages.
- Iseki, H. and B. D. Taylor (2009). "Not all transfers are created equal: Towards a framework relating transfer connectivity to travel behaviour." Transport Reviews 29(6): 777-800.
- Jacobs, J. (1961). The death and life of great American cities. New York, Random House.
- Jain, J. (2009). The making of mundane bus journeys. The cultures of alternative mobilities: Routes less travelled. P. Vannini. Burlington, VT, Ashgate Publishing Company: 91-107.

- Jiron, P. (2009). Immobile mobility in daily travelling: Experiences in Santiago de Chile. The cultures of alternative mobilities: Routes less travelled. P. Vannini. Burlington, VT, Ashgate Publishing Company: 127-39.
- Johansson, M. V., T. Heldt and P. Johansson (2006). "The effects of attitudes and personality traits on mode choice." Transportation Research Part A 40(6): 507-25.
- Johnston, R. A. (2004). The urban transportation planning process. The geography of urban transportation, 3rd edition. S. Hanson and G. Giuliano. New York, The Guilford Press: 115-40.
- Kain, J. F. and Z. Liu (1995). Secrets of success: How Houston and San Diego transit providers achieved large increases in transit ridership. Federal Transit Administration, U.S. Department of Transportation: 173 pages.
- Kain, J. F. and Z. Liu (1996). An econometric analysis of determinants of transit ridership: 1960-1990. Volpe National Transport Systems Center, U.S. Department of Transportation: 90 pages.
- Kleinert, M. (2009). Solitude at sea or social sailing? The constitution and perception of the cruising community. The cultures of alternative mobilities: Routes less travelled. P. Vannini. Burlington, VT, Ashgate Publishing Company: 159-75.
- Kohn, H. (2000). Factors affecting urban transit ridership. Bridging the Gaps: Canadian Transportation Research Forum, Proceedings of the 35th Annual Conference, Charlottetown, Prince Edward Island, Canada.
- Konig, A. and K. W. Axhausen (2002). The reliability of the transportation system and its influence on the choice behavior. Association for European Transport: 14 pages.
- Krieger, M. H. (2004). "Taking pictures in the city." Journal of Planning Education and Research 24(2): 213-13.
- Krieger, M. H., R. Govindan, M. R. Ra and J. Paek (2009). "Commentary: Pervasive urban media documentation." Journal of Planning Education and Research 29(1): 114-14.
- Krieger, M. H. and T. Holman (2007). "A dozen" tamales!": Documenting the aural urban sensorium." Journal of Planning Education and Research 27(2): 228-30.
- Kuby, M., A. Barranda and C. Upchurch (2004). "Factors influencing light-rail boardings in the United States." Transportation Research Part A 38(3): 223-47.
- Kusumastuti, D., E. Hannes, D. Janssens, G. Wets and B. G. C. Dellaert (2010). Capturing individuals' mental representation of leisure-shopping travel decisions to inform activity-based models of travel demand. Transportation Research Board Annual Meeting, Washington, DC: 15 pages.
- Langan, C. (2001). "Mobility disability." Public Culture 13(3): 459-84.
- Letherby, G. and G. Reynolds (2005). Train tracks: Work, play and politics on the railways. New York, Berg Publishers.
- Levine, J., A. Vinson and D. Wood (1973). Subway behavior. People in places: The sociology of the familiar. A. Birenbaum and E. Sagarin. New York, Praeger: 208-16.
- Liggett, R., A. Loukaitou-Sideris and H. Iseki (2001). "Bus stop-environment connection: Do characteristics of the built environment correlate with bus stop crime?" Transportation Research Record 1760: 20-27.
- Loukaitou-Sideris, A. (1999). "Hot spots of bus stop crime." Journal of the American Planning Association 65(4): 395-411.

