

**THE FLOW OF CITY LIFE:
AN ANALYSIS OF CINEMATOGRAPHY AND URBAN FORM IN
NEW YORK AND LOS ANGELES**

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Presented to
The Academic Faculty

By

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AN ANALYSIS OF CINEMATOGRAPHY AND URBAN FORM
IN NEW YORK AND LOS ANGELES**

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SUMMARY

This dissertation uses quantitative data on city cinematography and the morphological study of filming locations to identify how differences in ways of seeing cities, as shaped by cinematographic choices, are anchored both in differences in what is physically present as well as in differences in frameworks and expectations about what might be interesting or important to see.

Four films are evaluated that are set in Los Angeles and New York, two cities recognized as paradigms in American urbanism: *The Naked City* (1948), *The Long Goodbye* (1970), *Goodfellas* (1990), and *Pulp Fiction* (1994). In general, the New York movies suggest the embeddedness of the individual in the city and its social life in ways tied closely to urban form, with the visual presentation of the street acting as an index to the position of the individual within the narrative. Los Angeles, by contrast, presents the city as a series of enclaves linked by infrastructure. The street as a sociologically relevant entity hardly exists, with the exception of a handful of chase scenes, as though only crisis can catalyze direct encounters with the streets of Los Angeles.

Within individual movies, the depiction of city form reveals directorial idioms in the presentation of the narrative. *The Naked City* exploits corner shots to impart greater visual interest to the presentation of activity in the streets. *The Long Goodbye* shows the degradation of the distinction between public and private space as concurrent with a city form and culture that resists decoding. *Goodfellas* develops a grammar of views on the street that corresponds to the relationships of individual characters to overlapping social groups over time. *Pulp Fiction* mainly presents city locations as decontextualized to focus on dialogue and relationships, to sculpt urban form to meet the exigencies of the narrative, and to all the more powerfully introduce surprise.

In the concluding chapter, the qualities of the city as presented in *Goodfellas* and *Pulp Fiction* and both of the cities are diagrammed and discussed relative to architectural precedents and ideas that might inform architectural design.

CHAPTER 1: INTRODUCTION

City form provides a framework for how we experience and understand various activities and experiences in life. In architecture, disciplinary knowledge of city form often draws on paradigms that distinguish the traditional, dense city from a more sprawling morphology. There are several important, related branches of inquiry that tie city form type to culture and the experiences of cities. Social-science-inflected research on questions of city form and experience has often proceeded either through engagement of city-dwellers as participants who self-report, directly or indirectly, on their experiences (e.g., Lynch, 1960), while descriptive approaches from urban planning often describe overarching historical and cultural developments that occurred together with the emergence of various city forms (e.g., Southworth & Ben-Joseph, 1997). This dissertation was undertaken to incorporate a concern with subjective experience (in contrast, for example, with the much broader developments outlined by Southworth and Ben-Joseph) and an interest in the effects of form on experience that are definite, but not necessarily readily available to conscious reflection (in contrast with Lynch's reliance on that which subjects could recall and articulate or draw).

Criticism and history in architecture and urbanism provide a number of accounts of experience and understanding of city form, including those that are definite, but not necessarily readily accessible to reflection. These sources usually rely on first-person or omniscient narration that is supplemented with or subsumed into some quantity of historical or theoretical erudition. They usually focus on specific places, singly or serially. Such accounts are generally less systematic than those from social sciences or urban planning, but they often contain a variety of insights about urban form as experienced

perceptually and socially, and they sometimes imply how designers might appropriately intervene in urban settings. One might thus note a gap in the scholarship between systematic empirical approaches and accounts that address subtle aspects of how we experience and understand city form.

1.1 The problem statement

Paradigms or types of urban form—such as dense versus sprawling city, or centripetal versus centrifugal space—act as useful heuristics that tie form to experience and understanding; yet, there is little by way of *systematic* inquiry into how city typologies function *perceptually and socially*. A systematic account may be expected to reveal unexpected aspects of the “solid” and “field” distinction.¹ A natural question, at this point, might be why one should care to know how city typologies work as perceptual and social schema. The assumption underlying the present research is that architecture configures visual and social structures (Hillier & Hanson, 1984; Hillier, 1996; Bafna, 2010) and so understanding city typologies as systems of perceptual and social phenomena can be expected to provide insights for architectural design.

The present study uses quantitative data on city cinematography and the morphological study of filming locations to identify how differences in ways of seeing cities, as shaped by cinematographic choices, are anchored both in differences in what is physically present as well as in differences in frameworks and expectations that establish what might be interesting or important to see. Films, through the literal

¹ “Solid/field” terminology is adopted here from architectural theorists Collin Rowe and Fred Koetter (141, 1979/1983), because its conceptualization in physical terms more closely resonates with central concerns of architecture than related descriptions from urban planning or environmental psychology. The term is introduced more fully in the next chapter.

construction of a point of view, let us read the city and can prompt us to recognize that the way we interpret and use the city is dynamic and dependent on apparent visual and social properties. By understanding such dynamics, architects stand to enrich their capacity to intervene skillfully and deliberately on existing urban fabric, in keeping with the role of architecture as a social art.

Movie data are used for several reasons. Movie data has the capacity to support a fine-grained and systematic parsing of the solid city/field city typology and, through such study, the identification of rather detailed implications for urban co-presence and the perception of city space. Using movies solves some practical methodological problems; when we choose a film, we choose which locations and forms to study relative to the question of life in cities. This is a very beneficial help, because to sample from all views of a large city is to select from an almost infinite population of potential views. The locations and views studied herein can also be said to be culturally significant insofar as a filmmaker of critical stature and avowed interest in presenting city life has chosen them.

Over and above identifying whether and how different city form types come across in films, the present study also closely examines individual locations in terms of how, within the context of narrative film, they establish viewing positions that selectively present urban morphology. Here, the intention is to evaluate to what degree directorial choices represent a strategy that simply adapts to the urban morphology versus a strategy that takes inspiration from urban form into the construction of a specific film language. It is hoped that what emerges from these closer studies suggest analogues for how architects might intervene in urban settings, for example by using architectural form to construct schemas for visual engagement. This line of inquiry draws on how films about cities situate the viewer in a social world that may embody particular sociological textbook qualities, but, riding on top of one's recognition of such qualities, cities suggest

that certain types of experiential richness are more or less possible in certain places.

The representation of city form in film narrative may intensify the expected experiences, or, alternatively, may exploit the gaps between what one expects from the social world implicit in building form and the events that occur in the space to create dramatic tension, which a skillful filmmaker is likely to press into the service of an engaging narrative.

In sum, movies provide discretized, externalized, shareable instances of subjective experience. Movies that use location shooting link to real world settings that can be analyzed, reflecting the morphological properties of an actual physical location within a city context at a specific point in time. Movie location data and close examination of the morphology of locations themselves can support inquiry into whether or how types of urban form are experienced and understood and the degree to which the properties of the location itself become part of film art.

1.2 Research questions and general methodological premises

There are two main questions that the dissertation evaluates:

1. Given the culture of a place, how does a film create a visual language that builds on the existing reality to convey a perceptually situated understanding of the culture?
2. How does a director read and utilize the culture of a place relative to specific narrative events (such as chases)?

Many accounts of urban form from architectural criticism build up a descriptive language aimed at sharpening one's ability to see and understand the city. The first research question extends this general approach into a quantitative study of city

cinematography, involving both existing variables from film studies and newly developed variables that capture the visual presentation of city form and culture.

The quantitative study pursued under the first question is organized around city type, a topic which has been subjected to rich, critical discussion among architectural writers and theorists. While *building type* often refers to the programmatic function of a space in day-to-day usage (e.g., residential, healthcare), architectural *typology* often refers to the underlying principle that organizes a form (Rossi, 1966/1984). Typology can thus be thought of as an abstract principle. Therefore, when Rowe and Koetter distinguish between solid and field cities, they are not just taxonomizing formal properties, but they are implying that various aspects of daily perceptual activity and social organization will, in principle, correspond with the distinction. The architectural historian K. Michael Hays also sees a two-way distinction and describes it as one of abstract principle that inheres deep down at the level of “perceptual conventions” (2011, 9). In Hays’s account, the older, European city type (corresponding to Rowe and Koetter’s solid city) was characterized by the experience of space, the mnemonic function of architecture, and the production of objects, while the newer, American-like city (corresponding to Rowe and Koetter’s field) has to do with surfaces and the consumption of images. Such rich principles seem ripe for a systematic empirical parsing.

The second research question extends architect and writer Bernard Tschumi’s link from film to architecture as a celebration of events as developed in *The Manhattan Transcripts* (1994). *The Manhattan Transcripts* is a project inspired by conventions from film that visually interpreted New York in terms of events, over and above the form and space that are the typical pre-occupations of architects. The *Transcripts* can be taken to imply that urban space creates a framework of expectations about behaviors and states, which events either conform to or disrupt. That Tschumi comes to this programmatic

sense of architecture through film indicates a recognition that film can both narrate something specific (like a murder) and depict and reconstruct the underlying matrix that links urban form, culture, and activities.

The implication for architecture is that city form discloses its inherent language through events, and that this inherent language can be engaged in subsequent design interventions. The notion of the importance of the inherent design language to subsequent architectural intervention is demonstrated in recent accounts of Tschumi's architectural production from Hays (2011) and cultural scholar Nick Kaye (2013) that define Tschumi's work in terms of a language that relies on context. The second research question, thus, closely reads urban form as it is depicted and filtered during the presentation of a single event, the chase.

Four movies set in New York and Los Angeles are studied herein: *The Naked City*, *The Long Goodbye*, *Goodfellas*, and *Pulp Fiction*. These movies, with occasional exceptions, mostly conform to what Jon Elster calls the conventions of "classical" dramas (2007). It should be pointed out that both *Goodfellas* and *Pulp Fiction* have non-classical elements, such as the narrator addressing the camera directly at the end of *Goodfellas* and the convoluted sequence of the stories in *Pulp Fiction*. However, the movies mostly conform to the so-called classical parameters. Characters behave intelligibly given the state of the drama. There is full, but parsimonious storytelling. A "downhill plot" maintains local consistency in events and actions (rather than relying on, for example, extreme coincidence, to tie up loose plot threads), and the stories are ultimately psychologically and aesthetically gratifying (Elster, 252). Elster notes that each action and occurrence in a story is generally explicable twice over; it responds intelligibly to previous actions and occurrences, and it elicits those sensations that we often associate with stories, such as surprise, tension, and resolution (255).

1.3 Film location in theory and practice

Film locations establish both the space and the scene of the city presented in a film. Film theorist and historian David Bordwell describes a core-periphery schema of filmic textual structure (Bordwell, 1989). In it, the characters are central to understanding films. Elements of the “diegetic world”, or world viewed from inside the story, are secondary. These include lighting, setting, and objects, and, of course, the locations used in shooting. Third, and most peripheral, is “nondiegetic representation”, that is, things from outside of the story world, such as music, camerawork, and editing, that shape the viewer’s interpretation of film narrative. Auteur criticism places greater significance on the diegetic world and on techniques of representation, but still depends on character as the fundamental “reference point” (Bordwell, 1989, 175).

Siegfried Kracauer and Sergei Eisenstein have both noted that cities, and especially streets, have a special status in film by which the street is equated with life (Kracauer, 1960; Eisenstein, 1949). Eisenstein noted that the “unforgettable figures” from Griffith’s films walked into them “almost directly from the street” (Eisenstein, 299, 1949). Per Kracauer, the fortuitous, generally an important motif in movies, has its domain in the streets, where the accidental prevails over the providential, fleeting impressions are significant, and the incidental offers up opportunities and encounters (1960). The streets, which in an extrapolated sense can be taken to mean the city scene, present to Kracauer a constant influx of sense data from the physical world, all of which carries multiple potential meanings, all of which points to situations beyond itself; the capacity of film to capture such a flow suggests to Kracauer life itself. He uses the term “flow of life” (304) to describe this capacity in film, and he considers the flow of life to be emanation of the film medium that finds some correspondence in city spaces and streets.

The workaday reality of selecting film locations is markedly less elevated, though it merits a brief description. Typically, the decision for a film location follows narrative, both temporally and hierarchically. In film production, the screenplay implies or directly describes a setting through dialogue and exposition, and it is usually much later, as a film advances toward production, that a location is selected. During production, a location agent works with the director and production designer to secure practically viable locations that express the intended feel of the screenplay. Authenticity is not usually a criterion, so that Atlanta can stand in for Manhattan (as it does in *Anchorman 2*) or Morocco for Mombassa (as it does in *Inception*). This is consistent with Bordwell's schema, though, as mentioned previously, Bordwell notes that in auteur films as well as in more recent films, diegetic and non-diegetic aspects of the story world, including location and cinematography, take on more significance; they lend weight to the artistic effect of the film and/or assist in maintaining narrative legibility (Bordwell, 2006).

Cinematography, the science and art of film photography, is among the non-diegetic aspects of film. Aspects of cinematography are centrally expressive within film art. The *mise-en-scène* refers both to the visual content of the film, as well as to the capacity of single scenes within a film to stand for the film as a whole. The *mise-en-scène* is related to a number of film variables that will be described in chapter three, including shot distances and the framing of urban space. An important characteristic of film that will be key to the study pursued herein is editing; editing occurs in post-production, during which raw footage is assembled into the scenes that comprise a movie. Some practices in editing are aimed at preserving narrative continuity, such as the use of establishing shots and shot/reverse-shot sequences (e.g., alternating views between two participants in a conversation); others, such as montage, have more conceptual ambitions. Crucially, editing determines the length of shot and thus the visual dynamics of a film. Editing, as described by Kracauer, also has a more philosophical

dimension. It allows a filmmaker to implement intrigue, but also to turn away momentarily from the story toward things represented and dwell on them for their own sake (Kracauer, 1960).

Film is not a transparent media, and commercial fiction film is certainly not a transparent form. Understanding the tendencies in cinematography and the depiction of city space is the key to understanding strategies by which a filmmaker has attempted to convey a perceptually-situated representation of a city. This is not to say that cinematic parameters have content in and of themselves; on the contrary, they should not be read as equating with content. For example, shots that look down on actors cannot be assumed to always convey the powerlessness of the characters. However, cinematography directly forms percepts that, when considered for a movie as a whole, can reveal important tendencies in the depiction of city form.

Patrick Keating has evaluated the intersections between genre, cinematography, and the relation of urban morphology to social norms. Keating describes Kazan's apparent intent to go beyond the use of location shooting for local color in semidocumentary films to highlight how city space is connected, complex, and unpredictable, describing how Kazan brings these qualities forward in both narrative and cinematography (Keating, 2011). When comparing *Boomerang!*, set in a small Connecticut city, and *Panic in the Streets*, set in New Orleans, Keating notes differences in how the city comes for the fore, both in the narrative and in strategies in cinematography. *Boomerang!* emphasizes connections through relationships in shared spaces, and *Panic in the Streets* highlights the potentially catastrophic significance of layered, extensive urban background processes. Differences between cities shape how they take filmic events and how they structure events and activities.

In *Film Noir and the Spaces of Modernity*, Edward Dimendberg links visual and narrative content in various films noir to the cultural significance of changes in the built

space of American cities. Dimendberg is specifically interested in urban spatial “segmentation” as a phenomenon of late modernism that coincided with film noir. Such segmentation entailed a decline of the importance of public life at the center of cities. He also cites Sartre’s conception of seriality in terms of the tendency of American urban culture to define itself through separation and isolation. However, Dimendberg notes cities in noir films contain points of resistance to seriality, such as the urban scene of the Lower East Side in *The Naked City* into which a murderous thief escapes, which is characterized by rundown backyards, alleys, and a lot of tombstones (70). Sensitive to the difference between personal interactions and co-presence (and to the capacity for cities to afford rapid oscillations between the two), Dimendberg points out instances of a uniquely urban cinematic gaze, such as when a character is depicted solely through a distinctive piece of clothing, such as an unusual hat, thus combining a Simmelian sense of urban identity with the exigencies of narrative film.

These last points, on urban co-presence, merit closer discussion because co-presence links urban form and the dramaturgical aspects of social life with measurable filmic phenomena; co-presence, as it functions in cities and appears in movies, is thus centrally important to answering the research questions.

1.4 Cities as morphologies of co-presence

In *The presentation of the self in everyday life* (1959), Erving Goffman provides numerous, colorful accounts of co-presence that show how individuals modulate their behavior when in the presence or potential presence of others. Goffman uses a dramaturgical metaphor, on- and off-stage settings and behaviors, to categorize such modulations. More deeply, though, we might say that Goffman recognized that context pervades the provisional ways of being one adopts for social purposes. The immediate setting and the conditions of co-presence it stages are thus of structural importance.

Social context both constrains what will and will not be built (March & Steadman, 1971; Markus, 1993; Steadman, 2014) and stipulates what kinds of activities are appropriate or inappropriate in certain spaces, including streets (Simmel, 1971; Goffman, 1959; Markus, 1993). Co-presence is a key phenomenon that exposes and reinforces social expectations about behavior and is tractable to the analysis of locations depicted in films.

Staging of co-presence can be defined in terms of patterns of encounter. A characterizing feature of cities is the number and variety of encounters they support. Sociologist Louis Wirth, in providing a social definition of urbanism (1938), observed that, due to their large, dense populations, cities promote exposure to diversity, impersonal relationships, and individual freedom. Activist-author Jane Jacobs (1961/1989) argued that modernist urbanism fails because its forms displace a well-functioning ecology of social relationships enacted in patterns of daily encounter. Researcher William H. Whyte mapped complex patterns of encounters and relationships in suburbs and urban squares; in the latter, encounters were a metric of success for city planners (Lafarge, 2000). Culture critic Georg Simmel (1971) commented on how elaborations of co-presence, such as fashion, signal the tendency of individuals to both socialize and differentiate themselves in cities. Wirth and other sociologists as well as culture critics (including Simmel, Kracauer, and philosopher Walter Benjamin) generally viewed cities as posing the very fundamental problem of how to retain individual identity in the presence of the masses.

Space syntax has elaborated the assertion that space and society are mutually constructive into a general theory of space and a set of analytical techniques (Bafna, 2001; Hillier, 1996; Hillier & Hanson, 1984). The main measures of space syntax are aimed at the analysis of city and building plans and provide a representation of spatial configuration and its sociological significance, sometimes termed its “spatial culture”.

Syntax has origins in the question of space as an aspect of society, though it was not constructed atop sociological theory. Its first charges were to find the elementary structures of human spatial organization, represent them in unambiguous notation, and show how they are interrelated and can be combined (Hillier & Hanson, 1984).

Investigation of cities as morphologies of co-presence has led to theories of spatial culture related to natural movement (Hillier et al, 1993), the distribution of attractions (Scoppa, 2013), and the description of city typologies (Peponis, Hadjinikolaou, Livieratos, & Fatouros, 1989; Hillier, 2001). Space syntax theory and analysis have demonstrated ways that spatial configuration contributes to informal, sometimes transitory, social relationships (Hillier, Hanson, Peponis, & Burdett, 1983; Hillier, 1989), formal and informal learning (Peponis et al., 2007; Peponis, Conroy-Dalton, Wineman, & Dalton, 2004; Peponis, Zimring, & Choi, 1989), formulating aesthetic responses to art and architecture (Koch, 2012; Bafna, Losconzi, & Peponis, 2011; Peponis & Bellal, 2010; Bafna, 2009; Stavroulaki & Peponis, 2003), and conveying authoritarian social structures (Peponis, 1989; Hillier, 1989). Additionally, correlations between space syntax measures and indicators of co-presence (such as encounter rates) have shown that the distribution of inhabitation or use in cities and buildings can be forecasted, at least in some cases, by spatial variables (Hillier, Penn, Hanson, Grajewski, & Xu, 1993; Peponis, Hadjinikolaou, Livieratos, & Fatouros, 1989; Peponis, Ross, & Rashid, 1997).

The second research question, on whether or how filmmakers capitalize on dimensions of city form to build film art, draws on space syntax concepts and theories for understanding the spatial affordances immediate to a location. This approach aligns with cognitivist approaches to film criticism, which fix the attention on the craft of construction (Bordwell, 1990).

1.5 Plan of work

The plan of work is to begin with a review of literature that covers three topics: some critical descriptions of the city form, perception, and society nexus; descriptions of New York and Los Angeles as representing distinct paradigms in urbanism, and cinematics and analytical approaches to film. The review will provide a foundation for the description of various parts of the plan of inquiry, which is presented in chapter 3. Because there are two main questions that draw on movie data in distinct ways, the data are described and discussed in two separate chapters, the first of which rolls out the findings from the database of movie metrics, and the second of which compares images and plan views of movie locations. In keeping with the qualitative approach of the study, interpretation is discussed together with findings in an opportunistic manner together with the presentation of the results in chapters 4 and 5. The conclusion integrates and summarizes the foregoing chapters, but also sketches out implications for architects, making analogies to architectural precedent and suggesting ideas that may be relevant to architectural design.

CHAPTER 2

BACKGROUND

The overarching question the dissertation addresses has to do with the relationship between urban form, perception, and society and aims to use movie data to uncover relationships between these dimensions of city space. Operationally, the focus is on how movies build up a visual language of cities that both draws on and builds on what is there, extrapolating the cultural logic of cities into the visual film narrative. Three kinds of literature are summarized in the following chapter; the first has to do with existing accounts of interstices between urban form, perception, and society, largely from architectural critics and theorists. This next describes New York and Los Angeles as distinct urban typologies. The third introduces cinematics in the context of analytic approaches to the study of film.

2.1 City form, perception, and society: Some perspectives

To say that both architectural and filmic representations of cities are selective is to state the obvious, but a brief, illustrative example seems in order before progressing to accounts of how various writers, mostly architects, see city space. Architectural historian Anthony Vidler, in a chapter on cities in his book *Warped Space*, provides a useful example in comparing how filmmaker Sergei Eisenstein and architect Le Corbusier see the Athenian Acropolis, as indicated by their respective sketches of it. Eisenstein presents key views of the Acropolis episodically, divorced from any contextualizing framework. Le Corbusier, by contrast, presents the Acropolis as unified into a subtly ordered whole. Eisenstein is known, in part, for his markedly conceptual approach to montage which “did great violence to reality by assembling shots solely to generate an idea” (Bordwell, 1997, 52). His depiction of atomized, dramatic views of the

Acropolis would seem to reflect his filmmaking practice. His sketches of shots of the Acropolis emphasize striking variety in how one might encounter built form. Le Corbusier, by contrast, famously corrects the view in his sketch, inserting an orthographic elevation where the elevation would, in fact, be seen in an oblique view enhancing the compositional unity of the scene (Rowe and Koetter, 1979/1985, 191). While Eisenstein's dramatic power comes from presenting the Acropolis in a series of chopped-up, iconic views, Le Corbusier emphasizes a unified field of relaxed and naturalistic space defined and quilted to the ground plane by a composition of architectural works. Eisenstein's architectural forms are clear, but un-mappable. Le Corbusier trades in clarity of individual forms for relational map-ability. The question of inclusivity of urban form within artistic representations taken up again, in chapter 3, where it is discussed as part of the method.

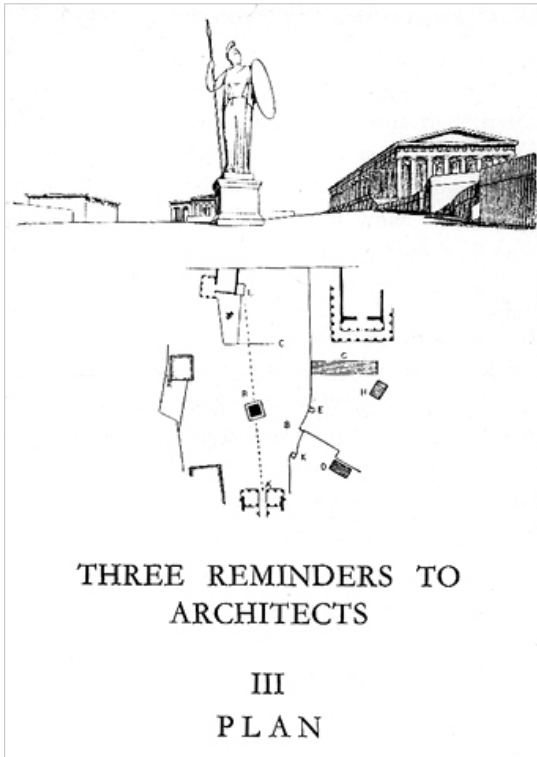


Figure 2.1: The unifying presentation of the Acropolis in Le Corbusier's sketch. (Source: Le Corbusier, 1923/1985).

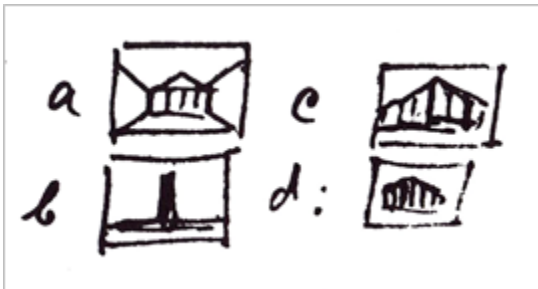


Figure 2.2: Eisenstein's montage of the Acropolis, which highlights views as discrete (Source, Vidler, 2000).

In an essay on the Vasari corridor in Florence, which connects the Palazzo Vecchio to the Palazzo Pitti, Michael Dennis illustrates how perceptual richness and ambiguity create a sense of deep engagement with urban form (Dennis, 1980); the urban corridor, as he describes it, morphs, in short sequence, from a theater, to an anteroom, to a portico. Dennis's parade of metaphors imply that urban space is equally animated by things we see and ideas they bring to mind, by percept and by concept. A quad of statues at the façade of the Palazzo Vecchio, which are arranged to suggest an exaggerated perspectival view to the building façade, exemplify how perceptual activity can be enhanced by ambiguity. Dennis points out that perceptual and conceptual ambiguities coincide, in equal measure, in the Uffizi Gallery, an elongated outdoor room bounded by thick, inhabitable, articulated facades (Figure 2.3); "Conceptually the space is the figure and the rooms behind are the ground. Perceptually, however, the space becomes the ground, and the rooms of the building, and the rooms of the city, become figural" (Dennis, 70).

The shifting conceptualization of space, suggested by a dense procession of dynamic percepts, creates the sense of "losing oneself" or becoming absorbed in the city; such a sense of losing oneself is a hallmark of aesthetic experience (Eldridge, 2003). Further, this perceptual and conceptual ambiguity, per Dennis, underlies the capacity of the Vasari corridor to form connections at multiple scales of urban form, to become memorable, and to stage interesting and unexpected visual relationships. Dennis finally proposes an overriding metaphor of the city as a museum, in effect staking both cultural conservation and didactic functions for urban design (Greenhill, 1992).

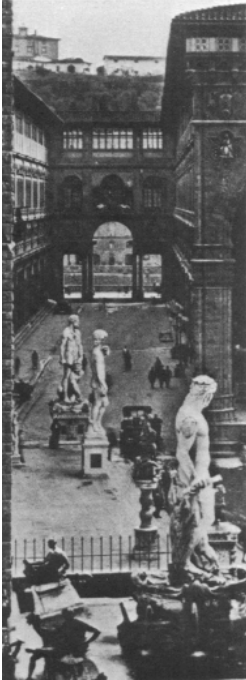


Figure 2.3: The Uffizi is conceptual figure and perceptual ground (Source: Dennis, 1980)

More broadly, and in distinction from Dennis, Collin Rowe and Fred Koetter address the complexities in the heritage of urban design as both socially and perceptually significant. In *Collage city*, Rowe and Koetter describe the typology of solid and field cities, or “the open field and the closed field” (147) as introduced in the previous chapter. The so-called solid city adheres to traditional European morphologies while the field city abolishes them. In a chapter from the book, *The crisis of the object: The predicament of texture*, the authors describe how, for example, as the form of housing was increasingly determined by the functional needs of inhabitants (for such things as light and air circulation), urban form had no equal and opposite imperatives with which to counter. More concretely, as modernist and proto-modernist housing emancipated itself from continuous built mass, the freestanding building that emerged severely compromised the legibility of overall urban form, where formerly certain conventions had held sway. For instance, a dichotomy where housing fronts are public

and backs are private activates the streets much differently than a number of freestanding buildings in a field, even where some attempt is made to emphasize the street that fronts an array of houses. Rowe and Koetter propose that the traditional city had “a perceptual base” (64) that made city space legible. This is mainly explained through its opposite, through the perceptual and conceptual experience of the modernist, or field, city. The figural buildings of such a city can be observed, enjoyed, and compared along the same dimensions as most groups of objects (e.g., by their density, identity, and proximity), but the unbounded, naturalistic flow of space deprives the experiencing subject of a frame of reference. The authors propose that visual interest in objects themselves eventually exhausts itself, giving way to innate perceptual tendencies of “closure, screening, segregation of information” (64), implying disengagement and alienation. They seem to suggest that while objects engage attention for a little while, relationships with a framing background are necessary to guide and sustain attention.

Rowe and Koetter describe a specific scenario meant to demonstrate how the modernist city fails to engage the imagination, and they thus question a canard of the modernist city, that open space must be public and accessible. (They are not very sanguine on implementation of idealist dimensions of modernism, noting the ubiquity with which the “the city in the park became the city in the parking lot” (65)). As part of a little thought experiment, they picture a walk through a city during which one is imagining what is happening in rooms that are partly visible from the street and reacting, emotionally and intellectually:

One walks through the city—whether New York, Rome, London, or Paris no matter; one sees lights upstairs, a ceiling, shadows, some objects, but, as one mentally fills in the rest and imagines a society of unexampled brilliance from which one is fatally excluded, one does not feel exactly deprived...For, in this curious commerce between the visible and the undisclosed, we are well aware that we too can erect our own private proscenium and, by turning on our own lights, augment the general

hallucination which, however absurd it may be, is never other than stimulating (66).

The authors explicitly identify a role for imagination in constructing city experience, which rests on the basic dynamics of encounter, projected reciprocity, and the specific visual conditions of the format in which others and the self are presented. Goffman's dramaturgical metaphor maps directly onto such a conception of the city as theater, implying both an active role for the city-dweller and specific requirements for visual conditions that maintain important illusions. The person on the street is tasked with inventing the parts of the story that are not visible; the implication is that with full visual disclosure, the imaginative capacity is made redundant and the experience of the street becomes flat. Particular unpleasant experiences ("one is fatally excluded") are presented as the hallmark of an interesting city.

A simple perceptual schema—one in which encounters are typically complicated by some degree of occlusion—writ at the scale of city, is used to distinguish between the filed city (Villa Radieuse-type cities) and solid cities, such as "New York, Rome, London, or Paris":

This is to specify, in a particularly extreme form, a way in which exclusion may gratify the imagination. One is called upon to complete apparently mysterious but really normal situations of which one is made only partially aware; and if, literally to penetrate all these situations would be destructive of speculative pleasure, one might now apply the analogy of to the fabric of the city as a whole. Which is quite simply to say that the absolute spatial freedoms of the Ville Radieuse and its more recent derivatives are without interest; that rather than being empowered to walk everywhere-everywhere being always the same-almost certainly it would be more satisfying to be presented with the exclusions-walls, railings, fences, gates, barriers-of a reasonably constructed ground plane (67).

Where Dennis suggests relationships between percept, concept and form, Rowe and Koetter extend the discussion into society. Sociologist Richard Sennett goes a step further when, in *The conscience of the eye: The design and social life of cities*, he sketches out interstices between city form, visual perception, and civic ethics. He notes that cities tend to produce a degree of social aversion and hypothesizes that this phenomenon has its roots in Christian edicts to regard the inner world as more true and pure than the material world. He suggests, as a corrective measure, that cities must encourage experiences of difference and exposure. One of the numerous ways that he ties this thesis to city form is by describing a walk he routinely took across Manhattan—through an area dominated by drug-dealing; on to Gramercy Park, where old-money and modest, middle-aged urbanites shared the public realm; then on to an area of small retail, mostly niche goods, some of a risqué nature, and so on. In terms of urban form, Sennett describes his promenade as falling under the rubric of a common schema: the linear sequence that is disrupted by various nodes, paths, districts, and landmarks, to use Kevin Lynch's terminology. One might expect Sennett to conclude by extolling the sense of freedom one gains in the presence of diversity. He does not. He goes in the opposite direction, describing how exposure to others produces an awareness of them that is inflected by reticence to intrude upon their affairs and an attendant modulation of one's own behavior. In this account of urban form and culture, mutual exposure has produced a precursor to the development of a social conscience.

Sennett's ambitions for urban form are grand insofar as they link to civic ethics. Despite some fundamental differences in values, the work of Bernard Tschumi resembles that of Sennett insofar as he is concerned with a related phenomenon; the capacity of architecture and its representations to signify internal conditions and states, developed especially in *The Manhattan Transcripts* (1981/1994). As described in the previous chapter, events are key to Tschumi's attempt to enrich what architecture

signifies, in part because they contain story fragments, “they belong to the category of the narrative (as opposed to the descriptive)” (Tschumi, XXI). He acknowledges a reliance on “notions” (XXVII) from editing in film, taking the link of film to architecture both into the celebration of events and the celebration of the framing of events as key to representing emotion and experience in architecture.

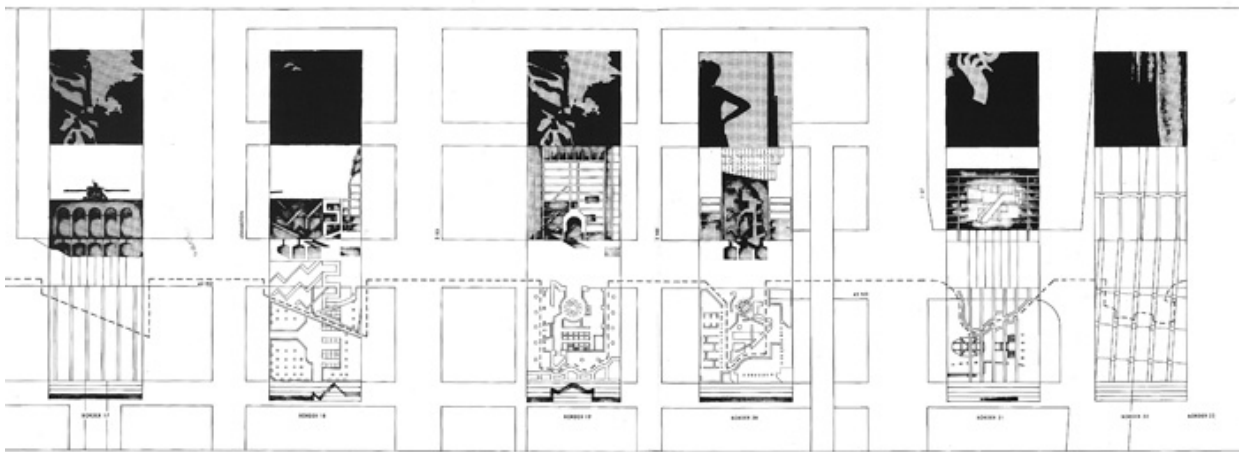


Figure 2.4: An image from *The Manhattan Transcripts*

Tschumi, Sennett, and Rowe and Koetter all invoke New York in their descriptions of city form, perception, and experience; Dennis describes Florence. All of the descriptions rely on what Rowe and Koetter would call the solid city typology. However, the solid city is neither the only nor the most prevalent urban form in the United States, though it appears to be the more idealized form. Its alternative, the field city, also merits description and theorization, both because it has the capacity to reveal assumptions about the solid city and for its sheer prevalence. The following section begins to address both of Rowe and Koetter’s typologies through New York, a solid city, and Los Angeles, a field city.

2.2 New York and Los Angeles

The present study evaluates movies from Los Angeles and New York, but there is no intent to originally discover that the two cities are different typologically. They are already well-known types: the situated, compact urbanism of New York that is, at least by American standards, the opposite of sprawling, disjointed Los Angeles. For present purposes we follow Aldo Rossi's definition of *typology*, in which type is an a priori logical principle that organizes and constitutes form and is "permanent and complex" (1982, 40). Such a definition allows us to consider each typology as a principle that has some degree of internal consistency. To begin to understand New York and Los Angeles as instances of the two types, each city is introduced below using descriptions by architects and writers from a variety of disciplines.

2.2.1 Los Angeles

In *Los Angeles: The Architecture of Four Ecologies*, Reyner Banham extolls certain "post-urban" conditions on the Golden Coast, especially the innovative, unpretentious homes; the cheap, fantastical commercial architecture; the pedestrian shopping districts, and the freeways, which, imbued with kinesthetic and sculptural glee, are "one of the greater works of man" (89). Banham's account describes how particularities of Los Angeles history, geography, and culture gave rise to a patchwork of "ecologies", or discrete, self-contained, but always artificially sustained environments, set cheek-by-jowl, and connected in an indifferent manner by giant, high-speed roadways. In giving a non-pathological description of Los Angeles that was contrary to the preponderance of accounts by his contemporaries, Banham also provided notes on a modality of city experience where the dominance of the car is part of the fundamental logic and poetics of everyday life.

As Banham describes it, Los Angeles is structured by an aspiration toward a bourgeois conception of the good life on an urban homestead, and a key oddity arises insofar as the entire city, not just its suburbs, is shaped by this aspiration. It all but goes without saying that Los Angeles has sacrificed opportunities for casual encounter on the street completely (p. 237) in favor of mobility and aspiration toward refinement. The value of mobility to Angelinos is a foregone conclusion. As evidence of the pursuit of refinement, Banham points to consistent, though definitely scattered, instances of architectural excellence, including at the arcades of Venice, the Watts Tower, the Eames House, Disneyland, and a smattering of Frank Lloyd Wright buildings. Banham also supplies inadvertent support for his notion that Los Angeles provided a rich stratum for architectural excellence; mixed in with description of paragons of architectural history, Banham, circa 1971, casually describes projects by two young, somewhat promising, markedly non-famous architects of 1960s and 70s Los Angeles, Frank Gehry and Cesar Pelli, now canonical figures in twentieth and twenty-first century architecture.

Driving itself is, per Banham, the locus of the phenomenal experiences of the city; only while driving can one reconstruct the parts of Los Angeles, if not into a coherent whole, then into an engaging succession of parts. Indeed, attention in such a city as Los Angeles and in such an account as Banham's, is activated at two extremes; the large scale of the urban landscape viewed from the car and at the close scale of the building, the mall, the arcade, engaged as a near environment, with limited scope for movement. The disconnectedness of scales and modalities of moving and seeing, together with the rich visual character of the settings, imply that the cognitive mapping of Los Angeles is itself guided by local, immediately visible features. The intermediate scale, where the "life of the street" would normally occur, is in Banham's LA a barely perceptible interlude between the thundering freeway and the static building at the arrival:

The first time I saw it happen nothing registered on my conscious mind because it all seemed so natural – as the car in front turned down the off-ramp of the San Diego freeway, the girl beside the driver pulled down the sun-visor and used the mirror on the back of it to tidy her hair. Only when I had seen a couple more incidents of the kind did I catch their import: coming off the freeway is coming in from the outdoors. A domestic or sociable journey in Los Angeles does not end so much at the door of one's destination as at the off-ramp of the freeway, *the mile or two of ground-level streets counts as no more than the front drive of the house* (p. 120, my italics).

This suppression of the middle scale as a concept, a part of daily experience, and an organizing principle for public life can be considered an important distinguishing characteristic of the field city, for while L.A.-style urbanism shares with modernism a love of mobility and its freedoms, illusory or real, it accepts the fragmented and the artificial as conditions of mobility.

Frederic Jameson takes a much more grim tone in his account of developer-architect John Portman's Bonaventure hotel in Los Angeles, through which he describes some particularities of post-modernist space. Jameson's reading of the space emphasizes the significance of the building's emphatic closure. The building entrances are at unceremonious locations, and they open to convoluted paths. Upon entering, vertical circulation is generally required before one can access the main parts of the program. In distinction from modernism, no attempt—not even a failed attempt—is made to insert anything idealistic into the relationship between the building and the city. Indeed, Jameson interprets the Bonaventure's reflective glass façade as repelling the city. Jameson further proposes that the oddly shaped space of the interior atrium volume is impossible to conceptualize. Such a patterning of space obviates the capacity to map one's own position, which, to Jameson, following Lynch (1960), undermines one's basic agency. Finally the vertical circulation—the glass-enclosed elevators that zip up and down Portman's atrium—are maligned as displacing the human body as the locus of movement. Taken together, these attributes suggest to Jameson that, in post-modernist

space, the experiencing subject forsakes the body and broader society while being absorbed into the technology of an unmappable space, that the city is a dystopia wherein attention no longer rewards one with knowledge or insight, and that the few visual and kinesthetic pleasures that exist (e.g., the elevators) are suspect.

To Mike Davis, some 20 years after Banham, Los Angeles is the urban exemplar of capitalism's logical extreme, swallowing all creative production into an agenda of economic polarization (Davis, 1990) and overtly courting ecological disaster in ways compounded by the pursuit of social inequality (Davis, 1998). Davis sees the form of the city as structured by the exigencies of commodification and defense. In *Postmetropolis: Critical Studies of Cities and Regions*, Edward Soja reads the city from a post-positivistic perspective, describing a number of "takes" on Los Angeles, variously as a fractal collection, an archipelago, and an "exopolis" (which has to do with the exurbs), among others (2010). All of these descriptions, whether optimistic or pessimistic in tone, concur in characterizing Los Angeles as typologically atomistic, disjoint, and lacking in social cohesion.

To these, Dimendberg adds an account of changing representations of Los Angeles in films noir that can be seen to connect Banham's enthusiasm with subsequent accounts that are more negative in tone (2004). Dimendberg outlines early Raymond Chandler descriptions of Los Angeles as characterized by a physical culture of a populace that was not plainly visible, but could be detected in the ubiquitous traces that were perceptible throughout the city to those who were attuned to them. In such a setting, the private detective (Chandler's Marlowe, for example) holds special knowledge; in his peripatetic activities and in his capacity to perceive traces, he stitches together various descriptions of the city; he holds the whole (169). However, as the freeway becomes more dominant and as material culture was generally displaced, the urban space of Los Angeles becomes less know-able, less operative. Dimendberg's

account of Los Angeles noir film shifts, accordingly, from films of city space to films of the road.

2.2.2 New York

While New York would seem to be a simple exemplar of the solid city, two accounts of New York by architects place the emphasis elsewhere. Rem Koolhaas, in retracing the development of Manhattan in *Delirious New York*, is excited by the virtuoso of the city's artificiality, a quality he claims even for Central Park, which he views more as a layer of carpet than an assertion of nature. Like Banham, Koolhaas finds piecemeal development, in specific geographic, historical, and cultural circumstances, an animating force for city form and experience; however, Koolhaas seems to focus clearly on the constituent parts of buildings or other attractions without much regard for the interstices between them. Most famously, Koolhaas invokes the New York skyscraper as an example of programmatic organization by fortuitous proximity, but he single-mindedly avoids acknowledgement of the life of the streets of Manhattan in any sociological sense.

Koolhaas's account of Manhattan is set in a past that is mostly documented, but certainly partly imaginary. His authorial presence is aggressive, but convoluted. However, he directly states certain ideals about urban experience in his "Talks with Students" (Kwinter, 1996), where he outlines several points for an architecture that recreate certain aspects of city experience. This architecture consists of dissociated parts that are designed to amplify their individuality; the parts are unified by circulation that is indifferent to local peculiarities, and the entire project takes place in the context of an aesthetic of bigness. Big things, remarkable forms, and globally ordered connections between them suggest that Koolhaas's approach to attention, aesthetics, and imagination is loosely rule-bound, in anticipation of a broadly predictable response to

built form. In this sense, Koolhaas's preoccupation with psychoanalyzing the masses, if a bit silly, was on some level in earnest.

Koolhaas's theory and built work are deeply indebted to a comparatively obscure figure in architectural history. Hugh Ferriss, who worked as a renderer and architect in New York for the first half of the twentieth century, put forth a heady, prophetic account of "The Metropolis of Tomorrow" in 1929. The Metropolis, as conceived by Ferriss, is a somewhat autonomous entity. Ferriss begins his book with renderings of buildings for major architects he created through the 19-teens and 1920s, and then extrapolates what he sees as their most promising tendencies into a projected future and, in the third section of the book, into his plan for an ideal city. Ferriss is clearly Koolhaas's forebear in his passion for the large scale, for conceiving of the Metropolis-qua-New York as autonomous, and even in the finite points of fortuitous proximity of program (documented by Ferriss as a skyscraper that has "swallowed" a church) and the desire to create novel, somewhat indifferent forms of circulation. For Ferriss, the emotional force of the city, whose form lies beyond the control of architects, arises from its sublime massiveness, from which emanates the eternal "lure of the city" (59).

Ferriss's Metropolis arises from several key parameters that lie outside of architects' hands, including the need to accommodate dense traffic, but, perhaps most characteristically, the requirement to mass buildings according to zoning regulations that preserve daylight on the street and place some sort of limitation on the density of occupants. Ferriss's renderings show the building masses as shaped by zoning law, and not by architects, as the primary formal manipulation of city form.

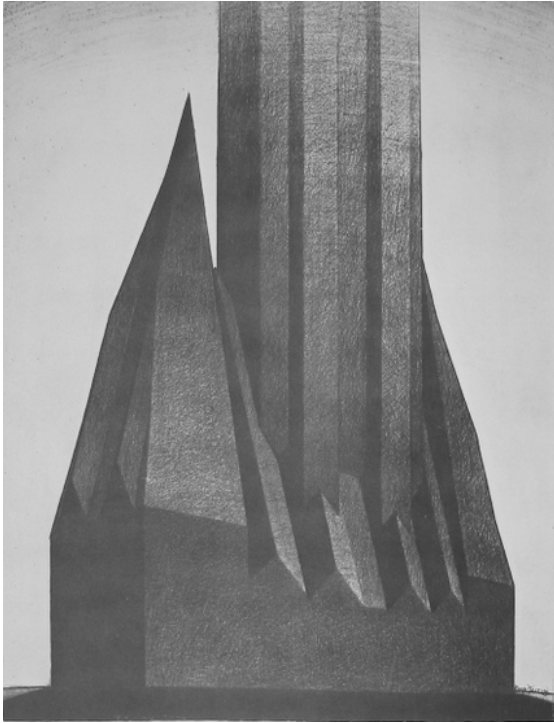


Figure 2.5: Hugh Ferriss's rendering of the permitted buildable volume

As in Ferriss's *Metropolis*, so in Koolhaas's *New York*: the denial of the social content of city form was necessary to emphasize the greatness of the individual work and the particular aesthetic experience of the whole. Koolhaas's total neglect to provide a recognizable account of the street can be taken as an announcement that his interest in New York was aimed less at documenting the city than at mining it for architectural concept. More typical descriptions of the city can be found in E. B. White's essay *Here is New York* and Jane Jacob's book *The Death and Life of Great American Cities*.

E.B. White's 1949 essay on New York describes various experiences that the dense patterns of urban form and culture create in New York, recognizing the ubiquity of chance and of the uncanny ways in which dense cities present their inhabitants. Claiming that importance of the fortuitous ("No one should come to New York to live unless he is prepared to be lucky", p. 19), White describes a variety of encounters, from near-catastrophes to star sightings to unplanned presence at historically significant

events. Such confluences of people, possibilities, and calamities require sufficiently rich background processes that large, dense cities can provide. He also describes phenomena that bring the inner self into contact with the city; one might seek out a new location with the express purpose of changing one's own mood or luck, or one might experience in New York the occasional unexpected congruence between internal thoughts and external phenomena, where the thought precedes the phenomena, which oddly, sometimes profoundly, reaffirms it, as the world itself conspires with the thought. White also describes particular ways New York generates a number of proximities that have nothing to do with the closeness of human relations, noting how the presence of others is often filtered through limited sensory channels; "...you can see in pantomime the puppets fumbling with their slips of paper (but you don't hear the rustle), see them pick up their phones (but you don't hear the ring), see the noiseless, ceaseless moving about of so many passers of pieces of paper" (29).

Jane Jacobs is more sociological and programmatic in her description of New York. An opponent to the formal theories of city planning encapsulated in the Garden City, City Beautiful, and Villa Radieuse movements, Jacobs advocated the kind of urbanism she observed in her 1940s Greenwich Village neighborhood, where society and space appeared have symbiotically evolved. In terms still used in urban planning, she promoted diversity and density through such strategies as short blocks, mixed building stock, and programming that would interleave multiple users over diurnal cycles. Among her most enduring contributions to the field are her close descriptions of individual roles in the framework of urban culture and activities and the support that such roles receive (or are denied) by specific features of New York streets. Jacobs identified streets, and not parks or other spaces specifically programmed for communitarian functions, as the proper domain of city social life and recreation. She identified co-presence on the street with something resembling a social contract that ensured safety,

served as an informational resource, and ultimately reduced discrimination and segregation.

Sennett's descriptions of New York suggest that its streets stage the sorts of exposure that can lead to social conscience. Sharon Zukin notes more recently that New York's symbolic identity is increasingly key to its economy in ways that are problematic insofar as they are associated with an undeclared agenda of privatizing the city and its resources (1995).

In general, New York appears in the literature as a city with the capacity to be both sublime and intimate. When we talk about New York, we often talk about the life of its streets, the visions of Ferriss and Koolhaas notwithstanding. New York is a city of continuous co-presence and its places are intelligible; while movement throughout the city may be burdensome, it is not necessarily prone to sharp catastrophe. Los Angeles, by contrast, exemplifies an archipelago-like disjunction, to follow the terminology used by Ungers, Koolhaas, and colleagues (2014). Places are diverse and islanded. To travel between them is to be vulnerable to sudden disruption. In the absence of an intelligible, multiscale order, one may well revert to attending to the local and thus withdraw from a more systematic understanding of one's place on the world.

The foregoing accounts organize percepts into higher-order categories of urban typology. The present study proposes to look systematically at the presentation of cities in film to gain a more specific understanding of how urban typologies are formed and how they mean. The following section looks at some relevant tools and approaches from film studies that may support the inquiry.

2.3 Cinematics and analytical approaches to film

Numerous accounts propose that cities and film are linked in essential ways in terms of their historical development and in terms of their fundamental concerns (Barber,

2002; Mennel, 2008; AlSayaad, 2006; Shiel & Fitzmaurice, 2003; Sands, 2003). Films are understood to convey sociological reality (Clapp, 2013), and yet to also resonate with personal experience (Bruno, 2004; Lamster, 2000; Shonfield, 2000). There is also a frequent invocation of the notion that cities and film share perceptual patterning (e.g., Clarke, 1997), though this tends not to be worked out in a systematic way.

Film may be viewed as a continuous and non-discrete system, with no basic unit and therefore no scope for quantitative analysis. However, “film grammar” is a tradition from within standard filmmaking approaches that discretizes film into frames, shots, scenes, and sequences (Manchell, 1990). In this conception, where the notion of grammar is basically metaphorical, frames (or stills) correspond to letters in a word and aggregate to form shots. A shot is a single, continuous run of the camera. Shots are built of frames and can be said to correspond to words. Scenes are related groups of shots, corresponding to paragraphs, which are often connected by virtue of taking place in one location or being composed of one arc of action. Sequences are sets of scenes that build up to form major parts of the story. The shot and scene will be important to the structuring of the database for this study because certain measures of cinematography can be made at the level of the shot, and scenes will matter insofar as they correspond to specific urban locations. Stills, which correspond to frames, are of course used for illustrative purposes.

It is possible to characterize movies, to some degree, by cinematographic characteristics and metrics. In his account of the history of the Hollywood filmmaking tradition (2006), Bordwell describes differences between the classical Hollywood and post-classical Hollywood era, in part using tendencies in cinematography, some of which can be quantified. The emergence of a post-classical-Hollywood style was characterized by faster editing, more close-ups, greater use of wide-angle and long-length lenses, and more dynamic camerawork. It began in the 1970s, with the appearance of the first films

of a generation of filmmakers who remain highly influential, if not directly active, today, including Martin Scorsese and Francis Ford Coppola. Bordwell refers to the later set of cinematographic conventions as “intensified continuity”. Additionally, Bordwell indicates that more recent films lean more heavily on elements of the storyworld to enrich the expression of themes and to aid the reading of the film. He notes the emergence of movies since the 1990s that engage in “worldmaking” (58), in which ambience is worked up in rich, often subtle ways to support the motifs of the film. He further argues that the more experimental the narrative (e.g., networked narratives, recursive flashbacks), the more necessary to legibility such informational cues become.

Film studies and psychology have sub-areas of study that focus on the structural features of films, including Barry Salt’s quantitative profiles of movies based on shot distance and duration (Salt, 1974/1985) and a series of studies led by psychologist James Cutting investigating how films function to maintain visual and narrative attention (Cutting, Brunick, & Candan, 2012; Cutting, DeLong, & Brunick, 2011; Cutting, DeLong, & Nothefter, 2010). In short, Cutting has found that over time movies have become faster (in terms of motion on the screen), quicker (in terms of average shot lengths), and darker (in terms of average screen luminance). Per Cutting, movies are being continuously refined to better reflect our viewing preferences, which he takes to be pre-existing and in the head. This is a narrow, metrically precise analog to Bordwell’s description of conventions in the classical Hollywood system and in the era of intensified continuity.

Cinematics is the broad term for Salt’s approach as well as the name of a Web site that provides tools, hosts a database of film measures, and contains a selection of articles applying metrics to the analysis and criticism of films (<http://www.cinematics.lv/>). In one such article, *Beyond comparing: The internal dynamics of Intolerance*, Yuri Tsivian extends the tools beyond simple comparisons of single measures between films

(such as average shot durations) to assessing the internal structure of a single film (2007). *Intolerance* is made of four stories combined through a strategy of cross-cutting that is aimed less at clarifying narrative than at suggesting concepts. Tsivian finds that the average shot lengths of each of the sub-stories vary in ways that both reflect the content of the sub-story and contribute to the dramatic tension and resolution of the whole film. Tsivian's analysis points the way toward pushing the measures toward interpretation of content instead of using it to track broader, more general trends. Such an approach is likely to be useful in evaluating the perceptual basis of urban typologies.

2.4 Summary comments

The foregoing review suggests that architectural writers have long integrated discussions of perception and society into their descriptions of city form and city type; while such discussion are often centered around specific spaces or buildings, they are also generally concerned with developing theories that relate urban form to how we experience and understand life in cities. Rowe and Koetter's distinction between solid and field cities supports a typological distinction between New York and Los Angeles, which is, in turn, supported by a number of texts that directly describe these cities. Tschumi's attempts to extend architectural representation to capture aspects of experience led him to film, which inspired him to directly map relationships among movement, space, and the events that reveal the underlying culture.

From the perspective of film studies, analytical approaches, especially cinematics, imply the possibility of probing differences between how cities are presented in a controlled and systematic manner. The depiction of city space in film is not a neutral affair, and cinematography can reflect tendencies in film in terms of how situations are framed. The following chapter describes the plan of inquiry, including strategies for extending current cinematic measures to capture more specific

information about how persons and events are framed in city space, how the city is animated, and how its elements are presented, among other things.

CHAPTER 3

PLAN OF INQUIRY

3.1 Brief overview of related approaches

The dissertation aims both at a systematic description of paradigms of urban form as well as at evaluation of how filmmakers intervene on urban form. The present inquiry takes the spatial and social to be inextricably enmeshed in the staging of experience. There is a strain of space syntax research that focuses on staging of experience, mainly in museum settings. The present approach differs from these existing studies mainly in its selection of movies as a data source and in its use of a larger dataset; however, it shares with the existing approaches a topical focus on spatial narrative.

The earliest study of space syntax and museums, by Peponis and Hedin (1982), elaborated a case study of correspondences between spatial taxonomies and the cognitive properties of encounters with museum displays. This study established for the field an approach that identified subtle but definite spatial typologies and related them to situated experience and embodied cognition. A much later but related study by Lu with Peponis (Lu, 2011; Lu & Peponis, 2013) correlated the ability to identify themes in artworks with aspects of layout. However, the main body of work on spatial narrative and space syntax is a cluster of studies that mapped or followed museum visitors users and correlated their densities and sometimes their actions with space syntax values for the inhabited space, with some authors discussing this work in terms of spatial narrative because they tracked visitors along actual spatial sequences (or paths) (Choi, 1997; Peponis, Conroy-Dalton, Wineman, & Dalton, 2004; Tortzi, 2004; Kaynar, 2005; Tortzi,

2005; Psarra, Xu & Wineman, 2007; Tzortzi, 2007; Rohloff, 2009; Tzortzi, 2011; Rohloff, 2012).

A related body of work looked less at straight correlations between spatial attributes and user behaviors, instead using analytical methods to look more into the design and experience of visual content of architecture. Stavroulaki and Peponis (2003; 2005) developed methods that described art content and display strategies as related to viewsheds at Carlo Scarpa's Castelvechio, noting especially interconnections between key viewsheds, which allowed them to comment on how movement and vision are subtly manipulated to condition experience and the formulation of meaning. Bafna, Losconci, and Peponis used syntax measures to generate paths in a museum, finding that perceptual organization of space was a means to understand how space influences imaginative. Peponis & Bellal (2005) subjected the living area of Frank Lloyd Wright's Kaufmann house to a battery of syntax analyses focused on uncovering different kinds of centrality; inherent to this approach is a critique of the standard syntax discretizations of space, which fail to note how perception constructs meaning. Koch (2012) studied contextual formulations in the staging of department store mannequins as a matter of allocentric spatial perception. Finally, the present author with Bafna (2012), plotted points on contrived trajectories through a library and evaluated gaps and congruencies between social staging, as implied by space syntax, and phenomenal staging, as conveyed by visual form as experienced during use, to develop preliminary theory on how imaginative activity is triggered in buildings.

The present method deviates from the approaches using correlations between space and behavior because it seems that the correlational approach tends to oversimplify the idea of "narrative", which is a representation of an event, to sequences of spaces visited as characterized by their space syntax values. One might argue that, when such studies claim to describe spatial narrative (and not all studies in this category

make this claim), narrative is defined in somewhat narrow terms, relying on the routes people choose (which, in museums, may be more or less imposed by curatorial decisions). There is a closer correspondence between the present approach and the analytical approaches to the design and experience of space. Namely, the present approach uses theories and techniques from space syntax, but the visual content of the settings is taken on its own terms, and theories related to visual content are drawn upon and extended in the explanation of how form works. An important difference between this study and the existing studies on visual content is that the existing studies tend to be focused on individual, unique spaces that are treated to intense sets of analyses while the present study uses numerous, spatially separated locations. It aims at a more general, broad-based approach, in keeping with an emphasis on city space and culture, as contrasted with the close study of a single setting.