- Loukaitou-Sideris, A. (2006). "Is it safe to walk? Neighborhood safety and security considerations and their effects on walking." Journal of Planning Literature 20(3): 219-19.
- Loukaitou-Sideris, A. (2009). How to ease women's fear of transportation environments: Case studies and best practices. Mineta Transportation Institute, San Jose State University: 82 pages.
- Loukaitou-Sideris, A., R. Liggett and H. Iseki (2002). "The geography of transit crime: Documentation and evaluation of crime incidence on and around the green line stations in Los Angeles." Journal of Planning Education and Research 22(2): 135-51.
- Loukaitou-Sideris, A., R. Liggett, H. Iseki and W. Thurlow (2001). "Measuring the effects of built environment on bus stop crime." Environment and Planning B 28(2): 255-80.
- Loukaitou-Siders, A. (1999). "Hot spots of bus crime: The importance of environmental attributes." Journal of the American Planning Association 65(4): 395-411.
- Maines, D. R. (1977). "Tactile relationships in the subway as affected by racial, sexual, and crowded seating situations." Journal of Nonverbal Behavior 2(2): 100-08.
- McBeth, M. (2009). Long live the 'Velorution'!: Cycling, gender and emotions. Gendered journeys, mobile emotions. G. Letherby and G. Reynolds. Burlington, VT, Ashgate Publishing Company: 165-76.
- Meyer, M. and E. Miller (2001). Urban transportation planning: A decision-oriented approach. New York, McGraw-Hill.
- Mikkelsen, M. R. and P. Christensen (2009). "Is children's independent mobility really independent? A study of children's mobility combining ethnography and GPS/mobile phone technologies." Mobilities 4(1): 37-58.
- Nash, J. (1975). "Bus riding: Community on wheels." Journal of Contemporary Ethnography 4(1): 99-124.
- Papacostas, C. S. and P. D. Prevedouros (2001). Transportation engineering and planning, 3rd edition. Upper Saddle River, NJ, Prentice-Hall.
- Papinski, D., D. M. Scott and S. T. Doherty (2009). "Exploring the route choice decision-making process: A comparison of planned and observed routes obtained using person-based GPS." Transportation Research Part F 12(4): 347-58.
- Pink, S. (2001). Doing visual ethnography. Thousand Oaks, CA, Sage.
- Pink, S. (2008). "Mobilising visual ethnography: Making routes, making place and making images." Forum Qualitative Sozialforschung 9(3): Art. 36.
- Pucher, J., Z.-R. Peng, N. Mittal, Y. Zhu and N. Korattyswaroopam (2007). "Urban transport trends and policies in China and India: Impacts of rapid economic growth." Transport Reviews 27(4): 379-410.
- Pucher, J. and J. L. Renne (2003). "Socioeconomics of urban travel: Evidence from the 2001 NHTS." Transportation Quarterly 57(3): 49-78.
- Reed, R. and S. Sen (2004). Evaluation of pedestrian safety campaigns. National Transportation Center, Morgan State University: 48 pages.
- Reynolds, G. and J. Rose (2009). Ambivalent journeys? Some emotional 'ups' and 'downs' of service bus drivers in England. Gendered journeys, mobile emotions. G. Letherby and G. Reynolds. Burlington, VT, Ashgate Publishing Company: 145-57.
- Rocci, A. (2009). "A semidirective interview method to analyze behavioral changes: A focus on two case studies." Transportation Research Record 2105: 37-43.