3.2 Overview of the present approach

There are two main research questions. The first has to do with how a film creates a visual language that is related to the existing reality of a city and conveys a perceptually situated sense of the city. The second has to do with how the culture of a place filters the presentation of a specific narrative event. The first question will be filtered through comparisons that can be made between locations in New York and Los Angeles, two cities for whom urban form and culture have been frequently described as of contrasting types, as in the foregoing literature review. The second will be focused around chases that appear in each movie narrative.

The first question is addressed by drawing summary and other statistics from a database on filmic visual content to identify whether the way that cities are presented in the movies adheres to the distinction found in the literature review, in which Los Angeles is marked by disjunction and New York by embedment. Where relevant, the data is also

discussed relative to an initial reading of the significance of urban form to each movie, which is provided at the end of this chapter. An extended description of the variable database construction is found in the next section

The approach to the second question focuses on what is depicted in a film in the context of what is physically available at a location, drawing on plan views and street view imagery relative to chases, a key event in the narrative of each movie. The use of an event as a selection criterion accomplishes two things; it introduces a degree of control to comparisons across cities and movies, and, more centrally, it allows us to look closely at the triangular relationship between physical setting, the culture that is implied by physical setting, and the insertion of an event, which reveals the urban setting under a particular form of stress (following Tschumi, 1994/1981). Chases were selected because film is inherently well-suited to capturing movement, and chases are intensified instances of movement that are usually significant to movie narrative.

Instances of each chase were selected following criteria. The first criterion was the depiction of the activity itself, which had to be directly shown, not implied. The second was that the chase had to occur in a location for which an address was available using online resources. Third, if multiple options were available, locations which were less changed from the time of filming were preferred to locations that have undergone more changes so that current imagery can be more easily compared to film imagery of a location.

Part of the task is to compare movie imagery with plan and situated views of the city to get a sense of what is included in the frame relative to what is available. Screen captures from the movies, building footprint maps, which have been corrected to resemble the date of filming, and Google Earth street views are used to make these comparisons. In no cases are the Google Earth street views contemporaneous with

filming dates; I provide commentary pointing out areas of significant change since the time of filming.

Convex space partitioning, a technique from space syntax, is applied to plan diagrams of each site. Convex space partitioning, more commonly referred to as *the convex map*, breaks the continuous space of the street into a series of perceptually stable spaces (Bafna, 2001; Hillier & Hanson, 1984). For each convex space, every point within its bounds is reciprocally visible, and so the convex map allows us to evaluate a set of inherent perceptual boundaries for a location. Filmmakers deal in the pyramid-shaped volume of space available to the camera lens, and the evolution of film style has been described with respect to its exigencies (Bordwell, 1997). Evaluating convex partitions, which are somewhat more abstract and allocentric (following Koch, 2012), supports a discussion of whether filmmakers are similarly attentive to perceptual boundaries in space apart from those imposed by the camera, whether they exploit such boundaries to sharpen the narrative, and, if so, how perceptual boundaries are used.

Convex maps were drawn over recent GIS-based building footprint maps (from <http://bdon.org/notes/city-cad-files/>), which were hand corrected to resemble the approximate year of production using Google Earth historical imagery maps (<http://www.google.com/earth/explore/showcase/historical.html>) and Sanborn maps, which were retrievable through the New York Public Library (from <http://www.nypl.org/collections/nypl-recommendations/guides/fire-topo-property-maps>).

3.3 Description of variables and database construction

The first research question is addressed by creating a database that allows us to characterize the visual language movies use to describe their cities. Data for each movie was collected in the following levels of aggregation: movie information, location information, scene information, and shot information. For the purposes of the database,

scene refers to DVD chapters, which are taken as a parsing of the movie into smaller units which viewers are likely to find sensible; *scenes*, here are not the units of temporal or spatial continuity that are denoted in film grammar. For any shots filmed partially or completely outdoors, each row corresponds to a shot, or a continuous run of the camera. However, for filming that does not occur outdoors, the row represents the duration of time that filming contains each of the following: closed or moving cars, indoors, and non-diegetic elements, such as intertitles and credits. Shot level variables are only recorded for outdoor locations.

Movie information includes the title of the movie, the city in which it is mainly set, and the population of the Metropolitan Statistical Area for the city at the decade nearest to the year the film was released, which was a readily available measure (<http://www.peakbagger.com/pbgeog/histmetropop.aspx>). Each movie is also described by up to seven genre designations. Genre designations follow those reported on the Internet Movie Database (IMDb <http://www.IMDb.com/>) and Netflix (<http://www.netflix.com/WiHome>). IMDb uses 22 simple, easily recognizable genres (e.g., adventure, comedy, crime), often in combinations of two or three, to classify films (<http://www.imdb.com/genre/>). Netflix uses a much larger number of “micro-genres” (<http://dvd.netflix.com/AllGenresList>), such as “Hobbies & Games-Boats & Sailing” or “Drama-Tearjerkers” aimed at recommending additional titles based on a customer’s viewing history, frequently using four or more such designations per film.

Locations can span scenes (or DVD chapters) and they can be returned to repeatedly over the course of a movie. All locations are labeled according to their diegetic name. For example, the database uses *Wallace House* for a Beverly Hills mansion that is presented as the home of Marcellus and Mia Wallace, two characters from *Pulp Fiction*. Addresses, where they could be determined from various Web sites and verified in Google Earth street views, are recorded in a separate column. Start, end,

and total time in seconds are recorded for each instance of a location, as well as the name of the scene title or titles in which each instance of a location appears.

Scene-level variables are recorded for all rows. For each scene, the database holds a set of dichotomous variables on activities that occur in it. These activities are: diegetic first encounters (i.e., first encounters in the story world), non-diegetic first encounters (i.e., first encounters of characters to the viewer), chance encounters, wayfinding, chases, searches, violence, and conversations. Each of these activities was hypothesized as having the potential to reveal something about how urban form relates to activities. First encounters often involve controlled and deliberate presentations of the self that are in keeping with social roles and expectations; the number of non-diegetic first encounters, as encoded in the database, provide some sense of the capacity of a city to incorporate newcomers, introducing them into the action. Similarly, chance encounters are relevant to urban form because some structural dimensions of street networks, such as integration values, have consistently been shown to correlate with higher distributions of users (Hillier, Penn, Hanson, Grajewski, & Xu, 1993; Peponis, Hadjinikolaou, Livieratos, & Fatouros, 1989; Peponis, Ross, & Rashid, 1997), thus increasing the probability of chance encounters. Wayfinding is dependent on urban form in ways well-documented in architectural research (e.g., Haq, 2003 and Peponis, Zimring, & Choi, 1990). Following Lidwell, Holden, and Butler (2010), wayfinding was recorded as an activity if one of the following four behaviors was undertaken in a scene: some indication of an attempt to determine one's location (i.e., orientation), selecting one's route, monitoring one's route, and recognizing one's destination. Chases and searches in filmic representations of cities are both tied to genre, insofar as searches are a central motif of many films, especially noir films, and chases are an activity that is especially well-suited to representation by film. Violence has both narrative and stylistic significance to films (Bruder, 1998); it was included to track both the prevalence of

violence in films and to note the degree to which violence is associated with streets. Finally, conversation, a relatively pedestrian activity, was recorded. For the present study, scene variables are not subjected to additional analysis; none of the questions pursued herein are addressed by relating scene-level activity to the visual content of shots as recorded in the database. During data analysis, it was found that aggregating variables at the scene level was problematic. Scene boundaries were taken along DVD chapters, which had, in some cases, apparently random association to settings and film activities. In subsequent research, it may be possible to revive this line of questioning using validated methods of parsing the movie into scenes, such as that developed by Cutting and colleagues (Cutting, Brunick, & Candan, 2012).

Shot-level variables fall into two categories: cinematography and urban form. Cinematography incorporates the camera in both its logistic and poetic function and metrics are well-established in film studies. Shot start and end times are used to calculate shot duration, recorded in seconds. Shot distance is conventionally measured in terms of how much of the human figure is included in the frame, assuming upright actors (Salt, 1985). “Big close up” is the head only; “close up” is the head and shoulders; “medium close up” is the body from the waist up; “medium” is from the hip to head; “medium long” is from below the knee to the head; “long” is the full height of the body, and “very long” has the actor small in the frame (i.e, if standing, less than one-third the height of the frame). Note that the movies studied have different formats; the assessments of shot distances were not adjusted to accord with different aspect ratios of the films as there was no known precedent for doing so. (Both *The Long Goodbye* and *Pulp Fiction* have aspect ratios of 2.35:1, *Goodfellas* has a more square-ish 1.85:1 aspect ratio, and *The Naked City* has the most geometrically compact format of 1.37:1.). Camera movements were also tracked, including “pan” for lateral rotation of camera without a change in position; “tilt up” for upward rotation of camera without a change in

position; “tilt down” for downward rotation of camera without a change in position; “track” for lateral movement of the camera’s position as well as “track in” and “track out” for movements in camera position closer to or further from the subject; “crane” for vertical displacement of the camera; “zoom in” and “zoom out” for changes in the camera lens, but not its position, that appear to bring the camera closer to the subject, and “none” for no camera movement. For shots with compound movements, the predominant angle or movement is recorded.

Shot-level urban form variables convey both direct representations of the city form and intermediate representations that indirectly depict urban form and culture. The latter category includes shot animation, which tracks the maximum number of unique persons that appear in a shot. This category also includes whether a shot is on or visually connected to a street, which was assessed either through what was shown on screen or by consulting a map view of the movie location. Direct representations of the city include the orientation at which the street was filmed. This was recorded by noting if the street was presented in axial view, oblique view, or transverse view. More than one selection could be made for shots that revealed streets in various views as the camera moved. This variable was introduced because viewing the films suggested that axial, oblique, and transverse views to streets appeared to be associated with different presentation of action as well as different activities, indicating that city form seemed to have a mutually constructive relationship with the movie narrative. Though interiors were not studied directly, viewing the films also suggested the tendency of some films to more strongly segregate interiors and exteriors. The variable “spans building threshold” is used to indicate shots that show the view through the threshold at doors is used to explore this distinction using a quantitative measure.

3.4 The movies

Two movies are analyzed from New York and two from Los Angeles. Dozens of movies were considered along the criteria that they use location shooting, that location is significant to the narrative, that the film is by a director of critically-acknowledged stature, and that the cinematography shows engagement of urban form in the construction of scenes. (*Memento*, for example, includes Los Angeles scenes, but depicts them in a relatively flat, scenographic manner, almost as backdrops.)

Each movie selected makes significant artistic use of its locations. *Auteur* theory holds that while filmmaking is an industrial process, some directors succeed in exercising the influence of their personal, artistic vision to the extent that they may be thought of as a film's author, with the camera acting as metaphoric pen (Bordwell & Thompson, 397). While the term *auteur* risks marginalizing the contributions of actors, cinematographers, editors, and other individual and supra-individual influences that shape the finished movie, the selection of directors of critical standing was nonetheless considered important to establishing that movies contained culturally significant depictions of cities. The research required films to comment on the city via cinematographic choices and the linkages between those choices and narrative events; this is a highly demanding parameter that goes beyond the typical exigencies of commercial, fiction film. Not all directors, even well-regarded ones, comment in a meaningful way on city form, and even well-regarded directors can show intentional engagement of urban form in one film while relegating city form to an inert background in the next. Despite the importance of *auteurs* to the selection of the films, I often use the more generic *filmmakers* instead of *directors* when describing the films because most analysis of the films takes place at the very fine grain of the shot, where it is difficult if not impossible to ascertain by whom the many small-scale compositional decisions were made.

All four movies selected are culturally significant films in the basic sense that they have directors of stature and are generally well-regarded films. This form of significance matters to the study because the representation of cities in film is taken here to reflect a degree of consensus about how we experience and understand cities. A review by Roger Ebert is taken to imply the cultural significance of a film due to Ebert's recognized status as a reviewer who was both popular and critically acute (Serjeant, 2013).

There also had to be some documented recognition, whether by movie critics or directors themselves, that the city plays a more-than-incidental role in the movie. Where Ebert does not comment substantially on the role of the city, comments from directors or other critics are added. The movies analyzed are introduced below.

Pulp Fiction (1994, directed by Quentin Tarantino) tells three intertwined crime stories set in Los Angeles. In the storyworld of the film, there are "no normal people and no ordinary days" (Ebert, 1994); in this sense the city belongs to the schema described by Koolhaas or Banham's, a schema of maximum local incident. *Pulp Fiction* also embodies search in the context of a continuing crises that keeps unspooling despite the efforts of its band of protagonists.

Tarantino has directly commented on the key role of the city setting in an interview with *Vanity Fair*: "Like the way New York is an important character in New York crime films, I would make Los Angeles an important character." (Seal, 2013). Los Angeles seems able to absorb its retinue of non-normal people and its wealth of extraordinary days. *Pulp Fiction* provides a representation of Los Angeles after Jameson's 1984 introduction of the term post modernism to describe a cultural condition and movement in the arts, with Jameson remarking on the Bonaventure hotel in Los Angeles hotel as emblematic of perceptual and cognitive challenges associated with post-modernist space.

Goodfellas (1990, directed by Martin Scorsese) depicts the mafia in its everyday workings and thus depicts the overlap between the most mundane social aspects of daily life and the activities, privileges, glamor, and violence associated with a career in the mafia. Pauline Kael observes that, “[Scorsese] loves the Brooklyn organized crime milieu, because it's where distortion, hyperbole, and exuberance all commingle” (Kael, 1990). Per the director, the milieu is the message: “The star of the movie is a way of life, not a character” (<https://www.youtube.com/watch?v=qV7btRCs3Wc>). Ebert reaffirms this, emphasizing that “[*Goodfellas*] isn't about any particular plot; it's about what it felt like to be in the Mafia” (Ebert, 1991). In an interview, Scorsese directly expresses his commitment to New York City: “I'm obsessed with this city. I just find it so remarkable... New Yorkers, we walk in the street, we talk to ourselves. But the issue is the energy, the excitement, and the different ethnic groups all mixed together” (Nastasi, 2013). The implication is that something about New York is great enough to create, sustain, and drive together, at least for a while, both the most abject violence and the most routine commitments.

The Naked City (1948, directed by Jules Dassin) is a semidocumentary film that tells of the solving of a bathtub murder of a model with extensive, unstaged depiction of its New York locations. Reviews often consider it a rather formulaic film at the level of the story (Crowther, 1948). However, *The Naked City* remains widely appreciated for what James Agee called its “lovely eye for space, size and light” (298). Dimendberg describes its representational strategies as attempting to organize a form of urbanism that was imperiled by late modernism (2004, 60). *The Naked City* was selected because its heavy documentation of the street and its sociological conception of the city could provide a baseline comparison for the more recent movies.

The Long Goodbye (1973, directed by Robert Altman) is a neo-noir movie that describes a private investigator who becomes involved in a murder and a suicide while

trying to help out a friend. The narrative heightens Phillip Marlowe's anachronistic character in southern California, a theme which eventually overtakes the plot. Per Roger Ebert, "[Marlowe] wears a dark suit, white shirt and narrow tie in a world of flower power and nude yoga" (Ebert, 2006); the city remains indecipherable to him and his ethos of a bygone era. This is encoded in the visual content of the "faded, pastel quality [of the film], as if Marlowe's world refuses to reveal vivid colors and sharp definition" (Ebert, 2006). *The Long Goodbye* is similarly grounded in a number of normal city conditions; it was more or less contemporaneous with Banham's book on Los Angeles, and it seemed the very optimistic tone of the book merited a comparison with another representation of Los Angeles from a similar point in time.

This selection of films skips over a number of important developments in urbanism, including the rise of suburbia, edge cities, and new urbanism, as well as the emergence of global cities. Because the collation of the films into the database is a laborious, very time-consuming process, few movies were selected for inclusion. The focus here establishes a baseline of observations about how abstract and plan aspects of urbanism are handled in a cinematic point of view. The selected films are not intended to be representative of the population of films set in New York and Los Angeles.

3.4.1 Initial interpretation of the role of urban form in the narrative of the four movies

3.4.1.1 The Naked City

The first of these movies, *The Naked City* is sometimes classified as a film noir, but in many ways it is a prototypical police procedural in movie-length format, and it is probably best described as a semidocumentary for its emphasis on the role of the city and the emphasis on unstaged reality. The plot centers on the teamwork of Dan Muldoon and Jimmy Halloran, a lieutenant and junior detective searching for the

murderer of a young model who, as we learn over the course of the film, worked her society connections to set up burglaries. A tedious, systematic search eventually reveals one of her hired burglars, Willie Garzah, to be the murderer and the movie concludes with a chase scene in which Garzah is killed. The action emanates from the 10th precinct police station in Manhattan as a veteran and rookie cop attempt to solve the murder. Decoding the city is an explicit theme, as are sociological and physical background processes of the city. Much of the movie was filmed on the streets, sometimes using clandestine methods; with close viewing, one can observe the occasional mugging or heckling citizen through a bus or building window. (The movie poster offers a degree of truth in advertizing when it states, "Filmed on the streets of New York – with a cast of 8 million New Yorkers".)

In *The Naked City*, interiors and exteriors are generally distinguished in their narrative function; with a handful of exceptions, plot exposition and character development take place inside, while the city is usually presented sociologically, often as part of establishing shots, often with voiceover narration—a distinction which may have originated in the challenges of location filming. The streets situate the person as part of a larger group, while the interiors individualize him or her. Interior is for character and plot; exterior is usually blank as regards character and plot, but it remains dense with what might be called *color*. Presenting the streets as a source of life and color in movies is a tradition dating at least back to D.W. Griffith in American filmmaking. In *The Naked City*, the little characters of the street—the ice man, the organ grinder, the Brooklyn girls gazing into shop fronts and daydreaming of the Waldorf Astoria—are emblematic of life itself. The various processes of the city—trains, mail, milk delivery—are presented as the organic functions of the urban corpus. On the few occasions when exteriors host extended conversations, these conversations happen away from the street, in out-of-the-way locations like construction sites, rail yards, and waterfrontage, implying that streets

are a special specimen of city space, where the main sense of self is that of taking one's position within the greater mass.



Figure 3.1: View of Houston Street in *The Naked City*



Figure 3.2: View of Fifth Avenue in *The Naked City*

In addition to these social functions, the city also operates as the location for a pair of chases, in which city features are interpreted in terms of their utility in aiding or concealing one's own movement and hindering the movement of others.

One of the scenes of enduring poignancy in *The Naked City* is where instances of the two extremities, background processes and chase, are driven together; as Garzah

climbs a tower of the Williamsburg Bridge in a fatally doomed attempt to elude his pursuers, a tennis club, flecked with players going about their small, distant games, comes incongruously into view.



Figure 3.3: Superimposed spatial scales in *The Naked City*



Figure 3.4: Superimposed scales of activity in *The Naked City*

3.4.1.2 *The Long Goodbye*

The Long Goodbye makes a retrospective comment on the film noir genre by placing Raymond Chandler's principled private investigator, Phillip Marlowe, in the middle of 1970s consumeristic, self-centered southern California, where ideals apart from self-gratification are fundamentally incomprehensible (Ebert, 2006). Marlowe is an anachronism, whose presence and actions often amount to social commentary on contemporary Los Angeles culture.

The plot is of a private investigator who becomes enmeshed in a so-called friend's troubles, discovering layers of violence, vice, and deception in the process. The plot begins as Marlowe's friend, Terry Lennox, comes by in the middle of the night to ask, as a friend, for a ride to Tijuana. Marlowe complies and the next day is picked up by police because Lennox is wanted for the murder of his wife. Marlowe spends three days in jail, not cooperating with police, and is released when Mexican authorities report Terry dead by suicide. Upon his release, Marlowe is hired by Eileen Wade to find her alcoholic husband, Roger Wade, a wealthy, but selfish and chronically drunk writer. Marlowe finds him, returning him home. Meanwhile, Marlowe goes to Mexico to investigate Lennox's death under pressure from the thug Marty Augustine, who wants to recover some of his money, which Lennox had been holding. Shortly after his return, Eileen reveals her connection to Lennox when she drops off the money that Lennox had been holding at Augustine's apartment, just as Marlowe is about to be maimed there. Marlowe is released, unharmed, and chases Eileen through the streets to question her, but she drives away and skips town. Marlowe returns to Mexico and bribes some officials to find Lennox. In a shocking moment of departure from Marlowe's generally humorous affect, Marlowe shoots Lennox dead, crossing paths with Eileen as he leaves Lennox's Mexican compound. As the reader may have noted, the narrative is convoluted, and,

viewing the film, there is some sense that scenes tend to work better by themselves than as parts of an overarching narrative.

The basic city morphology shown in *The Long Goodbye* is that of fantastical places connected by indifferent infrastructure. The street is ubiquitous, but not very relevant. Instead, we are presented with conversations and activities that happen indoors, in outdoor enclaves away from the street, or at the curbside of several introverted locations, such as Marlowe's apartment with a plaza at the tower level, the Malibu Beach club (a gated, residential community), and a detox clinic on a residential campus. The functional space types in play—plaza, yard, beach—might have been, in a different city morphology, part of a visually accessible commons. In Altman's Los Angeles, all have highly mediated relationships to the street that drain the street of its sociological relevance. Any life that happens is on the inside, several removes from the street.



Figure 3.5: A mediated interaction on a quasi-private street in *The Long Goodbye*



Figure 3.6: A mediated curbside chat in *The Long Goodbye*

When Marlowe goes into the streets of Westwood Village without a car, he is injured. This is his only real injury in the film, despite multiple run-ins with thugs and police. This is also the only scene of the street that is not mediated by a car (excepting some curbside chats). Overall, the street is presented in an extreme fashion, as either a background to life inside cars or as vacant and dangerous.



Figure 3.7: Enclave-like shared space in *The Long Goodbye*



Figure 3.8: Enclave-like space on the beach in *The Long Goodbye*

In the narrative presentation of the plot, people, places, and actions only become intelligible over time and repeated exposures, as the viewer slowly builds up and revises internal descriptions of the film's events and characters. Locations are often introduced with unclear framing. Famously, cinematographer Vilmos Zsigmond flashed the film, exposing it to a controlled amount of light that resulted in deliberately washed-out images. Both techniques can be seen as the stylistic embedment of a theme of the movie, that of a world that cannot be fully decoded or is not worth decoding.

3.4.1.3 *Goodfellas*

In New York as represented in *Goodfellas*, scenes of the street imply life opportunities presented in the street and governed by the street, that overlap and sometimes conflict with more transpatial societal forces, which ultimately prevail. The movie is based on Henry Hill's biography *Gangsters and goodfellas: The mob, witness protection, and life on the run*, and recounts the rise and fall of an associate in the Lucchese crime family, beginning with his childhood work running information through his Brooklyn neighborhood and ending as he deals cocaine out of his New Jersey home. Having crossed the family and his friends, he testifies against them to buy safety for

himself and his own family and ends up nostalgic for mob life from his anonymous suburban home.



Figure 3.9: City street interaction between strangers in *Goodfellas*



Figure 3.10: City street interaction among familiars in *Goodfellas*



Figure 3.11: Suburban street in *Goodfellas*



Figure 3.12: Suburban space in *Goodfellas*

In much of the movie, street culture is enriched along building fronts, with less emphasis on movement through the street network to the greater city. As in *The Naked City*, the street is presented as central to social life and social identity; however, unlike in *The Naked City*, narrative development of individual identity is elaborated out in the streets as well as behind closed doors.

In the film, transverse or oblique views of the street predominate, while axial views are usually associated with the introduction of characters or situations from outside who often have a transformational effect on the narrative. This implies a highly localized urbanism that well supports the story, which is centered on the particular solidarity of a crime family that operates locally within the larger city. However, over the course of the film, the representation of the tendency of the street to situate the individual is transformed from being essentially nurturing to being essentially threatening. Late in the movie, transverse views of the street begin to imply ensnarement and threat; pure movement, which is automobile-centered with no elaboration of interaction along the street, also appears late in the film, and is associated with interacting with large-scale societal institutions as distinct from the more local and physically situated activity of the mob.

Except for when there is pure movement, streets are depicted as usually animated by persons, providing a sense of near-constant social situation. Framed views to and from the street (e.g., through windows or doorways) are generally populated and participate in the presentation of the narrative, whether the street expresses aspiration, as for the young Henry, or uncertainty and fear, as when Henry meets with a friend at a café toward the end of the movie.

3.4.1.4 Pulp Fiction

In Los Angeles as depicted in *Pulp Fiction*, city form and culture tend to present the capacity for people and events to emerge from nowhere. Several non-sequential storylines are alternately disjointed and intertwined through the movie. The movie opens with a brief scene of Pumpkin and Honey Bunny planning to rob the café where they are having coffee. After the credits, a new scene shows Vince Vega and Jules Winnfield on their way to make a hit and retrieve a suitcase for their boss, Marcellus Wallace. Later,

Vince takes out Marcellus's wife, Mia, at Marcellus's request, and she accidentally overdoses; an agreement to conceal the near-catastrophe from Marcellus draws them closer. A distinct, but overlapping story is then depicted; boxer Butch Coolidge agrees to throw a fight for Marcellus, but crosses him, winning the fight, escaping directly from the arena, and cashing out. Before he leaves town, he has to return to his apartment to retrieve his father's watch. This causes his path to cross with that of Vince, whom he kills, and Marcellus, whom he attacks, flees from, and ultimately saves from imprisonment in a BDSM cellar under a pawn shop. Returning, to an earlier storyline, Vince and Jules spend a stressful, humiliating morning cleaning a corpse from their car, and end up eating breakfast at the same location where Pumpkin and Honey Bunny attempt their armed robbery. Jules and Vince put an end to the robbery, persuading Pumpkin and Honey Bunny to abandon it partway through. The movie closes with their departure from the café staged as ironic heroes, carrying guns and wearing borrowed gym shorts and t-shirts.



Figure 3.13: City space in *Pulp Fiction*



Figure 3.14: An apartment courtyard in *Pulp Fiction*



Figure 3.15: A first encounter on the street in *Pulp Fiction*

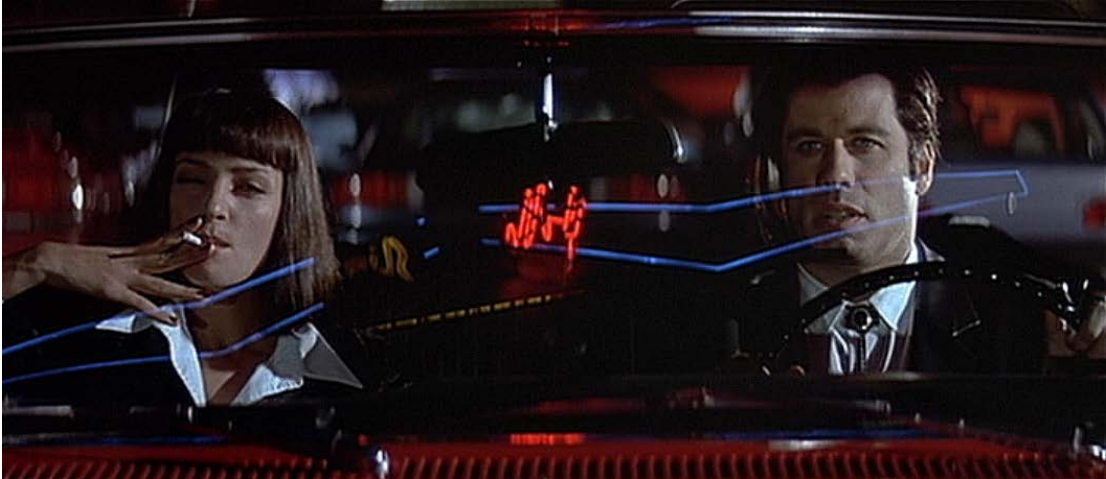


Figure 3.16: A parking lot as a social space in *Pulp Fiction*

Only the middle story, of Butch retrieving his watch, shows non-incidental inhabitation of the street, and even here the street only comes into play at a point of high crisis in the narrative. In this exceptional part of the story, where the street is involved in a search and a subsequent chase, key moments of action take place along axial views of streets with occasional transverse views. These scenes are the majority of axial street views in the film and the lone instances that imply spatial continuity along streets. Butch is unique in the narrative for his association to streets in both their extended dimension and concomitant promise of connection through axial views and their capacity interface to local, latent resources through transverse views.

The other, more typical pole of urban interface in *Pulp Fiction* is the smattering of locations that are presented aspatially, without depiction of their location in the larger structure of the urban fabric. Such locations are associated with specific, diverse, often fantastical programs: a junk yard, a 50's diner, a Beverly Hills mansion, the apartment of assorted lowlifes, among others. For the most part in *Pulp Fiction*, inhabiting the city represents moments of in-betweenness that are incongruous with the interiors and interior-like outdoor spaces where the significant events occur. In addition to pure

movement, city spaces such as doors, yards, or sidewalks tend to fill the urban *mise-en-scène*; less frequently does a view pick up connections to the street. Views between the indoors and outdoors are relatively few and rather generic, showing, at most, treetops and some cars passing by. In this presentation of Los Angeles, identities and transactions are negotiated in non-visible domains, city form is ripe for surprise to be powerfully introduced, and pure contingency is an important theme.

In *Pulp Fiction*'s Los Angeles, the implication is that anyone can become anything by sheer dint of the isolated freedoms the city promotes; however, Butch, the fighter and the character associated with the streets, delineates an alternative wherein the streets balance these freedoms against a more expanded and opportunistic sense of the world. In the visual presentation of the city, streets are usually marginalized, but they retain a very occasional but nonetheless critical role in marking some potential for subversion.

3.5 Summary comments

In sum, given four movies where urban form is central to the main themes, the plan of inquiry aims to investigate two things. First, it will describe how a visual language of form is built in each movie using a database on cinematography and the representation of urban form. Second, a variety of descriptions of city space, including maps, convex maps, movie stills, and present-day street view imagery will be used to assess how the event of a search is inserted into each movie and city.

CHAPTER 4

VISUAL LANGUAGES THAT BUILD ON REALITY TO CREATE EXPERIENCE

In the films analyzed, each of the filmmakers creates a visual language that builds on the existing reality to color our experience of cities through film. Movie locations and their depicted visual attributes were aggregated into a database, as described in the research method.

In the present chapter, summary and other statistics from the database are discussed with an eye toward identifying if (and, potentially, how) cities as presented in the movies convey the distinction between Los Angeles and New York found in the literature, in which Los Angeles is marked by disjunction and New York by embedment. Where relevant, the data is also discussed in terms of my initial reading of the significance of urban form to each movie. In this reading, introduced in the research methods chapter, the street is an organizing, social force in *The Naked City* such that the development of characters is displaced either to the indoors or to pockets of city space that are away from the street. In *The Long Goodbye*, city form presents Angelino culture as illegible to the ethical person, and the movie's action mostly takes place in sequestered enclaves. In *Goodfellas*, a language of streets is developed that systematically represents the street as the domain where social groups and institutions spatialize at various scales and where characters define their relationships. In *Pulp Fiction*, both the presentation of enclaves and of the inhabited street are equally celebrated, even as the narrative emphasizes the emergence of events and situations that come from out of nowhere.

4.1 Overall characteristics of movie locations

4.1.1 General characterization of filming locations by city

Over the four movies, there are 129 city locations that are filmed outdoors; excluded are interiors (108 locations); locations that come into play through driving or sitting in a completely closed car (25 instances); non-diegetic elements, such as intertitles and credits (17 shots); certain aerial views (13 locations), and city scenes filmed outside of the city of interest (eight locations). *Goodfellas* contains an out-of-town location for burying a body, an anonymous suburban subdivision, and locations that are meant to appear as though shot in Tampa, Florida, *The Long Goodbye* contains several Mexico locations, and *The Naked City* contains several shots taken from helicopters. Locations that are either not in the cities of interest, or locations that are presented as though they are not in the cities of interest were excluded because they do not satisfy the parameter of depicting New York or Los Angeles as such. In the case of the aerial views in *The Naked City*, these particular views were excluded from the database because they are not linked to the viewpoints, identities, or experiences of characters, and they do not present events or situations that are directly germane to the narrative. Typically, these aerial views serve as imagery that accompanies voiceover narration on the city in general; however, if these scenes were removed from the film, the narrative would not suffer any substantial loss of intelligibility. A final reason for excluding distant aerial views is that the visual material they provide is incompatible with the existing database variables. For example, in many aerial views, the visual orientation to streets is categorically different than it is on the ground. It would be irrelevant to ask if the street was presented axial, transverse, or oblique orientation to the camera in aerial views; in aerial views, the street is often presented in views that approach a plan orthographic, or map, view.

This leaves 129 city locations in the four movies. The two New York movies combined host 102 unique exterior urban locations distributed over 486 shots. The two Los Angeles movies combined contain a relatively few 27 locations over 505 shots. Given the much smaller number of locations in Los Angeles, the greater number of shots relative to New York is notable; while shots of the city are similarly numerous, the implication is that they are far less diverse in content in Los Angeles than in New York. The average number of shots per location is 18.70 for Los Angeles and 4.78 for New York. We might infer that city locations are more static and more elaborated in Los Angeles and more transitory in New York. Similarly, the average duration for each instance of a setting is 406.71 seconds for Los Angeles (sd=32.38; median=228), which is much higher than the average of 64.23 seconds per location in New York (sd=63.36; median=50) (Figures 4.1 and 4.2). There is preliminary support here for the idea that the Los Angeles locations may well be more disjoint than the New York locations, which appear to more readily change over to other situations and places.

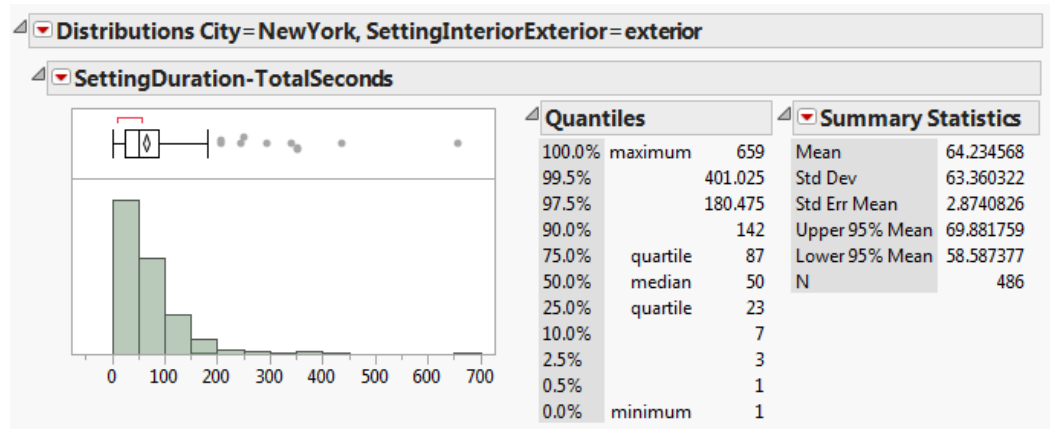


Figure 4.1: Duration per depiction of city space for New York

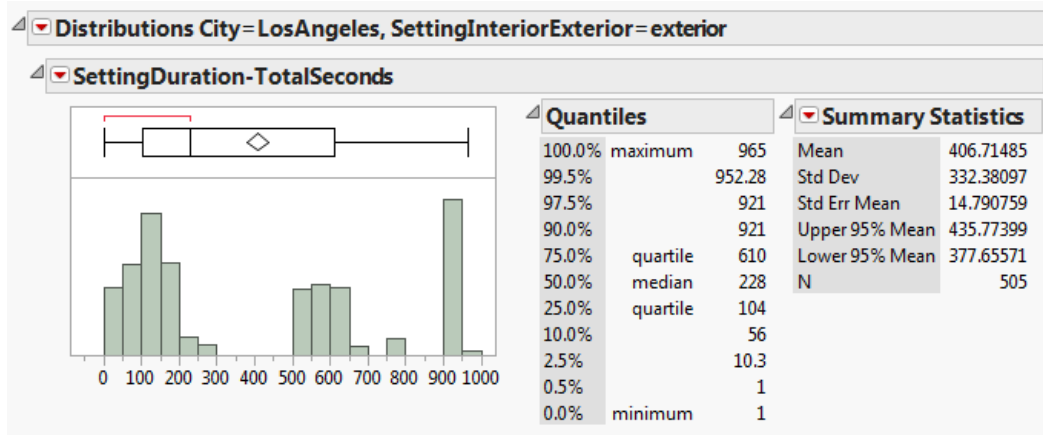


Figure 4.2: Duration per depiction of city space for Los Angeles

Another way to look at the frequency of location changes is to normalize them by time. The exterior shots for the New York movies run a combined, approximate² 3545 seconds and the Los Angeles movies a combined approximate 4317 (Table 4.1). New York movies present a unique urban location every 34.42 seconds on average, while the Los Angeles movies present a unique urban location every 159.88 seconds on average. If this is any indicator, the magnitude of the difference is large for how life is lived in each city as related to urban form. This difference supports the idea that one experiences New York locations as vastly more inter-accessible, and that this dimension of urban life is picked up in how filmmakers record life, including fictitious representations of life.

² All shot durations and measures that contain shot durations are approximate because shot durations were recorded using only whole numbers for seconds, thus 1 second was the minimum possible value. Rounding error thus may slightly inflate these values.

Table 4.1: Total seconds of city space depiction for New York and Los Angeles

	ShotDuration-TotalSeconds
City	Sum
LosAngeles	4317
NewYork	3545

The suggestion so far is that cinematography presents New York as interconnected, which implies legibility and interlocked spatial scales. Los Angeles, by contrast, hosts camera action that is much more elaborate, in terms of number of shots per location, but much more isolated, in terms of a low number of locations, implying disconnectedness between settings. This distinction is arguably a categorical one; on one hand, we have discrete locations with richly overlapped depictions of themselves. On the other, we have depictions that spread out over city space and thus acknowledge and engage urban context in a broad way. The difference can be seen in terms of contextualization in New York and decontextualization in Los Angeles. (See conceptual diagram in Figure 4.3.) New York and Los Angeles, as they appear in the films, suggest two basically different ways of organizing space that, in turn, organize awareness and activity and imply different ways of life at a fundamental level.

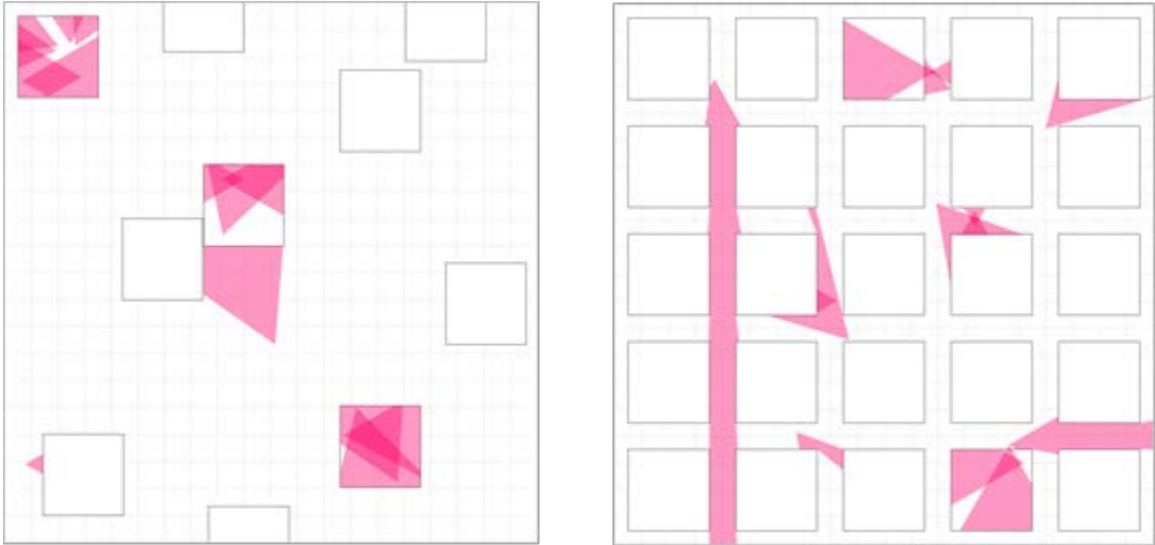


Figure 4.3: Conceptual diagram of camera positions relative to urban form in Los Angeles (left) and New York (right)

4.1.2 General characterization of filming locations by movie

The trend for individual movies is consistent with that of cities in terms of number of locations, average shots per location, average duration of each location, and the frequency of introducing new locations. In terms of number of locations, *The Naked City* leads with 64 locations over 209 shots, followed by *Goodfellas* with 38 locations and 279 shots, *Pulp Fiction* with 18 locations and 165 shots, and *The Long Goodbye* with nine locations and 340 shots. When broken out by average shots per location, *The Naked City* gives 3.27 shots to each location; *Goodfellas*, 7.34; *Pulp Fiction*, 9.17, and *The Long Goodbye* averages a comparatively numerous 37.78.

The Naked City, with its remarkably non-dynamic approach to locations (i.e., few shots per location), was filmed well before the broad set of stylistic changes that occurred in commercial, fiction American films in around the 1970s and included shorter shots and generally more visually dynamic cinematography (Bordwell, 2006). That *The Naked City* has few shots per location reflects, at least in part, a different era in film

style. Although it belongs to a different stylistic era, *The Naked City* can also be understood as providing a benchmark for the remaining movies. The perceptually stable representation of city spaces, together with the massive crowds that place limits on movement and action, resonates with the broader theme of the street imposing a social identity. The notion of the street as a stabilizing force, sometimes in a negative sense, is consistent with the sociological subthemes of the movie, such as the murdered model's ill-starred desire for all the big city had to offer. In *The Long Goodbye*, by contrast, there are very many shots in very few locations, and this is consistent with the concept of the city as a series of compounds or enclaves; most exterior locations in the movie have restricted access. *Long Goodbye* locations that are clearly public, such as streets, tend to be depicted fleetingly, in as little as a single shot.

The rank order of the movies by average duration of time per exterior setting is consistent with the city rankings; that is, it is much longer in the Los Angeles movies than in the New York ones. On average, an exterior setting is presented for 454.93 seconds at a time in *The Long Goodbye* (s.d.=348.39; median=538); for *Pulp Fiction*, the corresponding value is 307.37 (s.d.=271.80; median=118). For *Goodfellas*, the average visit to an exterior location is 67.09 seconds (s.d.=56.41; median=53), and for *The Naked City* it is 60 seconds (s.d.=71.43; median=34). A visual inspection of the frequency distributions show that while the New York setting durations are positively skewed, with most location times short, the Los Angeles ones tend to be bimodal. This again provides tentative support for the distinction between the disjoint and situated city. Previously, Banham described the absence of the middle scale in the street network. This has a temporal counterpart insofar as the middle range of exterior scene durations is also missing.

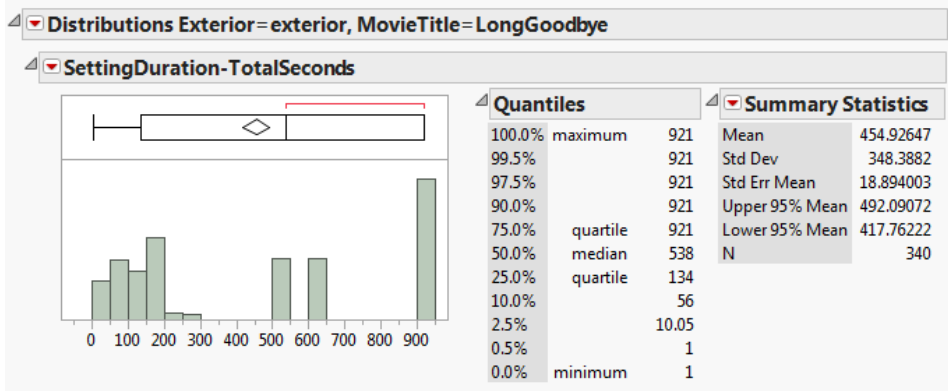


Figure 4.4: Duration per depiction of city space for *The Long Goodbye*

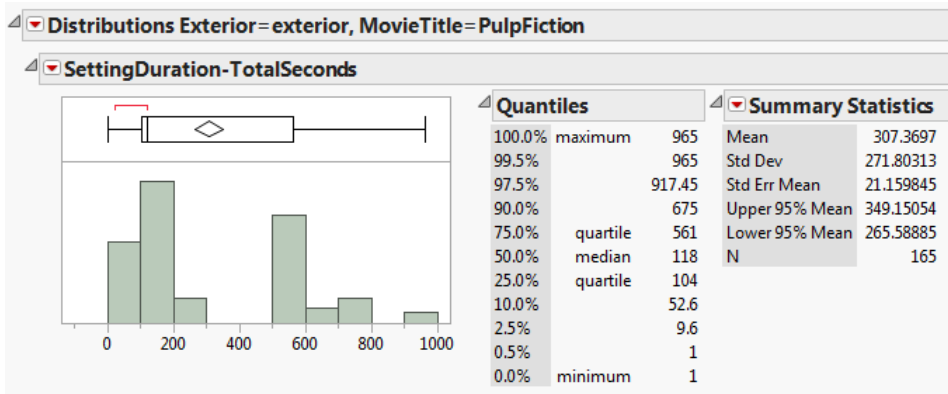


Figure 4.5: Duration per depiction of city space for *Pulp Fiction*

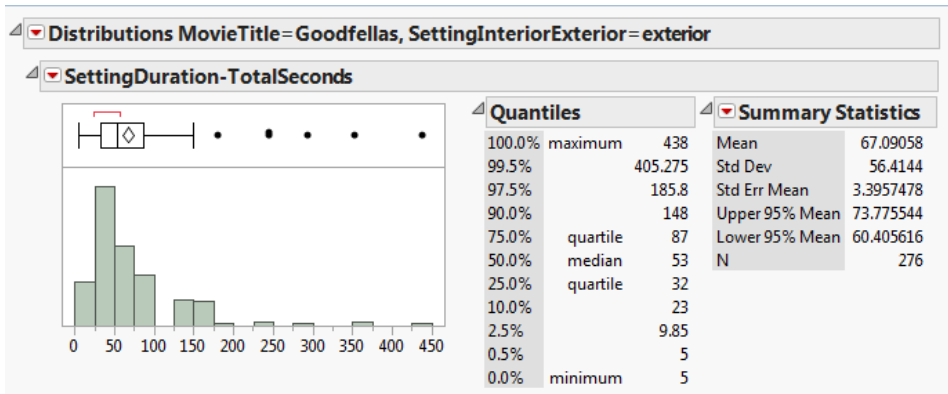


Figure 4.6: Duration per depiction of city space for *Goodfellas*

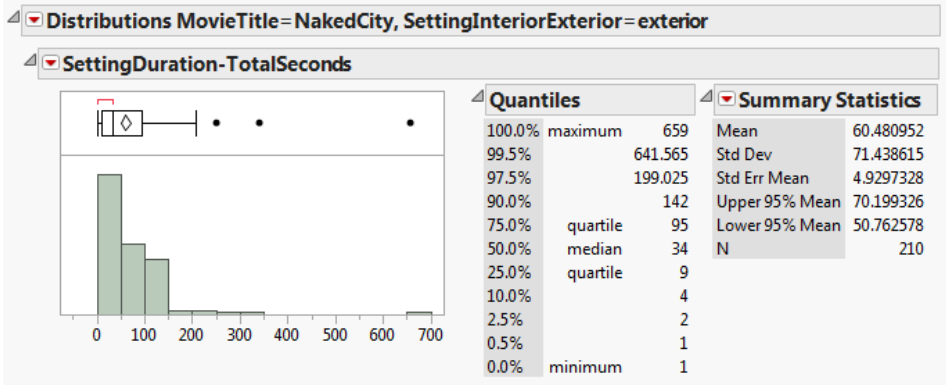


Figure 4.7: Duration per depiction of city space for *The Naked City*

As far as normalization by duration in city locations, *The Naked City*, on average, presents a unique location every 20.86 seconds, *Goodfellas* every 58.16 seconds, *Pulp Fiction* every 81.94 seconds, and *The Long Goodbye*, every 315.78 seconds. Concretely, this measure can be thought of as indicating the rate at which new locations are introduced; there are notable differences between films, with *The Naked City* introducing new locations at roughly 15 times as frequently as *The Long Goodbye*. As in the case of shots per locations, the rank orders preserve the distinction by city, with the New York movies introducing new locations much more frequently than the Los Angeles ones.

Table 4.2: Total seconds of city space by movie

	ShotDuration-TotalSeconds
MovieTitle	Sum
Goodfellas	2210
LongGoodbye	2842
NakedCity	1335
PulpFiction	1475

In sum, the New York movies show a higher number of city scenes that are presented more briefly as assessed by the number of shots or duration of presentation, either as an average of each instance in which a city location is presented or the broader measure of unique locations normalized by the number of movie seconds that occur in outdoor, city locations. The Los Angeles scenes, by contrast, are far fewer in number, but far more densely filmed in terms of number of shots and both measures of duration.

Table 4.3: Summary table of distributions of locations and shots by city and movie

	New York		Los Angeles	
	Naked City	Goodfellas	Long Goodbye	Pulp Fiction
# of locations - city	102		27	
# of locations - movie	64	38	9	18
# of location shots - city	488		505	
# of location shots - movie	209	279	340	165
avg. # of shots/location - city	4.78		18.70	
avg. # of shots/location - movie	3.27	7.34	37.78	9.17
avg. duration/instance of a location, seconds - city	64.23		406.71	
avg. duration/instance of a location, seconds - movie	60.48	56.41	454.93	307.37
avg. frequency for introducing unique location, seconds - city	34.75		159.89	
avg. frequency for introducing unique location, seconds - movie	20.86	58.16	315.78	81.94
total duration of city locations - city	3545		4286	
total duration of city locations - movie	1335	2210	2842	1475

4.2 Shot animation in city space and in streets

The number and distribution of people on the streets is expected to directly reflect tendencies toward disjunction or embedment. *Shot animation* counts the number of unique persons who appear in the frame on a per-shot basis. City space that tends to embed its occupants in a nexus of relationships is expected to show greater shot animation, while that which decontextualizes relationships is expected to show lower animation.

Note that the value of shot animation may be slightly underestimated for *The Naked City*, where the combined effects of aerial perspective, deep oblique views of the

streets, and high levels of animation sometimes made it impossible to distinguish individuals from other visual phenomena. For an example, see Figure 4.8; the persons on the sidewalk in the distance are difficult to distinguish and count. Shot animation counts were made conservatively in such cases.



Figure 4.8: Unclear figures in the distance in *The Naked City*.

Looking at the frequency distribution of the four movies combined, we see that average shot animation is 5.49 persons per shot, with a distribution that is positively skewed. The median of the distribution is 2, possibly reflecting the preeminence of dialogue as a central activity of film. The gap between the mean and median results from a handful of very high values. The lowest quartile is 1 person per shot; which may reflect solitary activities, such as searches or, as another option, dialogues depicted using shot-reverse-shot filming (in which each speaking actor is shown alone in alternating succession). The 75th percentile value equals 5, and the 90th percentile value rises to 13, then on to 41.3 for the 97.5 percentile. These top quartile values indicate the

cinematic presentation of co-presence, or the sharing of space with others with whom one need not necessarily interact.

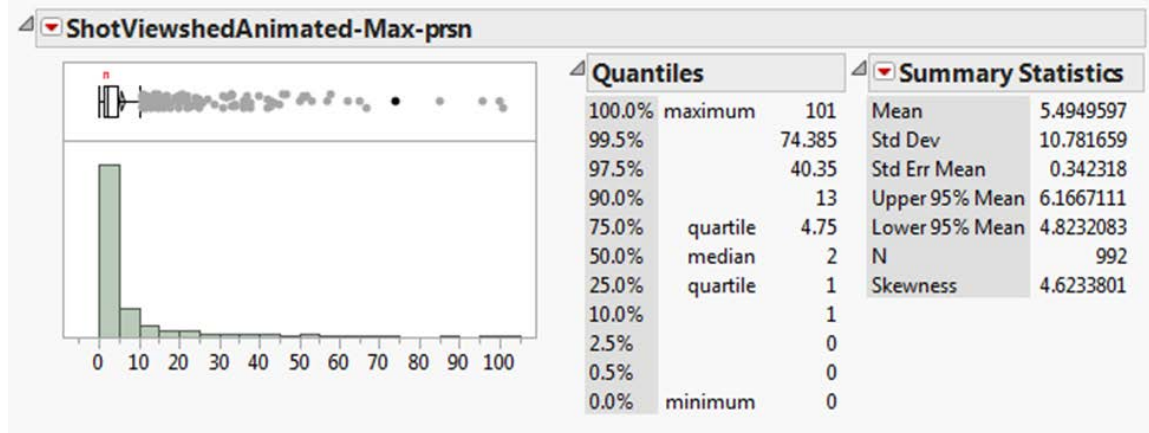


Figure 4.9: Shot animation for all movies

When we look by city, the median value and the positive skew of the frequency distribution are similar for New York and Los Angeles; that is, both cities have 2 as the median value and both have a small number of shots where high levels of animation were observed. However, the averages and the actual numbers observed in the high-animation shots differ between cities, with New York rather predictably exhibiting higher animation (Figures 4.10 and 4.11). New York shots host an average of 8.19 persons per shot, and its 75th and 90th percentile are 8 and 23 persons per shot. The Los Angeles average is 2.86 persons per shot with 75th and 90th percentiles of 3 and 6. The range of values for Los Angeles (42) is much smaller than for New York (101); however, there is greater continuity in the New York frequency distribution, which can be read both by visual inspection of the histograms, namely gaps along the x-axis and the skewness values for the distributions. The skewness value is higher for the Los Angeles (4.45)

than for New York (3.36). Some description of the potential, on-the-ground significance of skewness is in order.

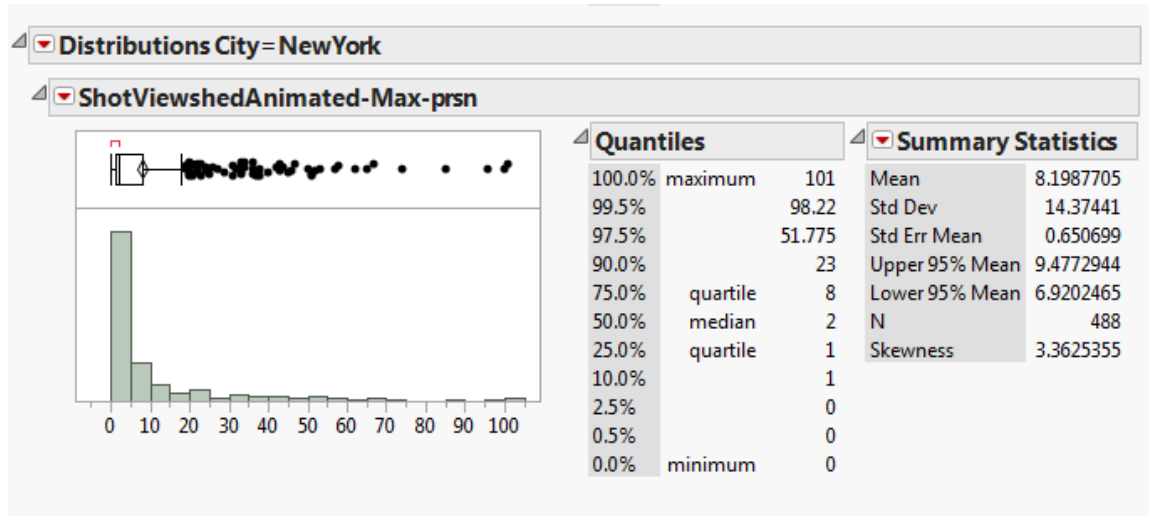


Figure 4.10: Shot animation for New York

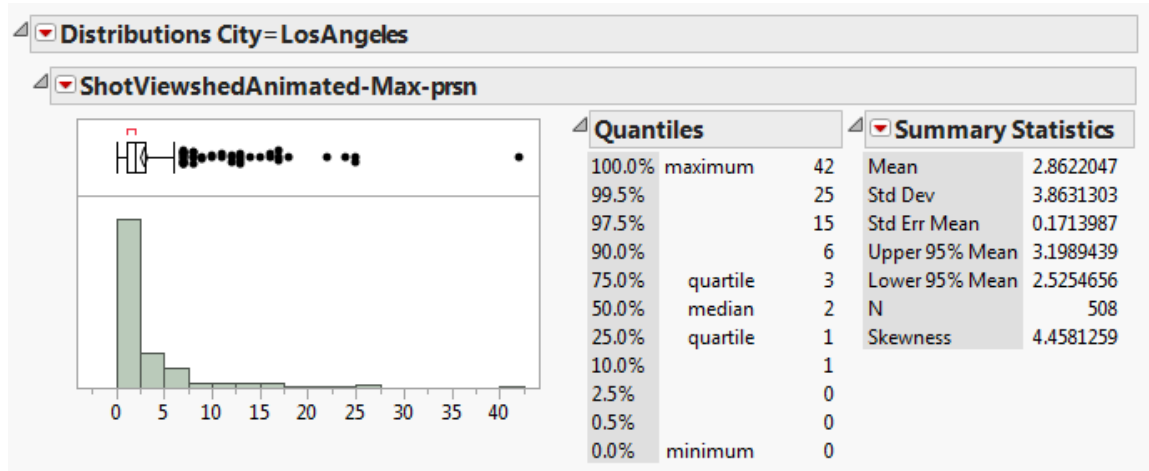


Figure 4.11: Shot animation for Los Angeles

The frequency distributions support an interpretation of the data wherein a city such as New York not only has a greater number of people present in city space, but

also shows a relatively smoother distribution of persons. By contrast, Los Angeles has more gaps at lower values in its pattern of animation, as well as lower values overall. While the data in this chapter does not support visualization about how city scenes appear in terms of animation, it may be useful to consider how physical distributions of persons in city space are likely to appear. Several conditions are diagrammed for illustrative purposes, representing simplified versions of shot animation frequency distributions and diagrammatic street views, with each example including 15 figures. The first shows a distribution where each group size is represented once (i.e., one group of one person, one group of two persons, one group of three persons, etc.). This condition was not observed in the data for either city, but is included as a reference case. The second shows a discontinuous distribution, which corresponds in principle to the Los Angeles shot animation frequency distribution, where there are groups that are low in number and groups that are high in number, but none of middle size. The third corresponds to the New York shot animation frequency distribution, with smaller group sizes prevailing.