- Roe, P. G. (2000). "Qualitative research on intra-urban travel: An alternative approach." Journal of Transport Geography 8(2): 99-106.
- Rosenbloom, S. (2005). The mobility needs of older Americans: Implications for transportation reauthorization. Taking the high road: A metropolitan agenda for transportation reform. Washington, DC, Brookings Institution: 227-54.
- Ross, C. (2000). "Walking, exercising, and smoking: Does neighborhood matter?" Social Science and Medicine 51(2): 265-74.
- Slosar, J., John (1973). "Ogre, bandit, and operating employee: The problems and adaptations of the metropolitan bus driver." Urban Life and Culture 1(4): 339-62.
- Stanko, E. (1990). Everyday violence: Women's and men's experience of personal danger. London, Pandora.
- Syed, S. J. and A. M. Khan (2000). "Factor analysis for the study of determinants of public transit ridership." Journal of Public Transportation 3(3): 1-17.
- Symes, C. (2007). "Coaching and training: An ethnography of student commuting on Sydney's suburban trains." Mobilities 2(3): 443-61.
- Taylor, B. D. and C. Fink (2009). Explaining transit ridership: What has the evidence shown? Annual Meeting of the Association of Collegiate Schools of Planning, Crystal City, VA: 30 pages.
- Taylor, B. D., H. Iseki, M. A. Miller and M. Smart (2009a). Thinking outside the bus: Understanding user perceptions of waiting and transferring in order to increase transit use. University of California, Berkeley, Partners for Advanced Transit and Highways (PATH): 297 pages.
- Taylor, B. D. and M. Mauch (2000). Gender, race, and travel behavior: An analysis of household-serving travel and commuting in the San Francisco Bay Area. Women's Travel Issues Second National Conference, Baltimore, MD: 34 pages.
- Taylor, B. D., D. Miller, H. Iseki and C. Fink (2009b). "Nature and/or nurture? Analyzing the determinants of transit ridership across US urbanized areas." Transportation Research Part A 43(1): 60-77.
- Tertoolen, G., D. Van Kreveld and B. Verstraten (1998). "Psychological resistance against attempts to reduce private car use." Transportation Research Part A 32(3): 171-81.
- Transportation Research Board (2007). Special report 288: Metropolitan travel forecasting: Current practice and future direction. National Research Council, Washington, DC: 132 pages.
- Urry, J. (2007). Mobilities. Malden, MA, Polity Press.
- Valenzuela, A., L. Schweitzer and A. Robles (2005). "Camionetas: Informal travel among immigrants." Transportation Research Part A 39(10): 895-911.
- van den Scott, L. J. (2009). Cancelled, aborted, late, mechanical: The vagaries of air travel in Arviat, Nunavut, Canada. The cultures of alternative mobilities: Routes less travelled. P. Vannini. Burlington, VT, Ashgate Publishing Company: 211-26.
- Vannini, P. (2010). "Mobile cultures: From the sociology of transportation to the study of mobilities." Sociology Compass 4(2): 111-21.
- Voilmy, D., Z. Smoreda and C. Ziemlicki (2008). "Geolocation and video ethnography: Capturing mobile internet used by a commuter." Mobilities 3(2): 201-22.
- Werkele, G. and C. Whitzman (1995). Safe cities: Guidelines for planning, design and management. New York, Van Nostrand Reinhold.

- Whitelegg, D. (2009). When being at work isn't work: Airline cabin crew, emotional labour and travel. Gendered journeys, mobile emotions. G. Letherby and G. Reynolds. Burlington, VT, Ashgate Publishing Company: 133-43.
- Yago, G. (1983). "The sociology of transportation." Annual Review of Sociology 9: 171-90.
- Zurcher, L. A. (1979). "The airplane passenger: Protection of self in an encapsulated group." Qualitative Sociology 1(3): 77-99.

Appendix A: UCLA Transit Photo Project Website Schematic

[TITLE] UCLA TRANSIT PHOTO PROJECT

Welcome to the UCLA Transit Photo Project website.

If you've already registered, please log in below. If you have not completed your registration, you will be directed to that page first.

My email address is:

I'm already registered and my password is:

I'm a new user

Log In

[Forgot your password?](#)

[Having problems registering?](#)

[Want more information about this project?](#)

[Frequently Asked Questions \(FAQs\)](#)

[REGISTRATION PAGE]
UCLA TRANSIT PROJECT

- First name
- Last name
- Email address
- Password
- Telephone number
- City where you currently reside
- Your residential zip code
- Sex
 - Male
 - Female
- Race/ethnicity (check all that apply)
 - White or Caucasian (not of Hispanic origin)
 - Black or African American (not of Hispanic origin)
 - Hispanic or Latino
 - Asian/Asian American
 - American Indian or Alaska Native
 - Native Hawaiian or Other Pacific Islander
 - Other (specify)
- Year of birth
 - 19xx
- Education
 - Less than high school
 - Completed high school or GED
 - Some college or technical school
 - Completed bachelor's degree or equivalent
 - Some graduate school
 - Completed graduate degree
- Are you currently employed?
 - Yes, full time (35 or more hours per week)
 - What is your occupation?
 - Yes, part-time (less than 35 hours per week)
 - What is your occupation?
 - No
 - Are you currently looking for work?
 - Yes
 - No
- Are you a student?
 - Yes, undergraduate student
 - Major or field of study
 - Yes, graduate student
 - Major or field of study

- No
- About how many times did you ride public transit (buses, rail, taxis) in the last week? (count a roundtrip as two trips)
- Typically, about how often do you ride public transit?
 - One time or fewer per week
 - About how many times per month do you ride public transit?
 - More than once per week
 - About how many time per week do you ride public transit?
- If you used public transit in the last year, which of the following modes did you use? (check all that apply)
 - Local bus
 - Rapid bus/skip-stop bus
 - Commuter bus/express bus
 - FlyAway bus/airport shuttle
 - Metro rail/subway/light rail
 - Metrolink/commuter rail
 - Taxi or cab
 - Other
- Do you have access to a personal car, truck, van, or motorcycle for your personal use?
 - Always
 - Usually
 - Sometimes
 - Never
- How easily can you get rides in/on a personal car, truck, or motorcycle driven by someone else?
 - Always
 - Usually
 - Sometimes
 - Never

Do you have access to any of the following to use for this project (check all that apply)?

- Digital camera
- Smartphone (e.g., iPhone, Blackberry, Droid)
 - Brand and model
- Other camera phone
 - Brand and model
- I have reviewed the participant consent form and understand the terms, conditions, and expectations of this project

Submit

[PROJECT INFORMATION]
UCLA TRANSIT PHOTO PROJECT

Project Description

In the UCLA Transit Photo Project, we are using photography to examine people's experiences as they navigate the public transit networks of Los Angeles. Participants will gather pictures of the things most important to them on their transit trips and create travelogues through the project website. We will then analyze this information to understand transit travel from the perspective of users.

Camille N.Y. Fink and Brian D. Taylor are conducting this project with a grant from the University of California Transportation Center (UCTC).

Researchers

- **Camille N.Y. Fink** is a PhD student in the UCLA Department of Urban Planning. Her interests include qualitative methods in transportation research, transportation equity, the built environment, the sociology of public space, and transportation safety and security. Her dissertation work involves the use of ethnographic fieldwork to understand behavior, culture, and social norms on buses in Los Angeles. She has a BA in sociology from UC Davis and an MA in urban planning from UCLA.
- **Brian D. Taylor**, AICP, is Professor and Chair of Urban Planning and Director of the Institute of Transportation Studies at UCLA. His research examines the politics of transportation planning and finance, and the demographics of travel behavior. His current work examines (1) equity in transportation finance, (2) measuring users' perceptions of public transit, (3) alternative ways to measure congestion, and (4) the influence of travel mode on cognitive mapping of opportunities.
- **Contact us**
 - Questions about the project: ucla.transit.photos@gmail.com
 - Questions about the website: webmaster@ucla.edu

[FREQUENTLY ASKED QUESTIONS FAQs] UCLA TRANSIT PHOTO PROJECT

Frequently Asked Questions (FAQs)

Do I need to ride transit regularly to participate in this project?

No, we're looking for a range of participants – from people who use transit frequently to those who use it rarely or never.

How many times do I need to ride transit?

We would like participants to document four individual trip segments – in other words, two roundtrips, four one-way trips, or one roundtrip and two one-way trips.

What is defined as a “trip”?

For this project, your trip on transit should be considered your door-to-door trip and not just your time on the vehicle. Therefore, your trip may include travel to and from stops or stations, wait times, and, if you make one or more stops between your origin and destination, other activities that occur while you're not on a bus or train.

What kinds of public transit routes should I pick for this project? Should I ride a route familiar to me?

While taxis and shuttles technically are considered public transit, we would like you to focus on bus or rail routes for this project. You can pick any transit route on any operator in the greater Los Angeles area. You choose the starting and ending locations of your trip. You can ride a route that you know well or use often or you can choose one you don't know. Or, you can make trips on a combination of familiar and unfamiliar routes. Please contact us if you have any questions about the routes you are considering.

How many pictures should I take?