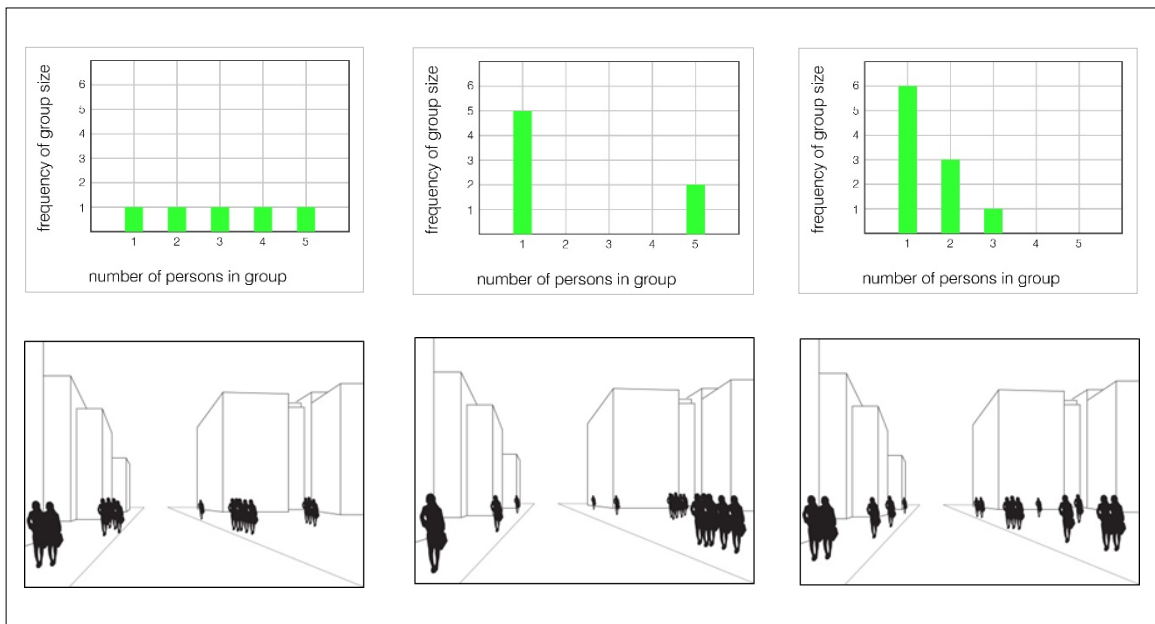


Figure 4.12: Conceptual diagram of distribution of animation in city scenes

Comparing the diagrammatic illustrations for discontinuity and positive skewness, there is some suggestion of a principle whereby the greater continuity of the positively skewed condition manifests as more “even” co-presence in the street, while the discontinuous distribution, similarly, corresponds to a more bifurcated condition on the street, insofar as the prevalence of large-ish groups together with single individuals can imply some sense of threat and alienation. The operative principle here appears to be that a positive skew maximizes the number of groups and this leads to more even coverage of the city landscape. This arises from tendencies in proxemics by which individuals within group will have less space between members of their group than between themselves and members of other groups (Hall, 1966). While the form of the present data cannot provide an unambiguous picture of how the animation of city space looks, there is some suggestion that the discontinuous distributions of persons per shot may correspond with more alienating urban scenes.

4.2.1 Shot animation by movie

Looking at shot animation by movie, *The Naked City* distinguishes itself as portraying an exceptionally densely populated city of continuous co-presence. In *The Naked City*, animation of the shot is characterized by a median of 5 persons per shot and a mean 14.13 persons per shot; if we accept, even provisionally, that *The Naked City* is a baseline exemplar of a cultural notion of urbanism, then the expectation is that to be in city space is to be constantly in the presence of others. The 75th and 90th percentile values are 21 and 43. *Goodfellas*, *The Long Goodbye*, and *Pulp Fiction* all share a median of 2, in common with the aggregated data described previously. Among the remaining movies, *Goodfellas* is the most animated, again preserving the New York-Los Angeles rank order distinction, with an average of 3.76 persons per shot and 75th and 90th percentile values of 4 and 8. *The Long Goodbye* has an average of 3.19 persons per shot and 75th and 90th percentile values of 3 and 7. *Pulp Fiction* has an average of 2.19 persons per shot, with 75th and 90th percentile values of 2 and 3. The order of the rankings is as is expected; however, one might expect a greater magnitude of difference between *Goodfellas* and the Los Angeles movies, given the preponderance of animated streets depicted, especially in the early half of the film.

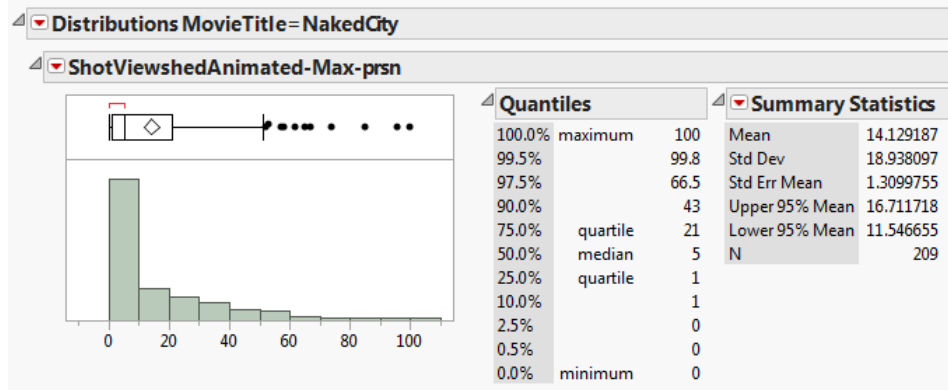


Figure 4.13: Shot animation in *The Naked City*

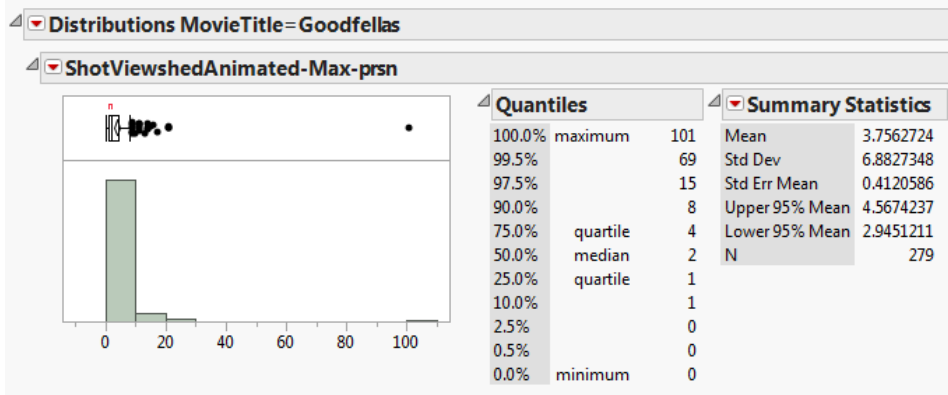


Figure 4.14: Shot animation in *Goodfellas*

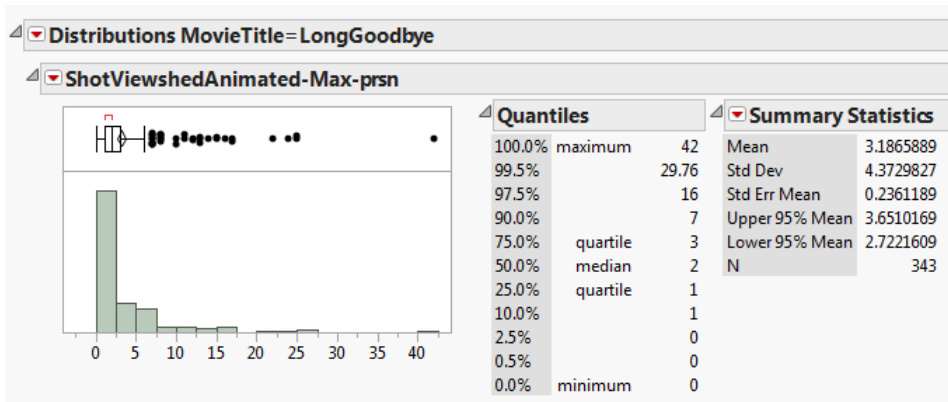


Figure 4.15: Shot animation in *The Long Goodbye*

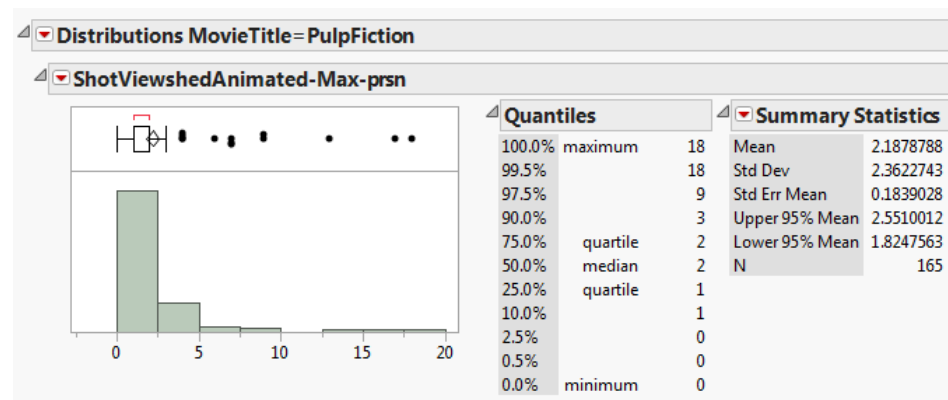


Figure 4.16: Shot animation in *Pulp Fiction*

In fact, there appears to be an earlier, more idealistic half of *Goodfellas*, which is characterized by its setting in a street of continuous co-presence followed by a more greedy and unprincipled half, which corresponds to a more suburban set of locations. The 2007 DVD version of *Goodfellas* uses a two-sided disc format; if we take the end of first side of the disc as the thematic halfway point, we find a notable difference in the animation of the city scene. The first half shows an average of 4.20 persons per shot, with 75th and 90th percentiles of 5 and 9 persons per shot. The latter half shows an average of 2.99 persons per shot, with 75th and 90th percentiles of 2.25 and 7.7 persons per shot. These values reflect the shift in emphasis from a central city locations (diegetically, Brooklyn; non-diegetically, mostly Queens) to suburban locations (e.g., in New Jersey) that correspond to Henry's initial full participation in gang life to his furtive drug-dealing business, conducted out of his suburban home. Re-ranking the movies by average shot animation regarding *Goodfellas* as two movies, the order from most to least animated city scenes is: *The Naked City* (14.13); *Goodfellas*—first half (4.20); *The Long Goodbye* (3.19); *Goodfellas*—second half (2.99); *Pulp Fiction* (2.19).

To shift to a more interpretive mode, there seems to be some thematic recognition within *Goodfellas* that secret activity, such as the drug dealing business Henry is hiding from his mob colleagues, is not as readily possible in a Brooklyn-like setting, with its retinue of street characters and matrix of social relationships situated in specific places. To that point, Henry's early voiceover narration emphasizes the importance of notoriety to the mob's function; the mobsters do as they like on the block because everyone knows what happens to those who oppose them. One can regard *Goodfellas* as more related to *The Naked City* in its first half, where the densely animated city is instrumental to social order (although the nature of the institution and the content of social order differs between the two movies). In its second half, *Goodfellas*

may be more closely related to *Pulp Fiction*, with which it shares themes of overlapping institutions that are often fluid and tactical in their spatialization.

In summary, the average animation of shots of urban locations is higher in the New York movies than in the Los Angeles ones and supports the distinction between the situated and the disjoint city. There is some possibility that not only the numbers, but also the shape of the distribution may give rise to differences in spatial culture as captured by film. The discontinuous frequency distribution for shot animation in the Los Angeles films may imply a tendency for Los Angeles urban space to be populated in a discontinuous fashion; by contrast, the shape of the New York distribution suggests greater continuity in the experience of the presence of others. Finally, *Goodfellas*, with its bifurcated narrative aligning with a shift in urban form supports the notion that settings suggest the suitability—even the possibility—of some activities and some stories more than others.

4.2.2 Shot animation in streets and off-street city spaces

The previous section evaluated animation on a per-shot basis for all shots filmed outdoors in the cities of interest. However, the location of person densities matters, especially given the present test of the distinction of city culture and form along the dimensions of situation and disjunction. An empty street with all the animation taking place in private yards is different in principle and in experience than a full street and empty yards (or no yards).

One important question, then, is whether animation is associated with the streets. The initial interpretation of the movies, made in chapter 3, asserts that in the narratives of all four films, streets have a special status as a form of urban space. More broadly, streets provide the interface that constitutes the border between public and private realms; give access to people, places, and opportunities, and act as a principal player in

the formation of cognitive maps of a city. Additionally, streets are often associated with political potential and social accountability. Animation on the street, therefore, drives more directly at the question of situation and disjunction in cities and movies than animation in outdoor city space more generally.

As described in the methods chapter, the binary variable “on or visually connected to the street” captures whether a shot is filmed in a street or near to a street such that the street would be visible to the shot location. “On or visually connected to the street” is a property of the shot location, though not necessarily a property of the visual content of the film. The visual presence of streets in a shot is a sufficient, but not necessary condition. Information gained by looking at the shot location on a map or observing other shots of the same location was also used to classify shots.

Looking by city, in New York there are 297 shots that occur on or visually connected to streets (60.73% of shots in city space), compared to 195 in Los Angeles (38.39% of shots in city space).

Table 4.4: Prevalence of on- and off-street shots by city

City	ShotLocationOnOrVisuallyConnectedToStreet	
	no	yes
LosAngeles	313	195
NewYork	192	297

In addition to streets being almost twice as prevalent in the New York shots, streets are also more animated in New York (average persons per shot = 9.60; median = 3; 75th percentile = 10; 90th percentile = 31) than in Los Angeles York (average persons per shot =2.10; median=1; 75th percentile = 2; 90th percentile =5). In terms of shots filmed away from the street, Los Angeles contains a higher number, 313 to New York’s

192. Even away from the street, the New York shots are more animated, though the difference between the two cities is narrower when comparing off-street animation (New York average =6.04; median =2; 75th percentile =4.75; 90th percentile =13.7) (Los Angeles average =3.34; median = 2; 75th percentile = 3; 90th percentile =7). Note, also, the inverted pattern within cities, whereby off-street Los Angeles outdoor city space is more animated than Los Angeles streets, while the streets of New York are more animated than its off-street spaces.

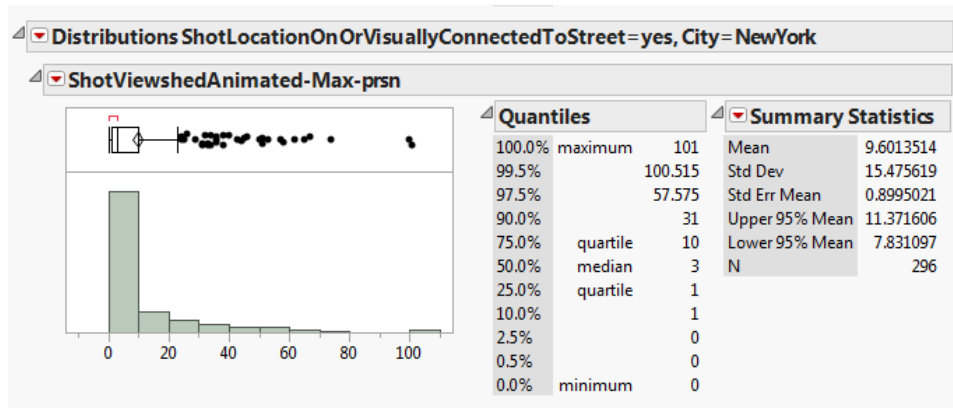


Figure 4.17: Shot animation on streets in New York

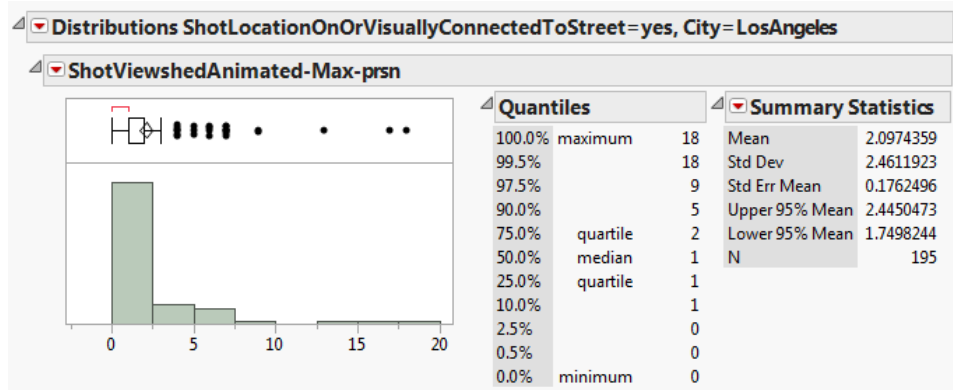


Figure 4.18: Shot animation on streets in Los Angeles

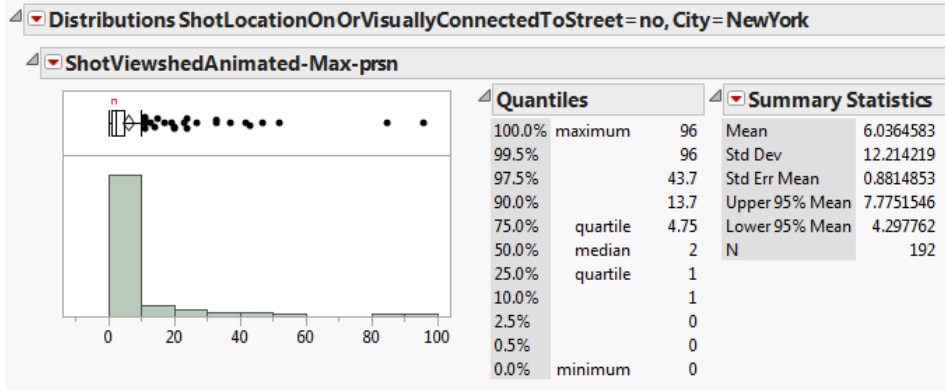


Figure 4.19: Shot animation off streets in New York

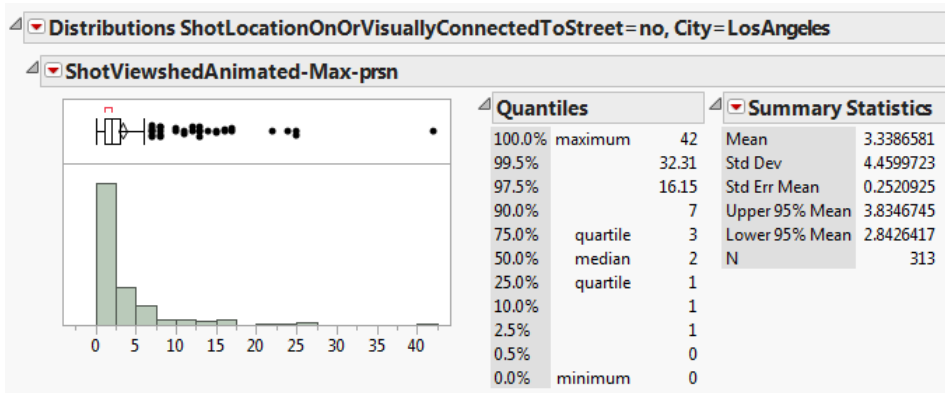


Figure 4.20: Shot animation off streets in Los Angeles

When we look by movie, the rank of most-to-least animated on the streets is as follows: *The Naked City* (96 shots; average persons per shot=21.38; median=16; 75th percentile=33.75; 90th percentile=51); *Goodfellas* (200 shots; average persons per shot=3.95; median=2; 75th percentile=4.75; 90th percentile=8); *Pulp Fiction* (76 shots, 46% of shots in outdoor city space; average persons per shot =2.57; median=1.5; 75th percentile=3; 90th percentile=7), and, last on all measures except number of street-connected shots, *The Long Goodbye* (116 shots; average persons per shot =1.80; median=1; 75th percentile=2; 90th percentile = 4). This is consistent with the previous finding on the outstandingly animated nature of the frame in *The Naked City*. *Goodfellas*

and *The Naked City* represent a New York of more active streets than the Los Angeles of *Pulp Fiction* and *The Long Goodbye*. The streets of *The Long Goodbye* are emphatically, almost comically, deserted, with the most typical street scene containing just one player. When, however, we look at animation in urban settings off of the street, *The Long Goodbye* shoots to the second rank (119 shots, 67% of city shots; average persons per shot=3.92; median=2; 75th percentile=4; 90th percentile=10). *The Long Goodbye* is not a movie of empty city space; it is a movie of empty streets, a theme which we may associate with the vacuous morality presented in the movie. *Goodfellas* has the greatest proportion of its shots in outdoor city space set on streets, and, in the next chapter, an argument on the development of a grammar of street views in *Goodfellas* will be presented.

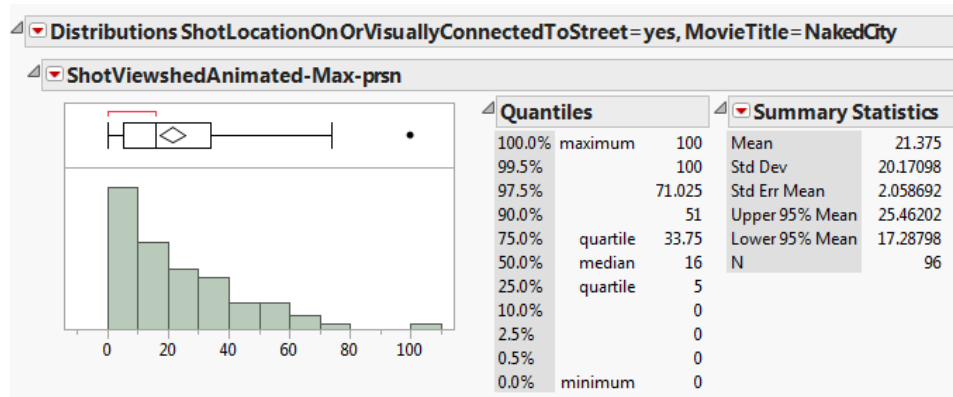


Figure 4.21: Shot animation on streets in *The Naked City*

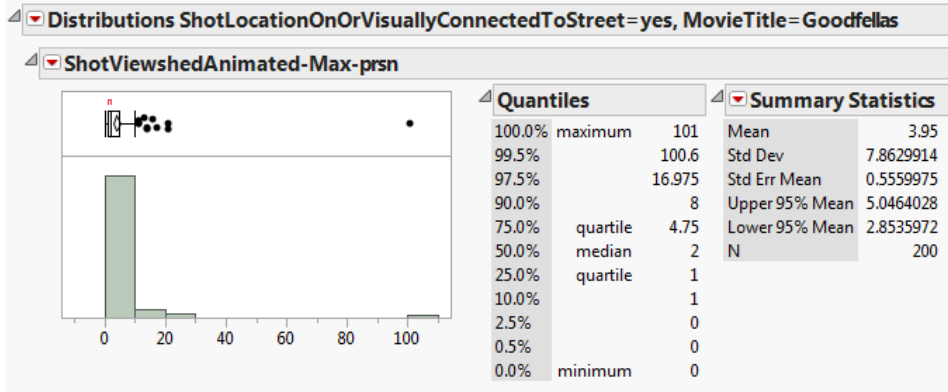


Figure 4.22: Shot animation on streets in *Goodfellas*

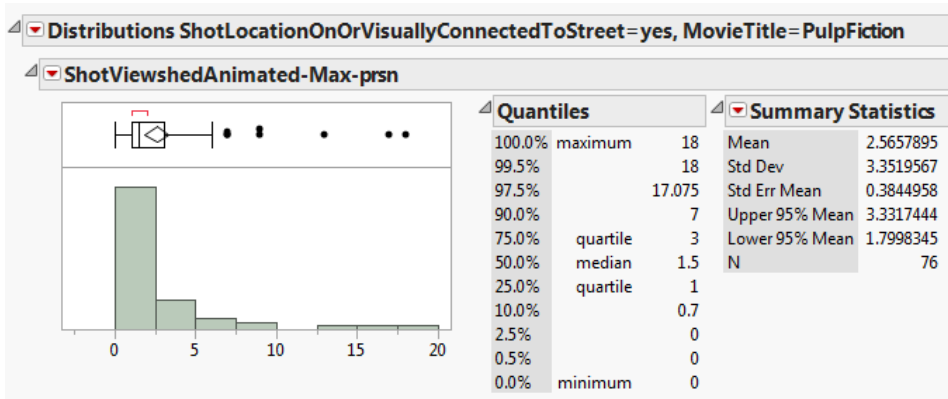
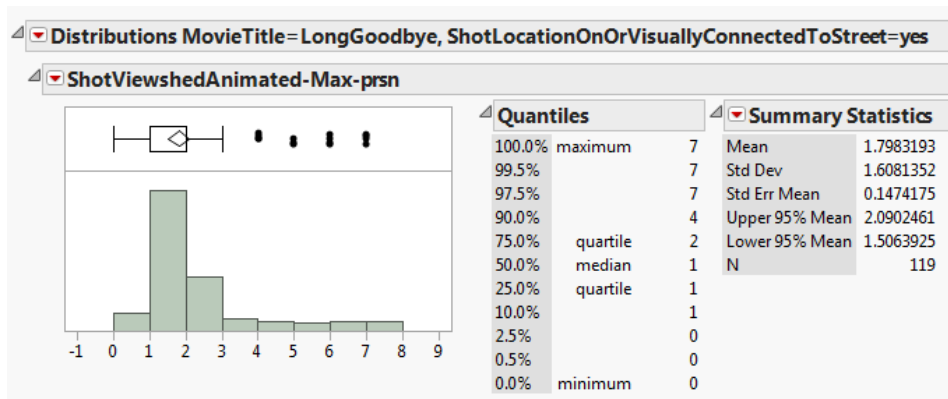


Figure 4.23: Shot animation on streets in *Pulp Fiction*



Figures 4.24: Shot animation on streets in *The Long Goodbye*

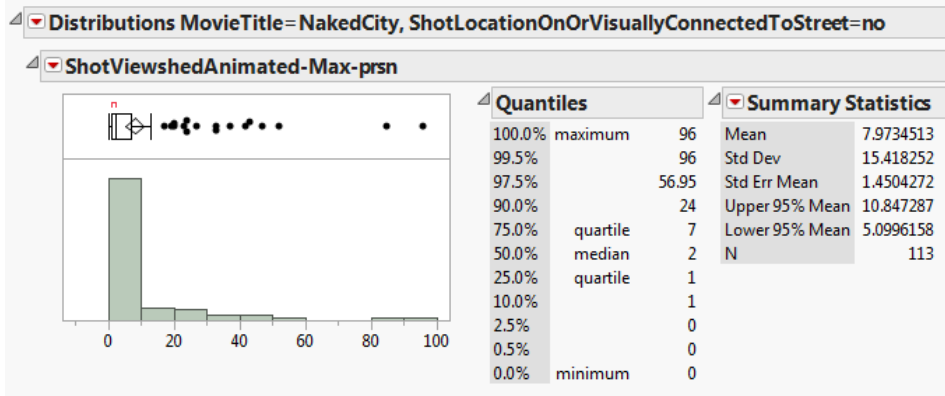


Figure 4.25: Shot animation off streets in *The Naked City*

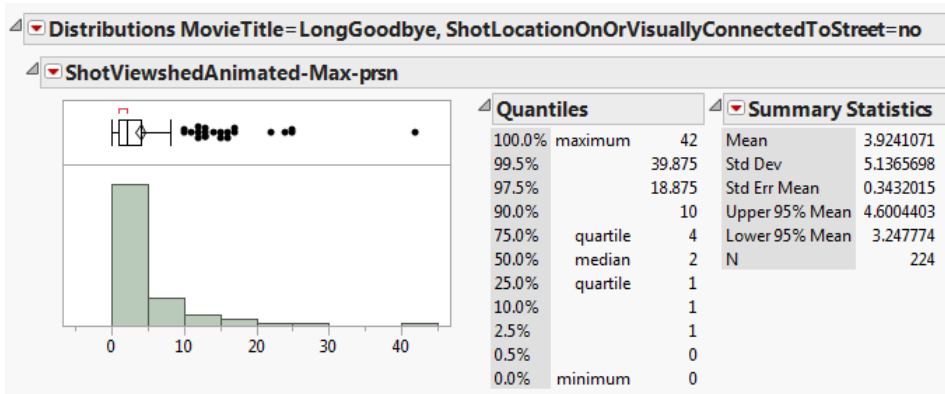


Figure 4.26: Shot animation off streets in *The Long Goodbye*

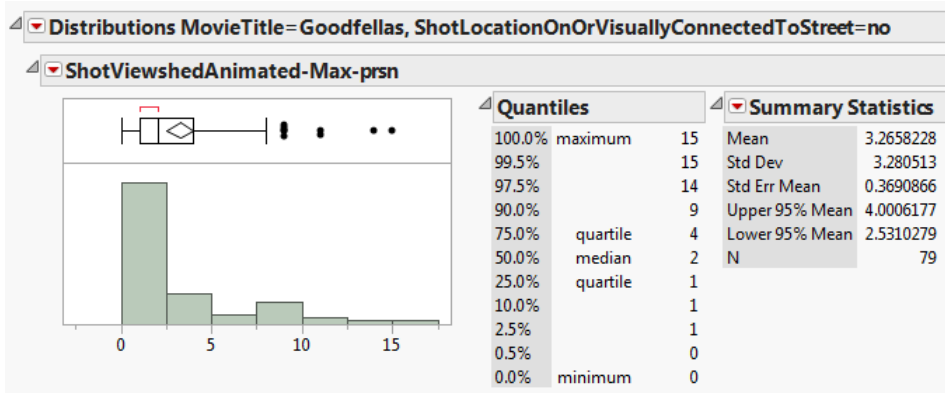
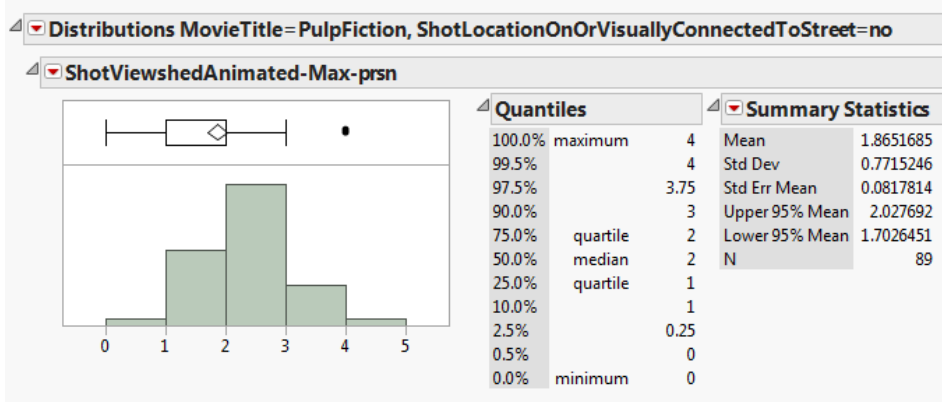


Figure 4.27: Shot animation off streets in *Goodfellas*



Figures 4.28: Shot animation off streets in *Pulp Fiction*

The Naked City retains its rank as the most highly animated for off-street city spaces (113 shots; average persons per shot=7.97; median=2; 75th percentile=7; 90th percentile=24), though it is less animated away from the streets than on the streets. *The Long Goodbye* ranks ahead of *Goodfellas* in number of persons observed per shot in off-street outdoor city spaces (224 shots; average persons per shot=3.27; median=2; 75th percentile=4; 90th percentile=10). *Goodfellas* hosts notably fewer shots off streets than *The Long Goodbye*, though the animation levels of the two movies are somewhat similar (off-street animation occurs in 79 shots; average persons per shot=3.26; median=2; 75th percentile=4; 90th percentile=9). *Pulp Fiction* distinguishes itself as a movie of consistently few people, on or off the street; off-the-street animation values are only slightly lower than those on the street (89 shots; average persons per shot=1.86; median=2; 75th percentile=2; 90th percentile=3). In the frequency distribution of off-the-street animation, we note in *Pulp Fiction* that the distribution is roughly normal, in distinction from all of the other frequency distributions we have seen thus far, all of which have been positively skewed.