We would like you to choose and upload at least 10 photographs per trip. You will be able to upload up to 25 photos. You might find it easier to take a number of photographs and later select of set of pictures that you believe capture your transit experience.

What should I be using to take photos?

You can collect your photos using a digital camera, a camera phone, or a smartphone. We anticipate that many people will use camera phones or smartphones for this project.

What kinds of things should I be photographing?

What you decide to photograph during your transit trip is up to you. You should consider that the final set of 10 to 25 photographs will represent your experience on transit. The elements of a transit trip that are important to one person may be less so for another person. You might also find that certain things are salient for you on different trips or even on different parts of the same trip.

What should I bring with me other than my camera or cell phone?

We recommend that you carry a notebook or paper and a pen with you. When you upload your set of photos, you will also have the opportunity to add captions to each photo as well as longer descriptions about the photos (e.g., where you were located, what was happening, how you felt at that moment, etc.). You may want to jot down notes during your trip. In addition, we'll ask you for information about your trip, including where and when your trip started and ended, the route number, the trip purpose, and whether you made any transfers or stops. You may find it helpful to write this information down while you are traveling.

Is it okay to take photos on transit?

We all know that cell phones and digital cameras have become part of our daily existence. In particular, cell phones are commonplace in public places where people use them to talk, to take pictures, and to record videos. In many ways, we've become very desensitized to people using cell phones around us all the time. We do not anticipate your photo gathering activities for this project to be much different than what you likely do regularly with your cell phone or camera. However, we encourage you to avoid any situations where you feel uncomfortable or at risk, where your activities might make other people around you feel uncomfortable or at risk, or where there is direct confrontation or hostile behavior.

Will I be compensated for participating in this study?

For your participation in this study, you will be entered in a drawing for one of four gift cards (\$100, \$50, \$25, \$25) to a major retailer.

Who are the researchers conducting this study?

Camille N.Y. Fink and Brian D. Taylor from the UCLA Department of Urban Planning are conducting this project with a grant from the University of California Transportation Center (UCTC).

Who should I contact if I have additional questions?

Please contact us at ucla.transit.photos@gmail.com if you have any questions.

[PHOTO INFO PAGE]
UCLA TRANSIT PHOTO PROJECT

- Was this a roundtrip or a one-way trip?
 - Roundtrip
 - One-way
- Where did your trip start and end? Please report the intersection nearest to your stop (e.g., Westwood/Wilshire, Hollywood/N. Stanley)
 - Start location
 - Turnaround location [for roundtrip only]
 - Add pop-up link/box that states “Your turnaround location is the place where you began your return trip”
 - End location
- When did your trip start and end?
 - Start time
 - End time
- Which agency operates the vehicle you rode?
 - Metro/Los Angeles County MTA
 - Antelope Valley Transit Authority
 - Culver CityBus
 - Foothill Transit
 - Los Angeles Department of Transportation (LADOT)
 - Long Beach Transit
 - Montebello Bus Lines
 - Norwalk Transit
 - Santa Monica Big Blue Bus
 - Santa Clarita Transit
 - Torrance Transit
 - Other (please specify) [text box]
- [For one-way trip only]
 - What was the route number of the vehicle you rode?
- [For roundtrip only]
 - What was the route number of the vehicle you rode from the start location to the turnaround location?
 - What was the route number of the vehicle you rode from the turnaround location to the end location?
- What was the purpose of your trip? (check all that apply)
 - To/from work
 - Work-related business
 - Shopping
 - Family/personal business
 - School/church
 - Social/recreational
 - Other (please specify)
- Were you traveling alone or with someone?

- Alone
 - With someone
- Did you make any stops or transfer along the way?
 - No
 - Yes, I made xx stops or transfers
- How often do you make this trip?
 - Frequently/regularly
 - Sometimes
 - Rarely
 - Never before this trip
- How familiar would you say you are with this route?
 - Extremely familiar
 - Somewhat familiar
 - Not very familiar
 - Not familiar at all
 - Please explain [text box]

Proceed to photo upload page

[PHOTO PAGE – START]
UCLA TRANSIT PHOTO PROJECT

- Upload photo button [connects to user’s hard drive]
- Photo caption [text box]
- Please describe this photo in as few or as many words as you would like. [text box]

Upload another photo

Save and log out

Finish/submit

Return to previous page [after page #1]

[This page gets repeated over for the max number of photos to be uploaded per trip – at least 10 photos – up to 25 photos]

- Were there any photos you wanted to take, but did not for some reason? Please describe.
- Is there anything in closing you would like to add to help us understand the experience of your transit trip as captured in these photos?