The *Pulp Fiction* distribution is centered about the value of 2. Note the proximity of the mean, 1.86, to the median of 2, indicating that the average is a good

representative of the distribution of animation in city space; two persons, give or take, is generally what one will see in the city space of *Pulp Fiction*. To cast the symmetry of the distribution of animation in city space in more interpretive terms, it can be noted that *Pulp Fiction* is a movie of couples and dialogue between couples: Pumpkin and Honey Bunny; Vince Vega and Jules Winnfield; Marcellus Wallace and Butch Coolidge; Butch and Fabienne; Mia Wallace and Vince Vega. While *Pulp Fiction* is critically renowned as a movie of dialogue and the intimacy that arises from dialogue (Ebert, 1994), it has also been criticized for generally lacking deeper content, such as political content (Wood, 1994). We might infer that that part of *Pulp Fiction*'s apolitical character can be read, in part, from the movie's lack of recognition of city space in its sociological dimension, indicated in the present data as the absence of marked (i.e., quantifiable) difference between how the movie populates streets, a public domain, and off-street city space, like yards. *The Naked City* and *Goodfellas* can be seen as positive proponents of the idea that the streets are the domain of co-presence and thus of political potential. *The Long Goodbye* seems to hold the same expectation, but negates it through anti-heroic themes that run through the narrative. *Pulp Fiction*, by contrast, makes only a marginal distinction between streets and other city space entities; both are similarly suitable backdrops for engaging dialogue.

Animation of shots of street and off-street city spaces supports the notion of a disjoint Los Angeles and a situating New York. However, taken more broadly, the patterns of street animation go beyond distinguishing the cities as tending toward situation or embedment to illuminate something less programmatic about city form and more artistic about the film narratives themselves and the role of the city in them. *The Long Goodbye* exaggerates the vacancy of the street and the crowdedness of the more privatized forms of city space, incorporating this portrayal of animation of city space into the movie's main theme, that of the incongruity of personal morality and the cultural

decadence of late capitalism. *Pulp Fiction*, by contrast, is relatively apolitical in its presentation of the street in terms of street animation. *The Naked City* presents the streets as uncongenial to individual activity, while *Goodfellas* links kinds of urban form to various ways of participating in the institution of the mafia.

Table 4.5. Summary table of shot animation by movie and city

	New York		Los Angeles	
	Naked City	Goodfellas	Long Goodbye	Pulp Fiction
mean animation - city	8.12		2.86	
mean animation - movie	14.13	3.76	3.19	2.19
% shots on/connected to street - city	65%		38%	
% shots on/connected to street - movie	209	279	340	165
mean animation for shots connected to street- city	9.60		2.10	
mean animation for shots connected to street- movie	21.38	3.95	1.80	2.57
mean animation for shots not connected to street- city	6.04		3.34	
mean animation for shots not connected to street- movie	7.80	3.27	3.92	1.87

4.3 Activated thresholds

The representation of New York and Los Angeles as situated and disjoint cities entails ideas about spatial continuity that we can evaluate using an extremely simple measure: whether the action of a scene crosses a threshold that spans a building interior and the space exterior to it. Sometimes, a scene shows threshold crossings in a highly discretized fashion; in one shot, the character is on one side of the door, and the next shot shows him or her on the other side, with the door already latched. In *Pulp Fiction*, this kind of discontinuity is shown when Butch sneaks into his apartment to recover his watch; one second he has his ear pressed against the door from the outside, the next he is standing inside the closed door, looking around. The alternative is that spatial continuity is preserved on both sides of the door, with the viewer either able to see the action unfolding on both sides of the threshold or the camera itself passing through the threshold. (Incidentally, doors appear to be somewhat problematic for filmmakers; both

Scorsese and Dassin set up shots with doors unobtrusively, but inexplicitly, ajar, so that characters can pass through them smoothly.)

When we look at threshold crossings by city, we find the predictable; in the New York movies, this form of spatial continuity is presented almost twice as often as in the Los Angeles movies. If we express threshold crossing as a percentage of city shots, threshold-spanning occurs in 9.65% of Los Angeles shots and 18.40% of New York shots.

Table 4.6: Shots that span building thresholds by city

	ShotActionSpansBldgThreshold
City	Sum
LosAngeles	49
NewYork	90

The individual movies present a more nuanced picture when observing the raw data. Using the raw data, *Goodfellas* is the film that is most enriched across thresholds, followed by *The Long Goodbye*. Although *The Naked City* is an intensely street-focused movie, it has fewer threshold-spanning shots than either *Goodfellas* or *The Long Goodbye*. *Pulp Fiction* has a trivial number of such shots. If we normalize the threshold crossings by the number of urban shots, the pattern holds: *Goodfellas*, 23.66% of city shots cross thresholds; *The Naked City*, 11.43%; *The Long Goodbye*, 12.54%, and *Pulp Fiction*, 3.64%.

Table 4.7: Shots that span building thresholds by movie

MovieTitle			
Goodfellas	ShotActionSpansBldgThreshold	Sum	66
LongGoodbye	ShotActionSpansBldgThreshold	Sum	43
NakedCity	ShotActionSpansBldgThreshold	Sum	24
PulpFiction	ShotActionSpansBldgThreshold	Sum	6

We may wish to observe what proportion of building thresholds are associated with streets, which are typically a public or at least a common space, and what proportion with other city space. What emerges, predictably, is that New York emphasizes threshold action along streets, with lesser emphasis on thresholds to other city spaces. Los Angeles presents the inverse, with thresholds activated along off-street space, in all likelihood, private spaces. The right column of bar charts shows that New York shots span thresholds along streets on 64 out of 90 occasions, or 71.11% of threshold crossings; in Los Angeles, 13 of 49 shots span thresholds along streets (26.53%), placing most activated thresholds away from the street.

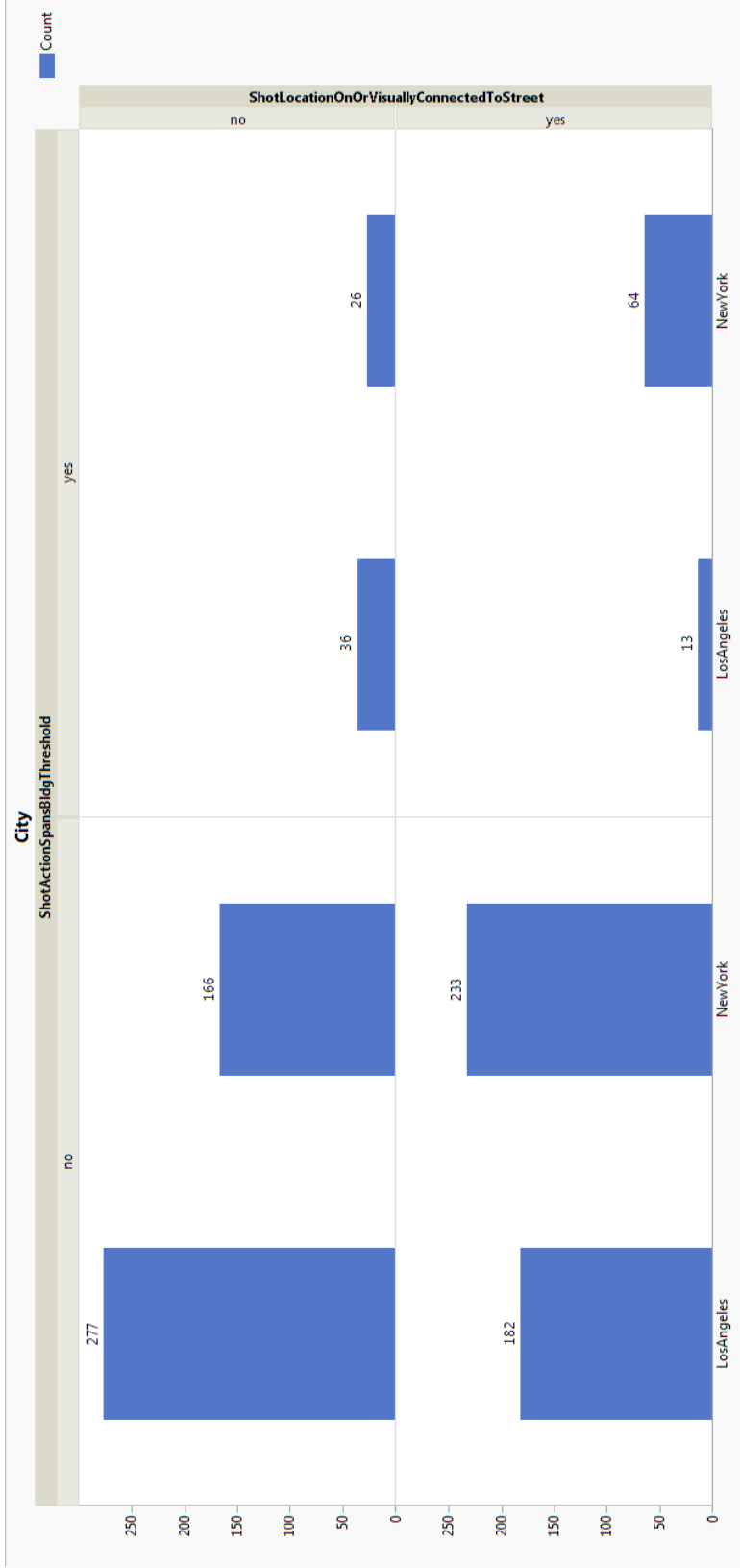


Figure 4.29: Threshold crossings associated with streets by city

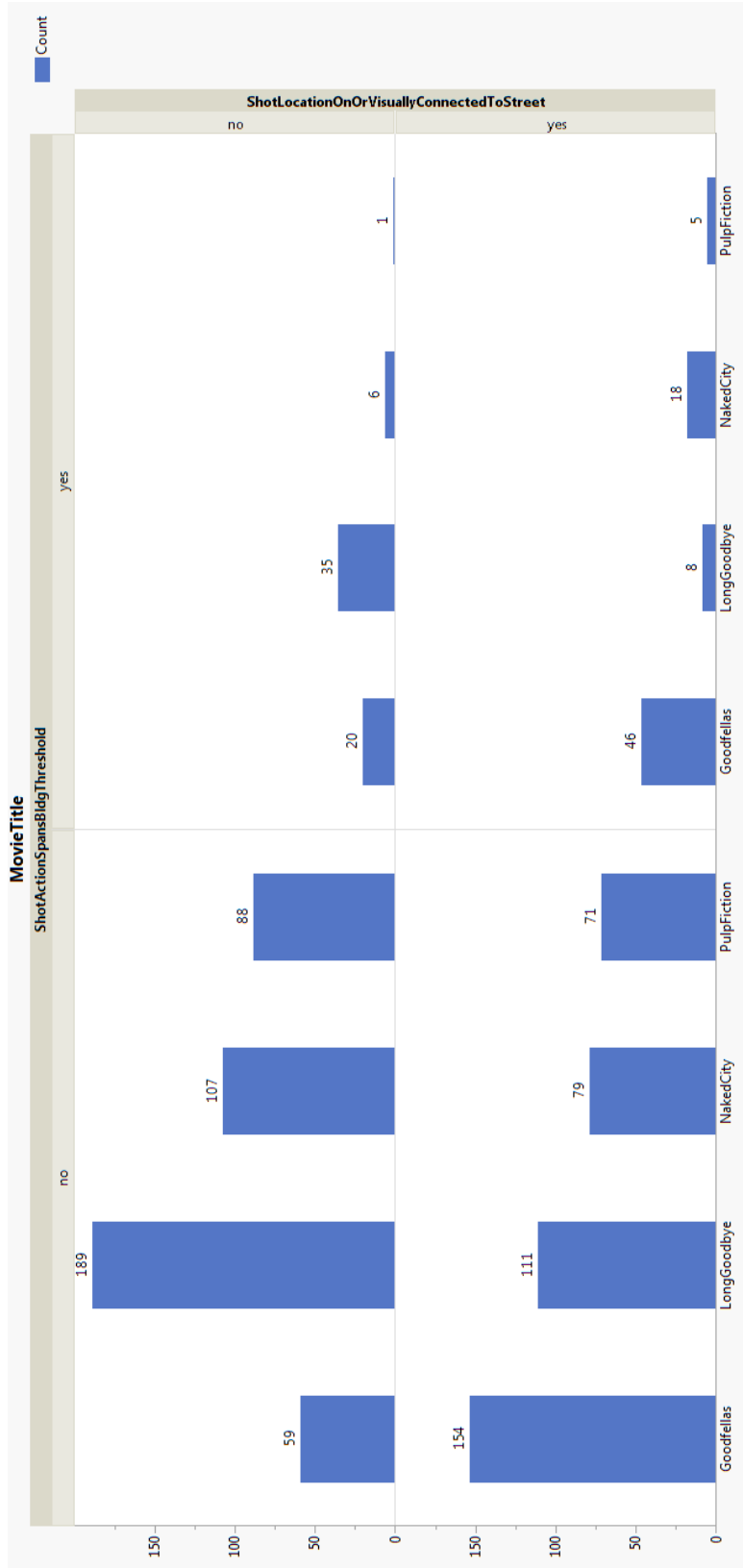


Figure 4.30: Threshold crossings as associated with streets by movie

By movie, we see that *Goodfellas* and *The Naked City* have a higher number of threshold-crossing shots along the street (46 or 70.00% of threshold-crossing shots for *Goodfellas* and 18 or 75% for *The Naked City*). Though *Pulp Fiction* has a small number of threshold-crossing shots, five out of six of them are on streets. *The Long Goodbye* has 35 threshold-crossing shots (81.40%) occurring away from the street. *Goodfellas* distinguishes itself here as a film that emphasizes threshold crossings generally, but especially to the street. To cross into interpretation, *Goodfellas* embeds the theme of the relationship of the individual to various institutions through the street. By contrast, *The Long Goodbye* emphasizes the enrichment of identity as occurring in the private domain.

Table 4.8. Summary table of building thresholds and connections to on- and off-street city space by movie and city

	New York		Los Angeles	
	Naked City	Goodfellas	Long Goodbye	Pulp Fiction
# shots spanning building threshold - city	90		49	
# shots spanning building threshold - movie	24	66	43	6
# shots spanning building threshold to street - city	64		13	
# shots spanning building threshold to street - movie	18	46	340	165
# shots spanning building threshold to off-street space - city	26		36	
# shots spanning building threshold to off-street space - movie	6	20	35	1

4.4 Street view orientation

Having raised the issue of interface between the city and indoor space, it becomes apparent that the data so far has been quite vague about visual form. The following measure looks at the form of a specific kind of interface, the street, relative to the view; namely, whether the street is viewed axially, obliquely, or transversely. Each of these views has specific significance. The axial view maximizes how far down the street one can see, and thus what the street gives access to. The transverse view emphasizes the local interface, the relationship of the street to the properties and buildings at its

edge, and relationships between public and private space and exterior and interior. In an extrapolated sense, transverse views may have more to do with how identities are forged locally while axial views suggest a larger set of possibilities. Oblique views maximize the visibility of movement along the street. Oblique views can also be expected to best capture three-dimensional qualities of the façade, which the highly flattened transverse view and the highly foreshortened axial view do not. A shot can be mobile and of considerable duration, and it is therefore possible for one or several streets to be presented in multiple views (e.g., in both axial and oblique view) over the course of a single shot.

Depth staging in film is the exploitation of multiple planes of visual interest. An axial presentation of a street introduces dramatic depth, but may pose problems of occlusion, as figures nearer to the camera can block other things. For this reason, a strictly axial view may tend to be fleeting or taken from a high angle. The oblique view of the street is amenable to depth staging both because it allows visual access to nearer and further levels of depth, and because moving figures tend to follow a pleasing visual dynamic, wherein a character enters at one corner of the screen and become enlarged or shrunken as he or she exits diagonally. Bordwell describes such oblique views as “recessional” and as promoting more pleasing lines of movement and the transverse view as comparable to stringing up actors on a clothesline (1997). The transverse view is more stage-like, providing something like a theatrical set; it can thus force characters into shoulder-to-shoulder alignments. In sum, the axial, oblique, and transverse street views have significance both from the perspective of cinematographic craft and well as in their role as perceived urban affordances.

When we look at the frequency of street view orientations, we see that the oblique shot, which I have argued to be friendly to visual storytelling, is most frequent, followed by the more stagey transverse view, followed last of all by the axial view.

Table 4.9: Shots showing various street view orientations

	ShotAxialToStreet	ShotObliqueToStreet	ShotTransverseToStreet
	Sum	Sum	Sum
	121	202	150

Taken by city, one can immediately note that the New York movies show more street view orientations in sum, with 289 street appearances in New York shots to 184 in Los Angeles shots. This is consistent with the tendency of Los Angeles films to concentrate their city shots away from the street. Both cities retain the rank order of oblique, followed by transverse, followed by axial shots. The magnitude of the gap between oblique and transverse shots is much greater in New York than in Los Angeles (a difference of 45 and 7), indicating a greater propensity toward oblique street views in the New York movies. It is possible that this supports Rowe and Koetter's assertion, that the street wall arrangement of building, which exists in New York, provides visual ground. Such a ground may readily render cinematic action figural. By contrast, the Angelino array of buildings as a field of discrete objects may call visual attention to itself, thus competing with the action. Values between cities are much more similar for axial and transverse street views. The similarity may be considered in light of the fact that both Los Angeles and New York are grid cities, with axial and transverse views similarly characteristic of and available from within both cities.

Table 4.10: Shots showing various street view orientations by city

	ShotAxialToStreet	ShotObliqueToStreet	ShotTransverseToStreet
City	Sum	Sum	Sum
LosAngeles	53	69	62
NewYork	68	133	88

The oblique street view may be, in some practical, craftspersonly sense, the most practical of the three views; there is breathing space around the action and scope for it to expand more naturally along a more permissive number of vectors. Axial views draw attention to elsewhere, and, in commercial, fiction film, such disruption may only be needed in small doses. Scorsese, in particular, appears sensitive to the capacity for the axial street view to signal impending shifts in the narrative. Transverse views, by contrast, replicate some conditions of theatrical modes of presentation and to rely on them heavily is to present a world that is artificially contained relative to the resources of the film medium.

Table 4.11: Shots showing various street view orientations by movie

	ShotAxialToStreet	ShotObliqueToStreet	ShotTransverseToStreet
MovieTitle	Sum	Sum	Sum
Goodfellas	26	76	56
LongGoodbye	32	50	36
NakedCity	42	57	32
PulpFiction	21	19	26

The rank order for the frequencies in *Goodfellas*, *The Naked City*, and *The Long Goodbye* conform to that of the four films combined, that is, “oblique view” first, “transverse view” second, and “axial view” third. *Pulp Fiction* hosts the lowest number of street view shots in all categories, but also shows an unusual ranking insofar as the oblique views are the least frequent and transverse views are most frequent. In *Pulp Fiction*, transverse views may attain more prominence because of the tendency in *Pulp Fiction* to frame actors, often as they interact in pairs, which is consistent with a more theatrical approach.

Table 4.12: Summary table of street view orientation by city and by movie

	New York		Los Angeles	
	Naked City	Goodfellas	Long Goodbye	Pulp Fiction
# oblique views - city	133		69	
# oblique views - movie	57	76	50	19
# axial views - city	68		53	
# axial views - movie	42	26	32	21
# of transverse views - city	88		62	
avg. # of transverse - movie	32	56	36	26

4.5 Shot duration and impressions of density

Shot duration is a common measure in studies of cinematography. In general, average shot durations have grown shorter over time (Bordwell, 2006). Additionally, higher average shot durations are often discussed as coming part and parcel with “more cinematic” or higher quality films (Bordwell, 2006).

For the present sample of movies, the shot duration was taken for city scenes only. It is long compared to average measures for commercial, fiction films, most likely reflecting that status of all of the directors as auteurs, or directors who exercise considerable artistic control over movies and thus ensure their quality. For the combined sample, the average shot duration is 7.89 seconds with a median of 4 seconds. David Bordwell characterizes “typical films” of the late 20th century of having shot lengths in the three to six second range (2006).

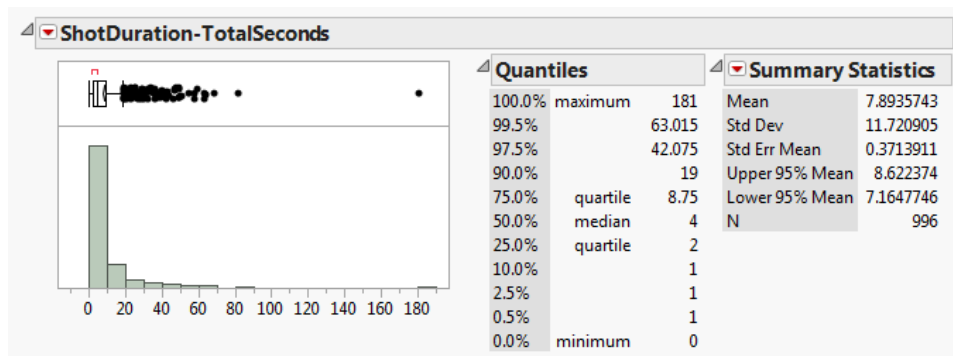


Figure 4.31: Shot duration

By city, shot duration average values are quite similar between New York (mean=8.49) and Los Angeles (mean=7.26), and the movies from both cities share a median value of four shots per second. The famous three-plus minute tracking shot from *Goodfellas* is responsible for the magnitude of the positive skew in the New York movies.

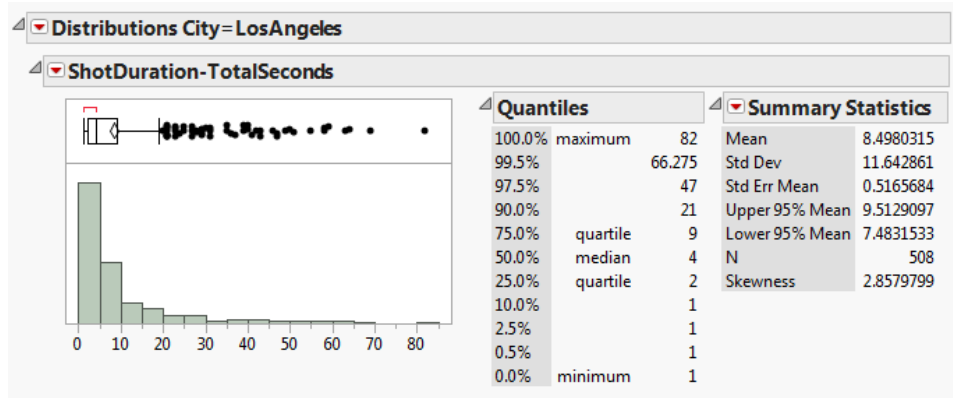


Figure 4.32: Shot duration in Los Angeles

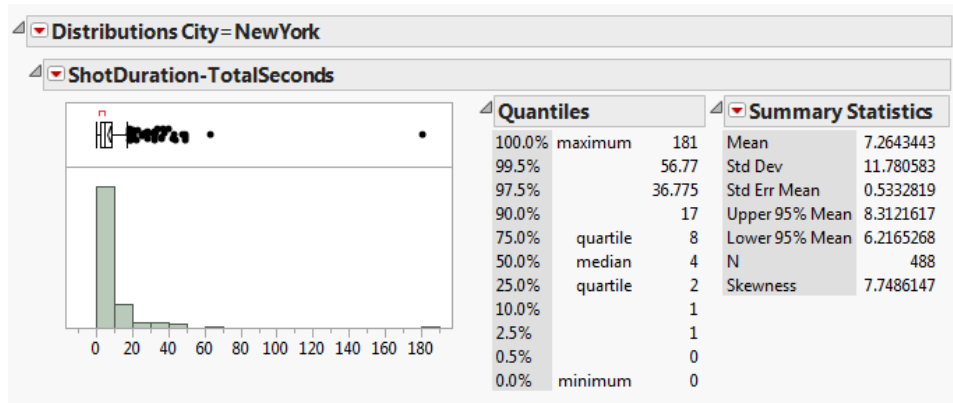


Figure 4.33: Shot duration in New York

By movie, they remain quite similar, with three of the four movies having mean shot durations near a value of eight. *The Naked City* has the shortest average shot duration of 6.39. All four of the movies have a median value of 4 for shot duration.

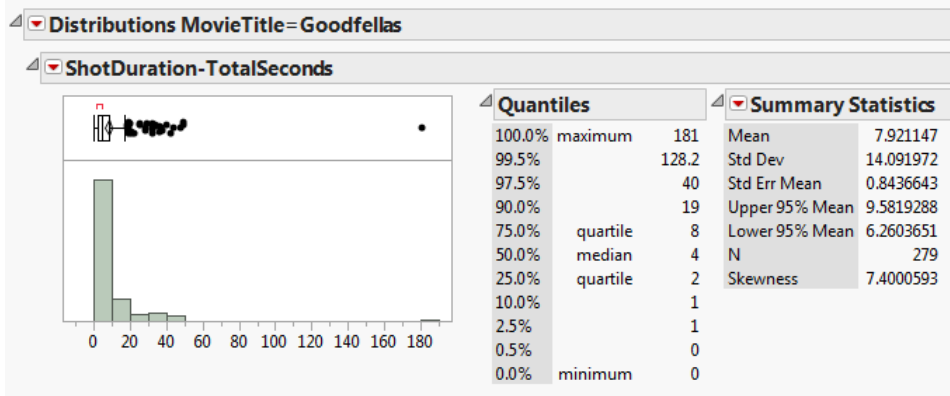


Figure 4.34: Shot duration in *Goodfellas*

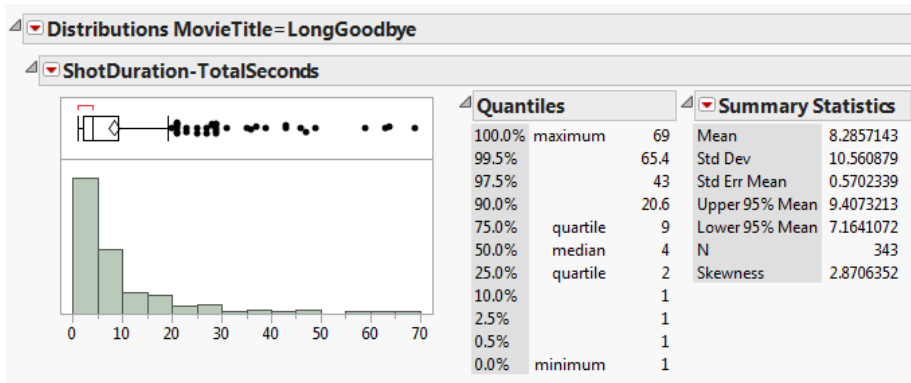


Figure 4.35: Shot duration in *The Long Goodbye*

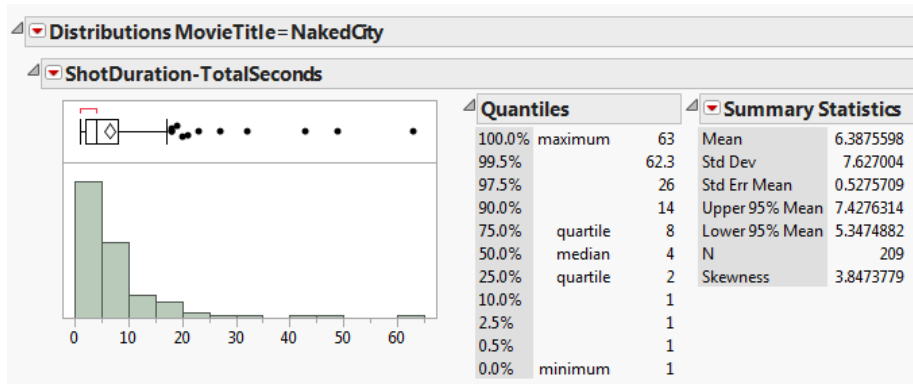


Figure 4.36: Shot duration in *The Naked City*

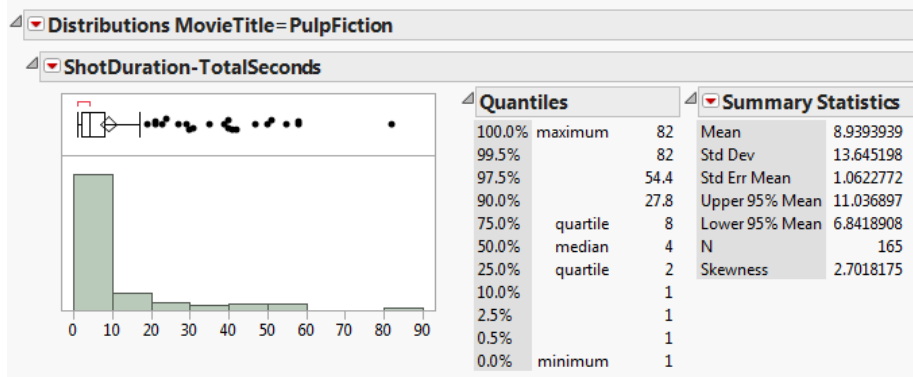


Figure 4.37: Shot duration for *Pulp Fiction*

Shot duration can be combined with shot animation to evaluate how impressions of urban density are constructed in films. When we go out in cities, we have a natural sense of building up the number of people we have encountered over time, even if the individuals we encounter are largely expendable from awareness. Movie action in cities appears to not be structured similarly in the sense that it appears that movies work in a more imagistic way.