**[PARTICIPANT CONSENT FORM]
UCLA TRANSIT PHOTO PROJECT**

University of California, Los Angeles

RESEARCH INFORMATION SHEET

The Presentation of Self in Everyday [Transit] Life: An Ethnographic Study of Public Transit Culture and Behavior in Los Angeles

You are asked to participate in a research study conducted by Brian D. Taylor, Ph.D., and associates from the Department of Urban Planning at the University of California, Los Angeles. You were selected as a possible participant in this study because you expressed interest in this project and met the list of participation criteria. Your participation in this research study is voluntary.

Why is this study being done?

This study uses visual images to document and understand transit spaces and the transit experience. Riders will identify the most important features of their transit journeys and collect photographs during their trips.

What will happen if I take part in this research study?

If you volunteer to participate in this study, the researcher will ask you to do the following:

- Make two roundtrips, four one-way trips, or one roundtrip and two one-way trips on public transit in the greater Los Angeles area
- Conduct your trips during April and May 2010
- Collect at least 10 and up to 25 photos per trip
- Upload a set of photos (at least 10 photos) to the project's data collection website
- Add captions to the photos and text about the photos and your experience

How long will I be in the research study?

Participation in the study will take a total of about 6-12 hours total during the two-month data collection period.

Are there any potential risks or discomforts that I can expect from this study?

We anticipate that the data-gathering activities for this project will pose minimal risk to you because you will be gathering data in public and semi-public places while engaging in a regular and routine activity (riding transit).

Are there any potential benefits if I participate?

You will not directly benefit from your participation in the research.

The results of the research may transit practitioners and officials better design, manage, and operate their systems and provide better and more effective transit services to a broader segment of society.

Will I receive any payment if I participate in this study?

For your participation in this study, you will be entered in a drawing for one of four gift cards (\$100, \$50, \$25, \$25) to a major retailer.

Will information about me and my participation be kept confidential?

Any information that is obtained in connection with this study and that can identify you will remain confidential. It will be disclosed only with your permission or as required by law. Confidentiality will be maintained through the safeguarding of data. Information from and about participants will be stored on a secured server at the Institute of Transportation Studies (ITS) in the UCLA School of Public Affairs. Only the study's investigators will have access to participant information and data submitted via the data collection website.

- **Withdrawal of participation by the investigator**

The investigator may withdraw you from participating in this research if circumstances arise which warrant doing so. If you are unable to gather photos and upload them to the data collection website by the end of the data collection period, you may have to drop out, even if you would like to continue. The investigator will make the decision and let you know if it is not possible for you to continue. The decision may be made because the researchers must complete the data collection in the specified time frame.

What are my rights if I take part in this study?

You may withdraw your consent at any time and discontinue participation without penalty or loss of benefits to which you were otherwise entitled.

You can choose whether or not you want to be in this study. If you volunteer to be in this study, you may leave the study at any time without consequences of any kind. You are not waiving any of your legal rights if you choose to be in this research study. You may refuse to answer any questions that you do not want to answer and still remain in the study.

Who can answer questions I might have about this study?

In the event of a research related injury, please immediately contact one of the researchers listed below. If you have any questions, comments or concerns about the research, you can talk to the one of the researchers. Please contact Brian D. Taylor at 310-903-3228 or ucla.transit.photos@gmail.com.

If you wish to ask questions about your rights as a research participant or if you wish to voice any problems or concerns you may have about the study to someone other than the researchers, please call the Office of

the Human Research Protection Program at (310) 825-7122 or write to Office of the Human Research Protection Program, UCLA, 11000 Kinross Avenue, Suite 102, Box 951694, Los Angeles, CA 90095-1694.