There is a statistically significant but very small-magnitude correlation between how long the camera looks on a city scene and how many persons are seen for all movies combined. The adjusted r-squared value corresponds to a 4.5% contribution of

shot duration to animation of the urban scene. If we exclude the very long tracking shot at the Copacabana in *Goodfellas*, the adjusted r-squared value falls to less than 1%, , though the parameter remains statistically significant. We will exclude the Copacabana shot in the following analyses, by city and by film.

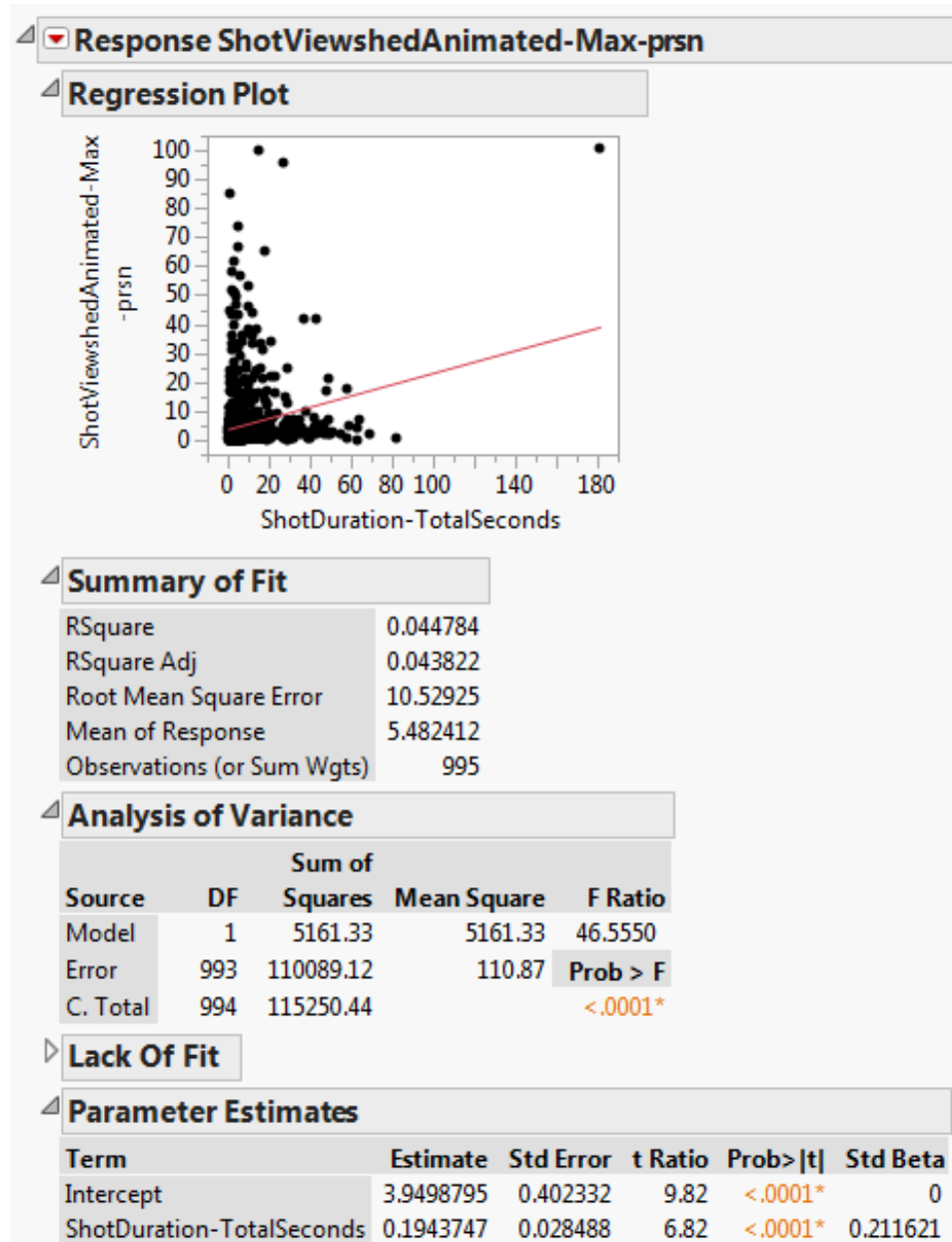


Figure 4.38: Association of shot duration and animation, all movies

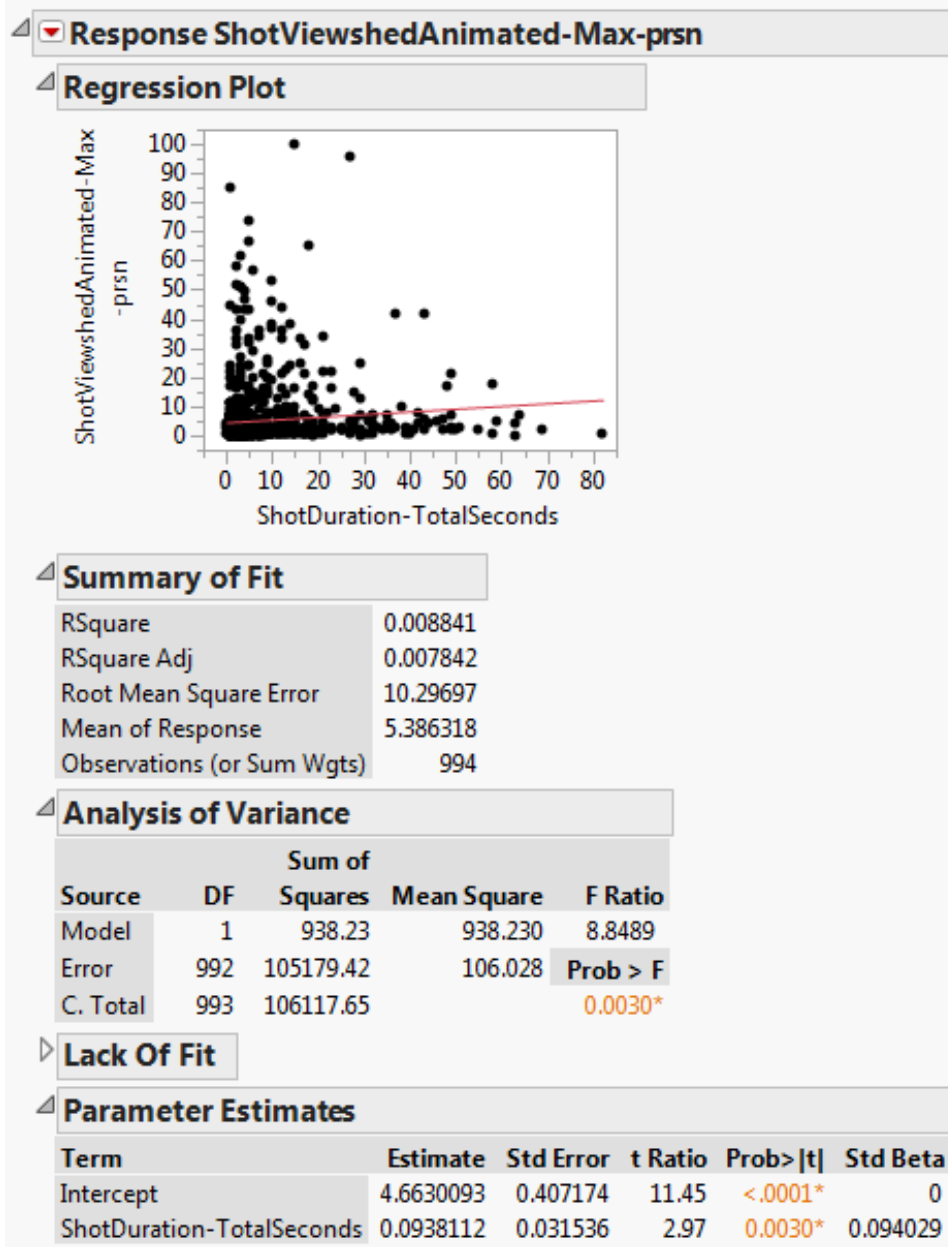


Figure 4.39: Association of shot duration and animation, all movies, excluding the long tracking shot at the Copacabana in *Goodfellas*

When we run the regression analysis by city, we see that the effect sizes remain small, while the statistical significance persists. Surprisingly, the magnitude of the relationship is smaller for New York (r-squared value = 0.014) than for Los Angeles (0.053). Remember that Los Angeles city space is generally away from streets, so we are likely seeing a buildup of people over time in locations like yards or beaches; we are seeing, in other words, something that resembles a party. Even so, for both cities, almost none of the cause for seeing increasing numbers of people is related to the per-shot duration of time in the city. The implication appears to be that editing creates a sense of dense animation using powerfully suggestive imagery rather than the naturalistic build-up of persons over time.

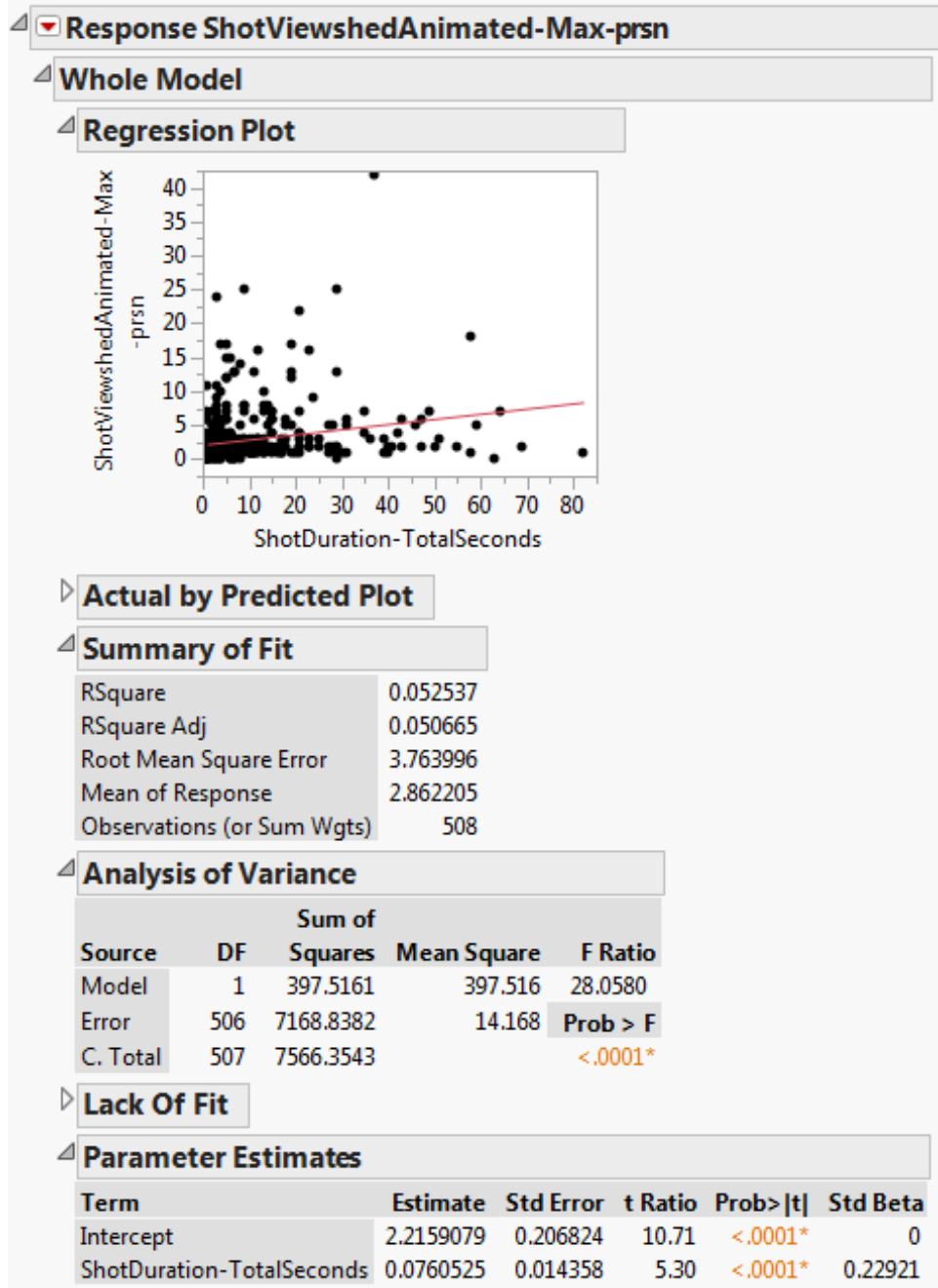


Figure 4.40: Association of shot duration and animation, Los Angeles movies

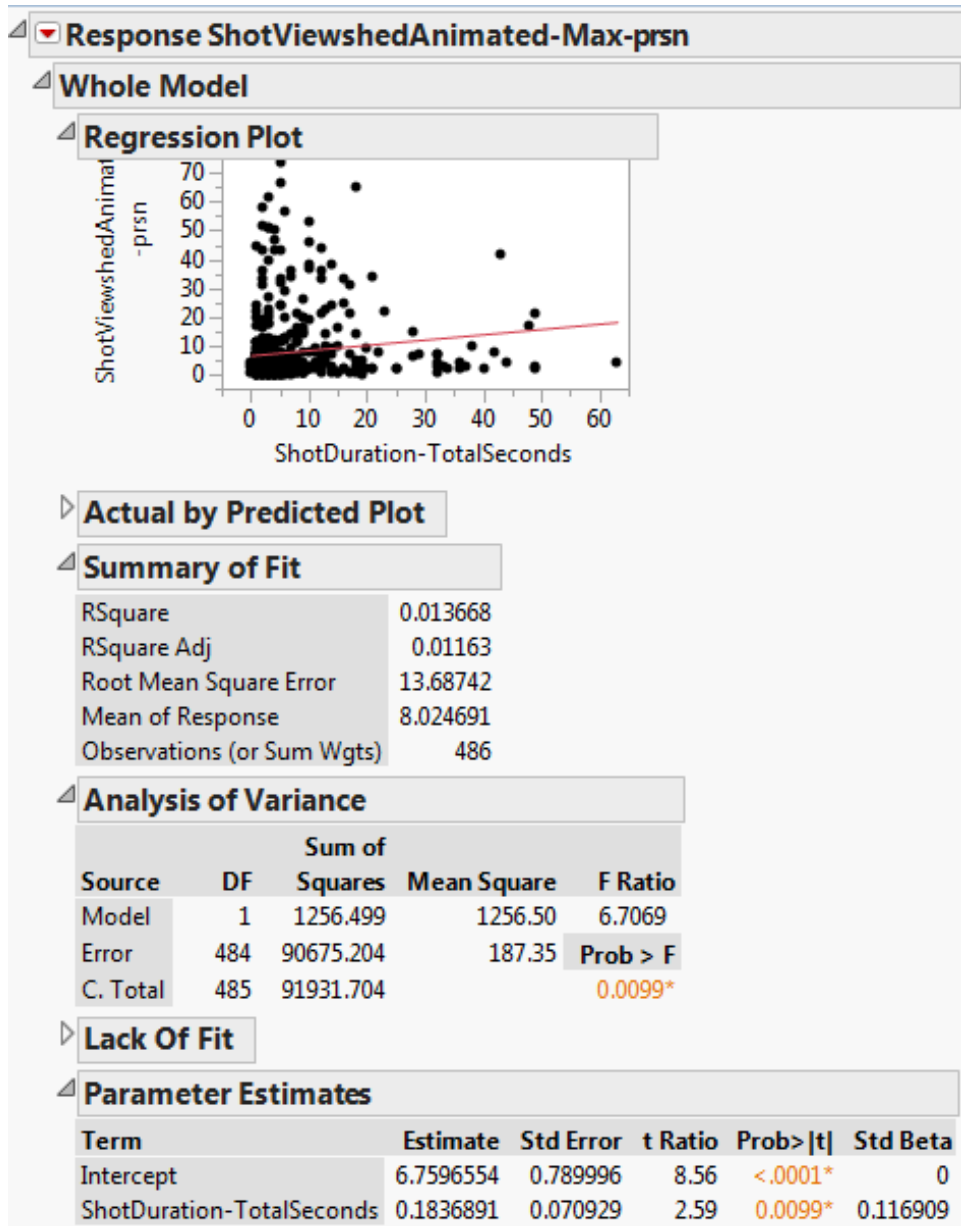


Figure 4.41: Association of shot duration and animation, New York movies

The relationship between shot duration and animation retains significance with small, variable effect sizes when evaluated on a per-movie basis. The coefficient of determination for *Goodfellas* was the highest, with shot duration explaining about 12% of shot animation. *Goodfellas*, especially the first half, has its locus in the streets, and perhaps the camera tends to linger more there, taking on a more temporally extended approach to the streets and their animation. In *The Long Goodbye*, the adjusted r-squared value corresponds to about 7%, most likely reflecting long shots taken in off-street group settings, such as the party at the Wade's beachfront home or the yoga colony that meets on terrace of Marlowe's penthouse. In *Pulp Fiction*, it is about 4%. *The Naked City*, heretofore a paragon of urbanism, shows the smallest coefficient, of 2.5%. It appears to be editing, cemented in by the documentary tendency, that make it so; the various scenes of crowded street have the flavor of lecture slides with the visual equivalent of "next slide, please" interjected every few seconds. The visual impression of shots of the streets in *The Naked City* is one of masses of people observed in glimpses.

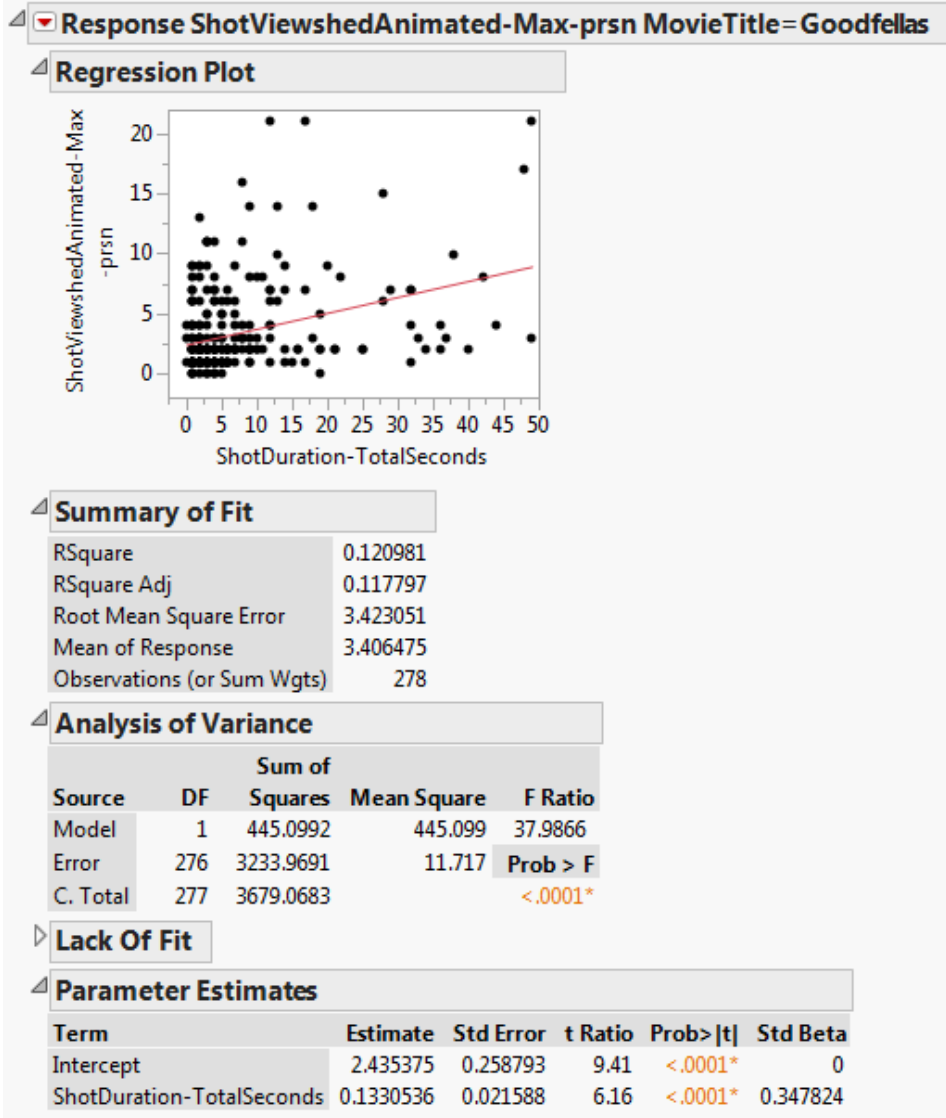


Figure 4.42: Association of shot duration and animation, *Goodfellas*

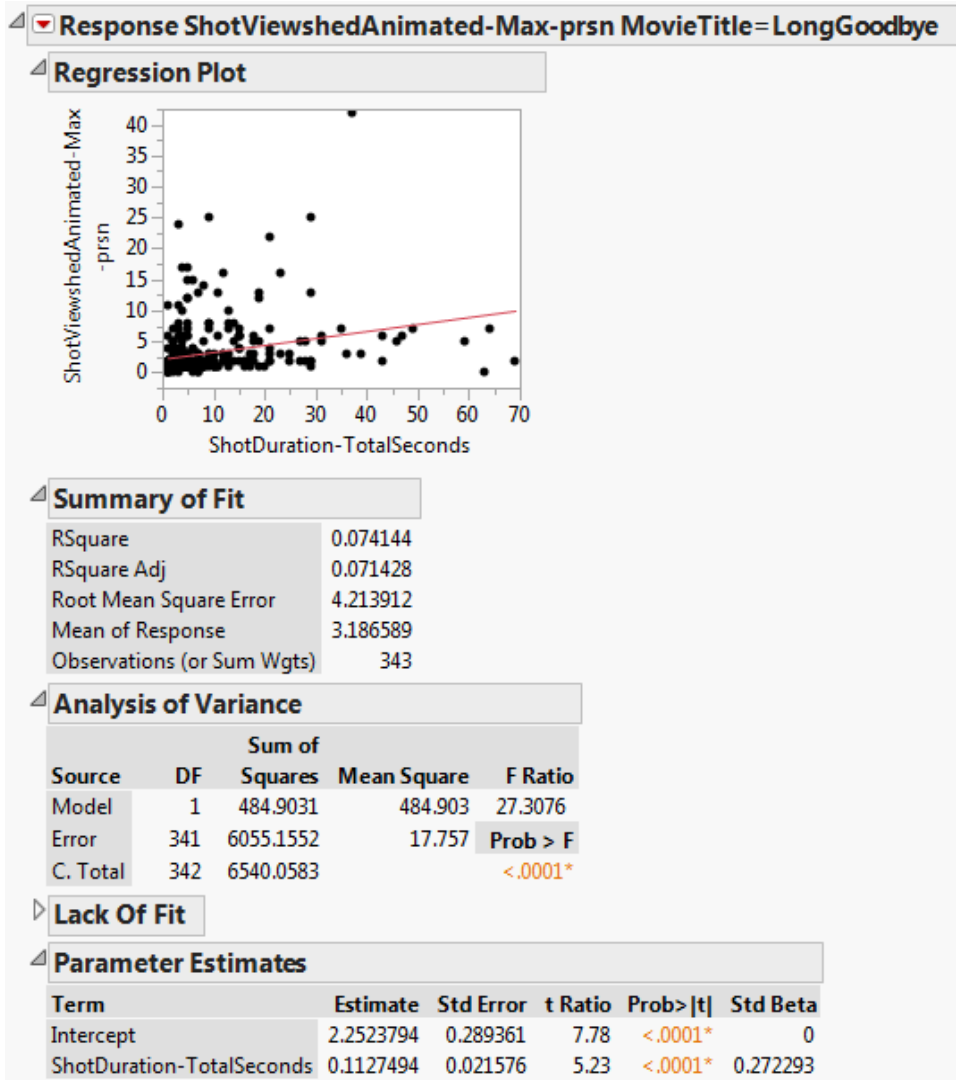


Figure 4.43: Association of shot duration and animation, *The Long Goodbye*

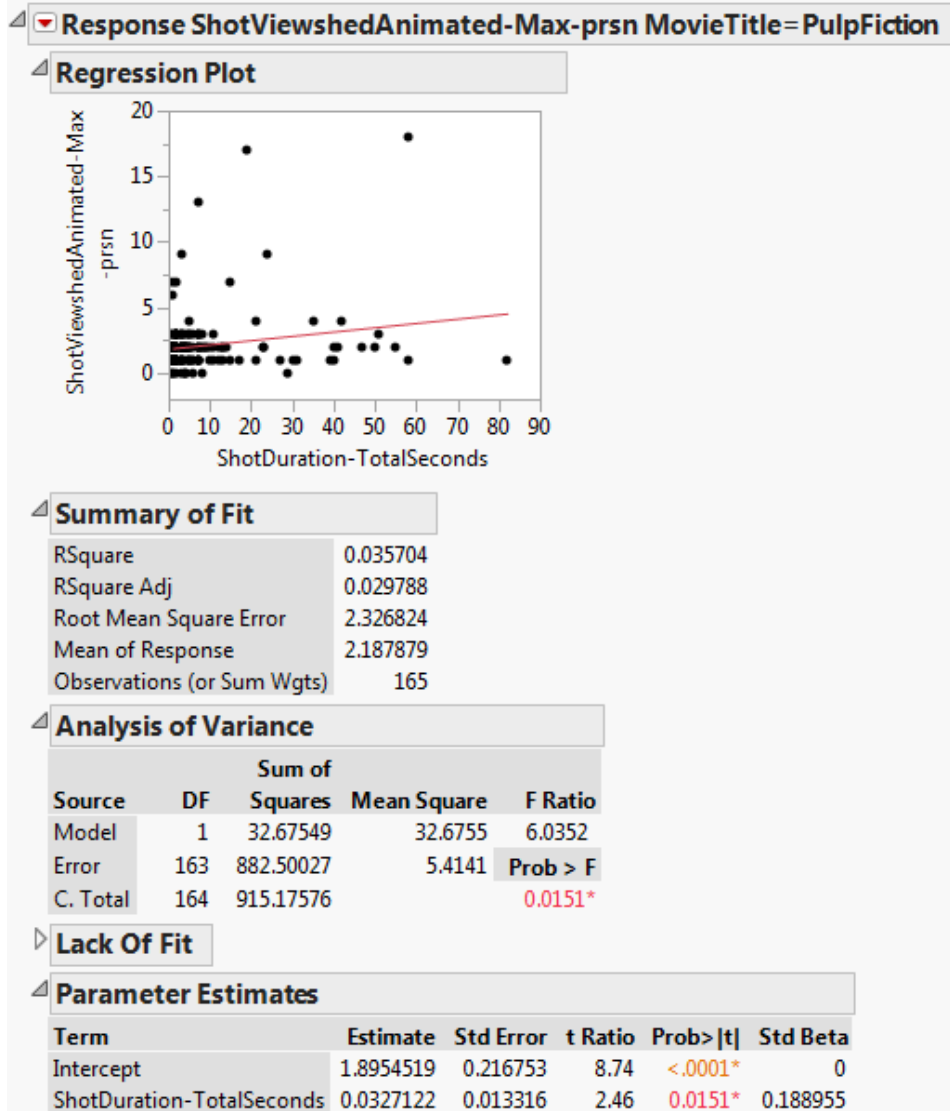


Figure 4.44: Association of shot duration and animation, *Pulp Fiction*

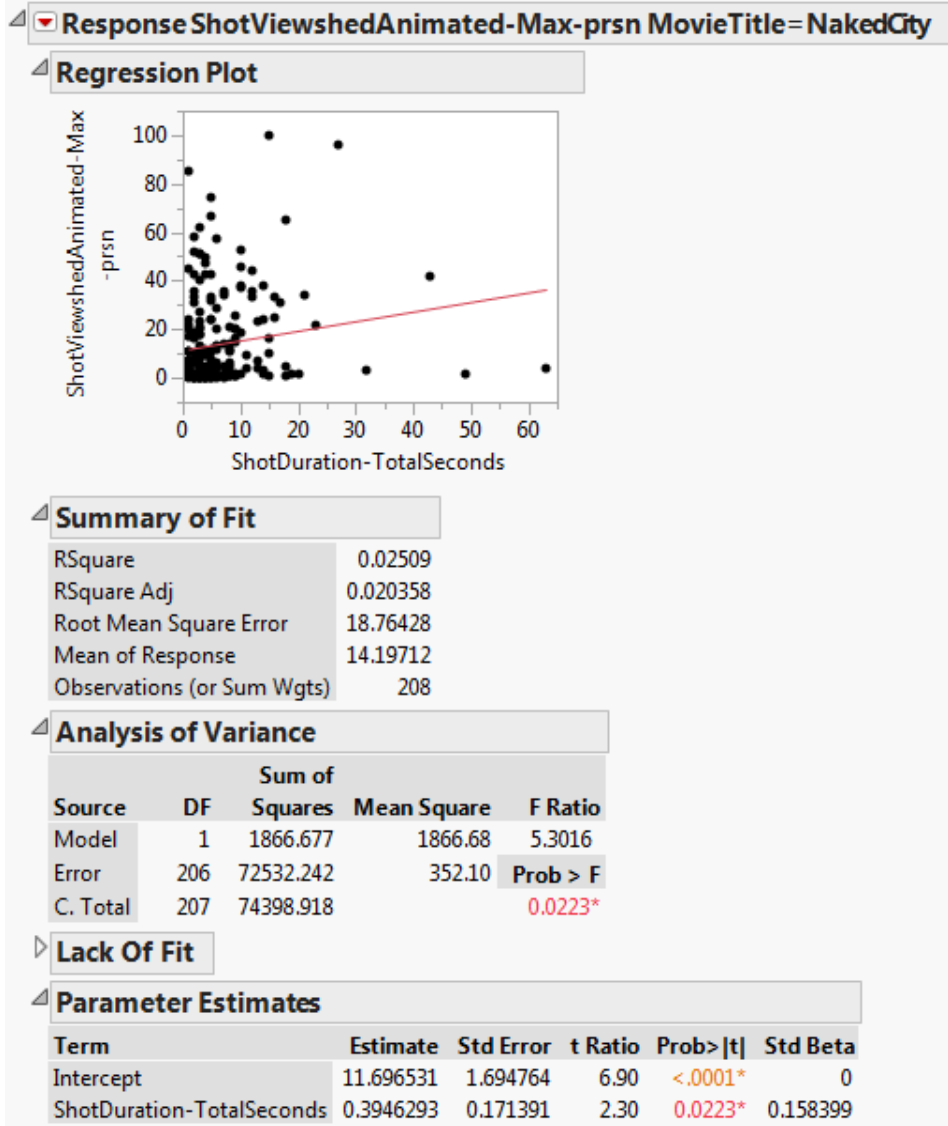


Figure 4.45: Association of shot duration and animation, *The Naked City*

In experiences of cities, greater numbers of people are encountered over time. However, this mechanism for experiencing people in city space is not, for the most part, how commercial, fiction films work. Across city types, film editing and deliberately chosen imagery overcome the tendency to build up people over time. In the four movies, the buildup of animation over time occurs enough to be consistently statistically significant, but it does not occur with any great magnitude.

4.6 Shot distance and camera movement

In spite of occasional assertions to the contrary, camera movements do not have fixed meanings. For the camera to tilt down is not necessarily equivalent to depicting subjugation or vulnerability of the scene's contents. The present section describes how things are depicted, considering cinematographic choices as representing the regime of decisions collected from a larger field of possibility of what might take place at the intersection of storytelling and urban form.

4.6.1 Shot distance

Barry Salt's quantitative profiles of movies based on shot distance and duration (1985) have been used to identify differences in film across time and genre. A relatively recent series of studies by psychologist James Cutting and colleagues have used various measures of film as part of a broader research program investigating how films function to maintain visual and narrative attention (Cutting, Brunick, & Candan, 2012; Cutting, DeLong, & Brunick, 2011; Cutting, DeLong, & Nothefter, 2010) in pursuit of Cutting's overarching hypothesis, that movies are slowly evolving to reflect perceptual and cognitive tendencies of the human mind.

Shot distances are assessed using the size of the human figure relative to the frame. The big close-up corresponds to a view of the face only, and the close-up to the

face and shoulder. The medium close-up extends to the waist, the medium shot to the hips, and the medium-long shot to the knees. A long shot contains the human figure, and a very long shot shows the standing body at or less than the equivalent of one-third the height of the screen.

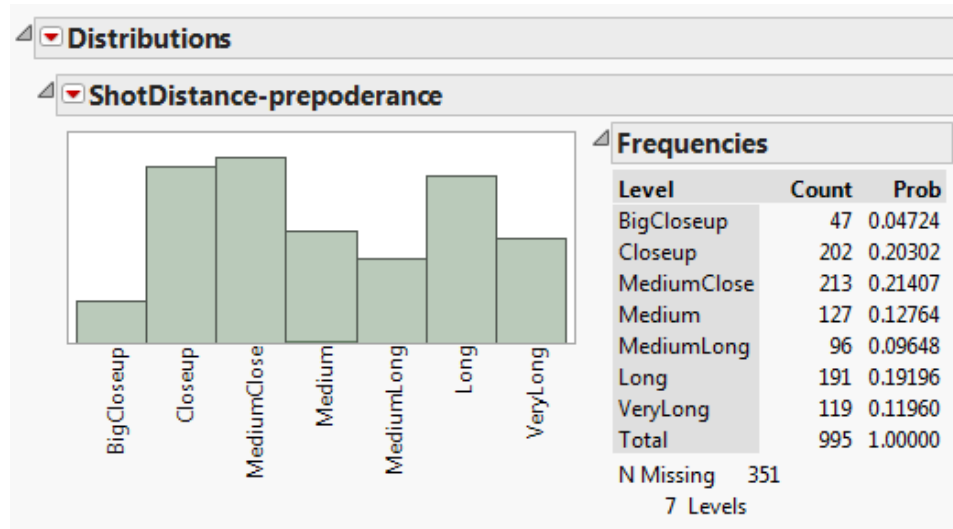


Figure 4.46: Shot distances, all movies

For all movies combined, shot distances have a bimodal distribution, which would seem to suggest that there are two nodes of action; one in personal space (signified by high frequencies for close-up and medium-close up views) and one in action space (the high frequency of long views). These distances may well correspond to the exigencies of commercial film, where both action and dialogue are mainstays of narrative exposition. If we provisionally follow Cutting's basic thesis, that movie editing ultimately expresses deep-seated visual preferences, the frequency distribution could be interpreted to mean viewers may not find a movie consisting mainly of big close-ups and very long shots a legible or appealing conveyance of such narrative staples as speech and action. However, the relative dearth of medium and medium-long distances suggests that

neither do movie viewers want to be presented with a blandly legible presentation of actors and spaces.

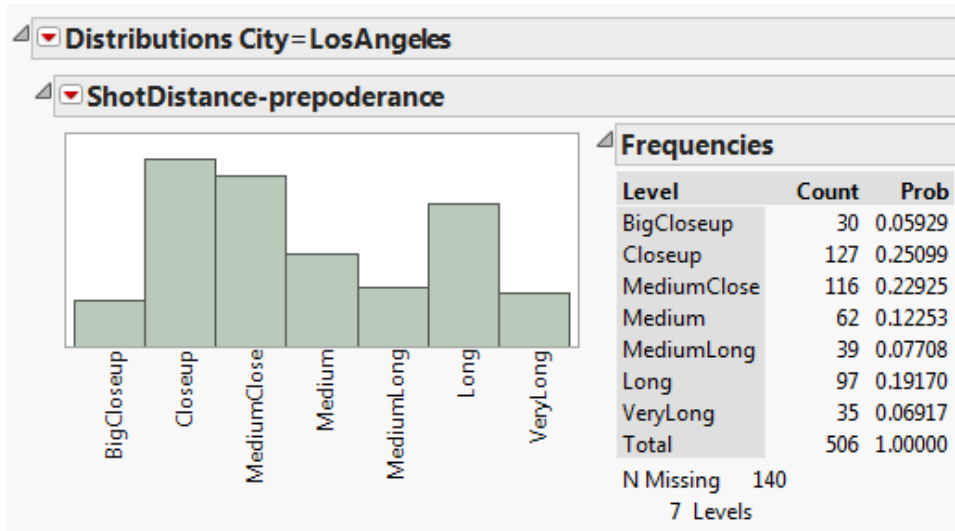


Figure 4.47: Shot distances in Los Angeles

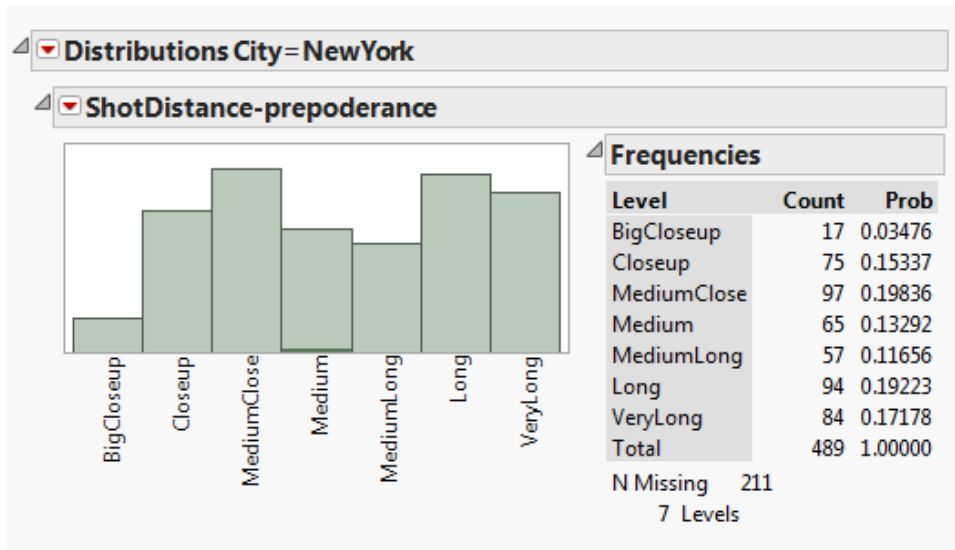


Figure 4.48: Shot distances in New York

By city, however, things change somewhat. The same overall bimodal distribution is present, but Los Angeles does more to emphasize the half of shots that are close up, in personal space, while New York has greater values for the half of shots that are more zoomed out from the figure. The probability of a shot being medium-long, long, or very long is 48% in New York movies, but only 34% in Los Angeles movies. Conversely, the probability of a shot being medium close, close, or a big close-up is about 38% in New York, but takes on a higher value of about 54% in Los Angeles. In its closer framing of the subject, the Los Angeles shots are more likely to exclude contextual information about locations within the city, while the New York shots are more likely to include such information.

When we break it down by film, *Goodfellas* and *The Long Goodbye* retain the bimodal distribution, while *The Naked City* and *Pulp Fiction* go off toward opposite extremities, with *The Naked City* keeping greater distance from the figure in urban space and *Pulp Fiction* zooming in close. Clearly, *The Naked City* is driving the tendency toward looser framing in the New York movies, which may be due to factors unrelated to its location in New York, such as its genre or year of production. The present sample is not large or well-controlled enough to suggest more than a possible trend toward looser framing in New York. Put another way, for *The Naked City*, there are few close-ups on in outdoor city space; depictions of the city provide overviews and a sense of the larger-scale situation. Meanwhile, in *Pulp Fiction*, there are few long shots, and we therefore generally have little sense of where a location fits into the urban framework. While, as noted previously, *The Naked City* seems to demarcate the indoors as the domain of the face and the person and the outside of the domain as the body present with other bodies, *Pulp Fiction* seems to make no adjustment for the exterior, as though the outside is just another specimen of the indoors or vice versa. This is consistent with the closely

framed presentation of characters in urban space in *Pulp Fiction* and the looser framing that is more inclusive of information about where one is in New York of *The Naked City*.

In sum, the purpose of the relationship of between narrative and shot distance is to frame dialogue and other action at intelligible and engaging scales. However, in the Los Angeles movies, the framing is generally closer, giving less scope for representing the city, which resonates with the idea of Los Angeles as disjoint. Conversely, the New York movies do more to emphasizes more distant views, which both make one's place in the city legible and also creates opportunities to visually convey themes related to how social institutions shape individual behavior.

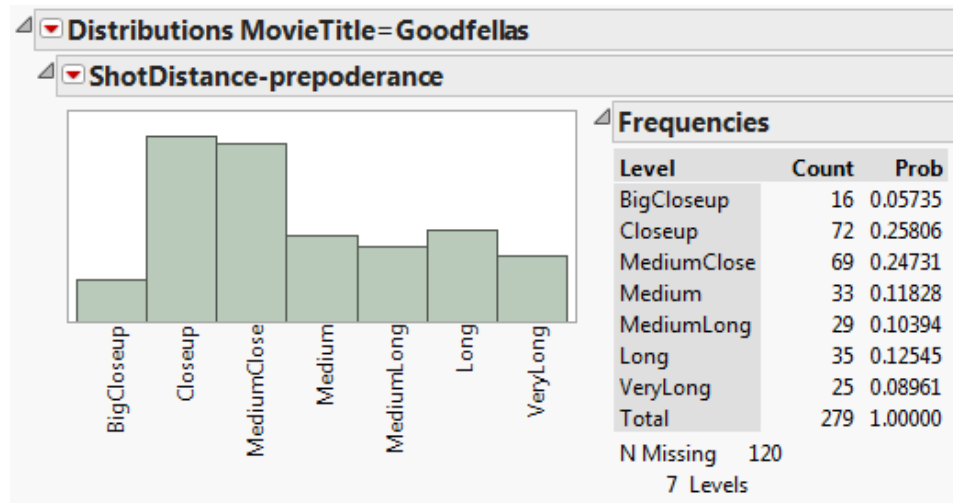


Figure 4.49: Shot distances in *Goodfellas*

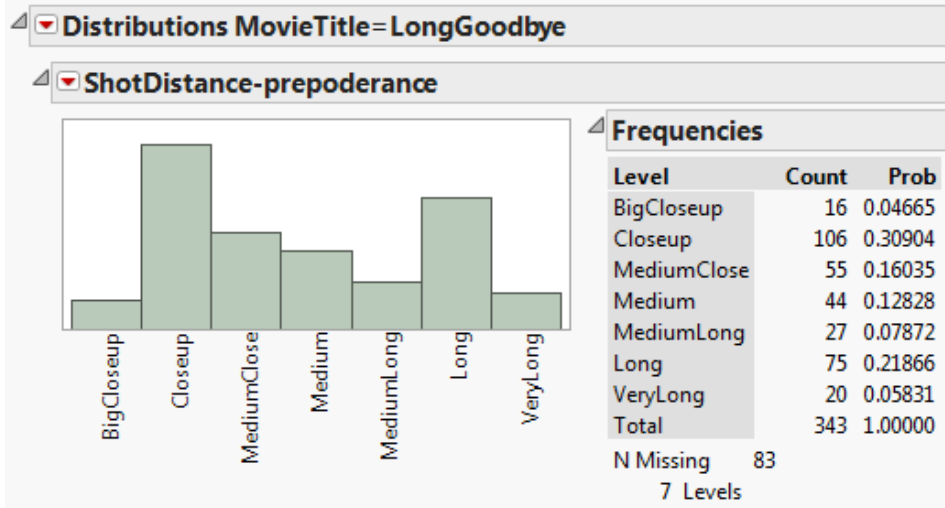


Figure 4.50: Shot distances in *The Long Goodbye*

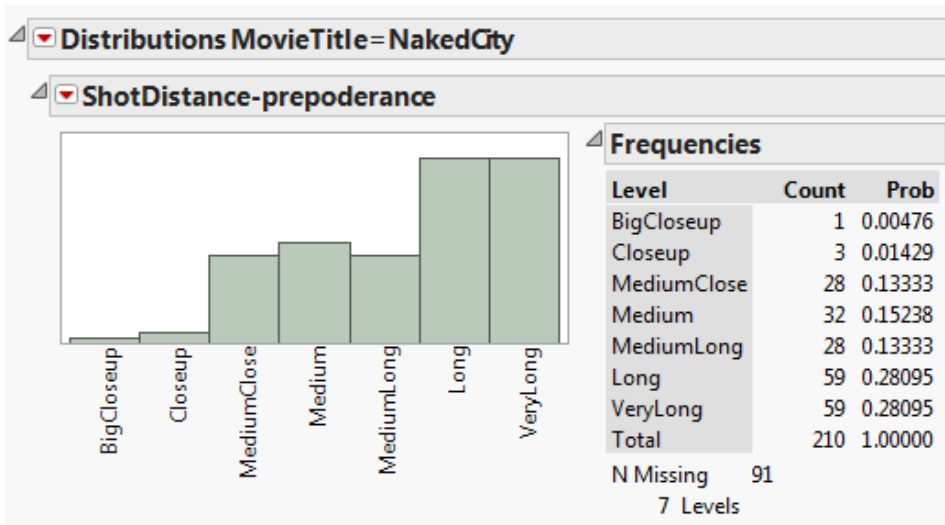


Figure 4.51: Shot distances in *The Naked City*

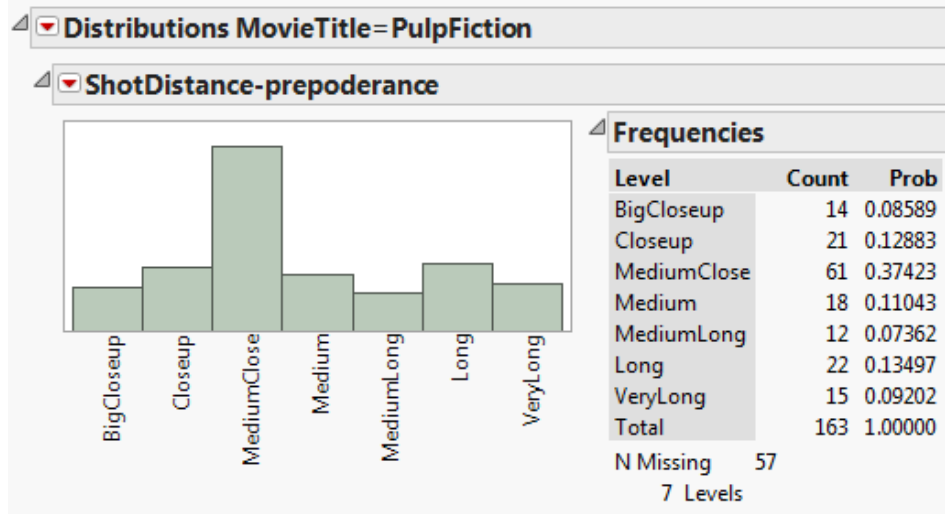


Figure 4.52: Shot distances in *Pulp Fiction*

4.6.2 Camera movement

In most shots of city spaces in the four films, the camera does not move. When the camera does move, the most common movements are the track and the pan. Panning, or rotating the camera about the z-axis, expands one's access to the scene laterally, and tracking, or moving the camera through space, creates the capacity to enter the depth of the scene. Tracking can occur along any vector, while panning is a more constrained motion. Note that there is a distinction between zooming in and out and tracking in and out, which is preserved in the dataset as well as in the table below. Zooming involves changes within the camera that magnify or shrink the view. When watching movies, one can distinguish a zoom from a track because the positional relations of objects to each other will remain static during a zoom. During tracking (in, out, or lateral), the positions of objects change relative to one another.

Table 4-13: Camera movement by city

ShotCameraMovement-prepoderance	City	
	LosAngeles	NewYork
LittleToNone	237	300
Pan	93	78
Track	98	66
ZoomIn	35	10
ZoomOut	12	0
TiltDown	4	4
TiltUp	3	12
Crane	0	8
TrackIn	18	4
TrackOut	6	4

If we combine all tracking shots (including “track in” and “track out”, they total 196, making the track the single most frequent camera movement, followed rather closely by the pan (171 pans). We can interpret the slightly greater prevalence of tracks with respect to the idea that explorations of the depth of the city are of slightly greater interest in the film studied, taken as a whole, than explorations of the lateral extent of the scene taken from a single position.

By city, the New York movies contain 74 tracking shots (including tracking in and tracking out) and 78 pans. Tracking is somewhat more prevalent in the Los Angeles shots than the New York ones, perhaps due to the very high number of tracking shots in *The Long Goodbye*, where the camera is almost always in some kind of motion. Pans are a technically simpler shot and were heavily employed in *The Naked City*, where location shooting was already a challenge and during a time cinematography was less dynamic. *Goodfellas* cinematographer, Michael Ballhaus, and *Long Goodbye* cinematographer, Vilmos Zsigmond, employed a higher number and variety of mobile shots, and both gave the track more play than the pan. By contrast, *Pulp Fiction’s* Andrzej Sekula and *The Naked City’s* William H. Daniels used a relatively static camera

and panned more frequently than they tracked. We might conclude that the visual presentation of the city tends more to surfaces and static presentation of locations in these two movies.

Table 4.14: Camera movement by movie

ShotCameraMovement-preponderance	MovieTitle			
	Goodfellas	LongGoodbye	NakedCity	PulpFiction
LittleToNone	156	108	144	129
Pan	33	77	45	16
Track	56	86	10	12
ZoomIn	10	35	0	0
ZoomOut	0	12	0	0
TiltDown	3	3	1	1
TiltUp	6	2	6	1
Crane	8	0	0	0
TrackIn	3	15	1	3
TrackOut	4	5	0	1

4.7 Summary comments

The movie database was queried with an interest in whether the distinction between the disjoint and situated city was perceptible in how urban form was presented in the four movies, and consistent support was found for this distinction. The number and duration of shots in cities showed that New York settings were more numerous and fleetingly used compared to Los Angeles, where few settings were filmed in a more elaborate way. Shot animation was lower in Los Angeles for streets, and the frequency distributions for shot animation on streets were discontinuous, possibly implying a tendency toward a less evenly populated streetscape. Cinematography that crosses the interior-exterior threshold was more prevalent in New York, especially for streets. The implication is that identity is formed in relation to the streets in New York and in relation to more private domains in Los Angeles. The orientations of views to the street were assessed for both cities and movies. *Goodfellas* and *The Naked City* presented diagonal views of the street most frequently, followed by axial views, followed by transverse views. *Pulp Fiction* is slightly more stagey, with a greater relative emphasis on views transverse to the street, while *The Naked City*, which most emphasizes axial views, appears to more often subsume the individual into the larger urban framework. The construction of the perception of person density appears to proceed by a different logic in life than in film insofar as that while in life one builds up an impression of many people over time, in film the relationship between time (shot duration) and person density (shot animation) has little statistical magnitude, though but consistent statistical significance. This implies that film successfully uses imagery to suggest phenomena, perhaps building on viewer's prior experience, but equally possibly building on well-known cultural expectations about cities (e.g., that New York streets are full of people). Shot distance in urban space tends to be most focused at two distance ranges. The first is the close-to-medium-close range, distances that are presumed to well-capture speech

and finer details of acting, such as facial expressions and relatively subtle gestures and postures. The other, similarly frequent distance is the medium-long-to-long range, which is assumed to convey gross physical actions as well as the surrounding city context in which action occurs. Los Angeles emphasizes the longer views less, thus providing fewer opportunities to the viewer to read the city space surrounding the action, while the New York movies allow the viewer to locate the action in city space through the use of more inclusive framing. In terms of camera movement, there were not regularities by city. *The Long Goodbye* and *Goodfellas* use tracking shots somewhat more than pans and generally had more camera movement in shots in city spaces than *Pulp Fiction* and *The Naked City*, possibly implying a more searching and/or inclusive approach to the urban setting. A more limited engagement of urban form via cinematography is perhaps due to stylistic conventions of the era in the case of *The Naked City* and due to the artistic and thematic concerns in the case of *Pulp Fiction*.

Database findings suggest initial interpretations of films. In *Pulp Fiction*, close shot distances, transverse street view orientations, a generally static camera, and paucity of both time per urban location and total time in urban locations support the conclusion that *Pulp Fiction* is a somewhat stagey film that emphasizes surfaces. The prevalence of couples and relatively closely framed shots, together with the film's critically acclaimed script, suggests that it is a movie of dialogue pairs, and contextualizing the action in urban space is a subordinate concern. *The Long Goodbye*, by contrast, is distinct in its extreme tendency to set a mobile camera afloat in just a few disjoint enclaves. It presents a strong interface between interiors and exterior city spaces, though it rarely depicts unambiguously public spaces. *Goodfellas* most consistently includes the street and interface between interiors and streets, promoting the idea that streets play a role in forming identities and allegiances. *The Naked City*, by

contrast, includes a high quantity of city spaces, especially streets, but they tend to be presented in a brief and static way, with little interface to interiors.

The present chapter has focused on the depiction of city form using a comprehensive, systematic approach, and this necessarily excluded key topics from consideration. The two most important of these are the nature of the relationship between city form as depicted in film and actual urban form and how urban form participates in the presentation of the film narrative. A more selective and interpretive approach is pursued in the following chapter, which allows us to extend the inquiry to these areas.

CHAPTER 5

THE LENS OF NARRATIVE EVENT

In the prior chapter, we looked at how the city is presented in terms of its capacity to stage readings of the films. The analysis focused on urban form as depicted in the film, without extending the analysis to properties that are present in the setting but not necessarily shown in the movie. This methodological choice is consistent with the aim of studying urban space in film rather than studying the objective properties of locations chosen for filming.

Nevertheless, what is physically available is relevant to the central question of the dissertation, of how city form creates a sense of possibility, action, and mood in subtle ways. More closely examining the location of the shots allows a sharper reading of directorial intention and the degree to which urban form is used in support of a story. Such an analysis can achieve two main things. First, it can get to the distinction between whether the director was screening out tendencies in urban form to create the scene or building on what was prevalent; alternately, both strategies could be pursued at the same time. Evaluating the gap between what is depicted and what is physically available provides a sense of whether urban form inspired how the story was told, or whether it played a lesser role, as a prop in a story that was settled more independently from city form. Second, place plays a role in movie narrative insofar as it makes basic aspects of the plot intelligible. Tschumi's *Manhattan Transcripts* implies that, over and above depicting city form, movies can be expected to reveal and highlight relationships between city form and culture, and within this matrix of relationships and expectations, events occur that may transgress or comply with the implied norms.

With this in mind, we turn to closer analysis of a chase scene from each of the four movies. Chases were selected because they are a key activity in many movies. Film

is inherently well-suited to capturing movement, and chases are an intensified instance of movement. Hitchcock noted that the chase was the “final expression of the motion picture medium” (Hitchcock & Gottlieb, 1995, 125). Per cultural and film theorist Siegfried Kracauer, chase scenes open up larger expanses of reality in a new time signature, with the flood of visual phenomena giving the viewer a sense of omnipresence (1960). Chases are distinct from searches in that while both chases and searches involve physical phenomena that generate movement, chases take place between multiple moving agents, and there is thus a suggestion of personal interaction about them.

Following on the prior analysis, we can say that the Los Angeles of *Pulp Fiction* is one of cinematic mood while the Los Angeles of *The Long Goodbye* depicts the breakdown of social intelligibility. One city stages two distinct directorial agendas, both involving urban form. In *The Naked City*, New York City represents textbook sociological urbanism, tracking closely with Louis Wirth’s description of urban life as characterized by exposure to diversity, impersonal relationships, and individual freedom (Wirth, 1938). In *Goodfellas*, New York is presented as constituted of overlapping social networks that are spatially situated and in intermittent conflict. In New York, the two movies share themes that are recognizably sociological, but they tell essentially different stories, in part through the selection of different locations in the city as well as through different cinematographic strategies.

The maps that follow show locations of outdoor scenes identified from the four movies. In no cases were identical locations used in more than one movie. As one might imagine, Los Angeles locations (Figure 5.1) are more diffused through the city, with none falling in the downtown proper. In New York (Figure 5.2), the tendency is much more central, especially for *The Naked City*, which is filmed almost entirely in Manhattan. The plurality of locations in New York described in the previous chapter is visually evident

here. (Note that some location markers, especially for *The Naked City*, represent multiple locations; many locations were in very close proximity, and the corresponding level of granularity could not be captured in these city-scale maps.)

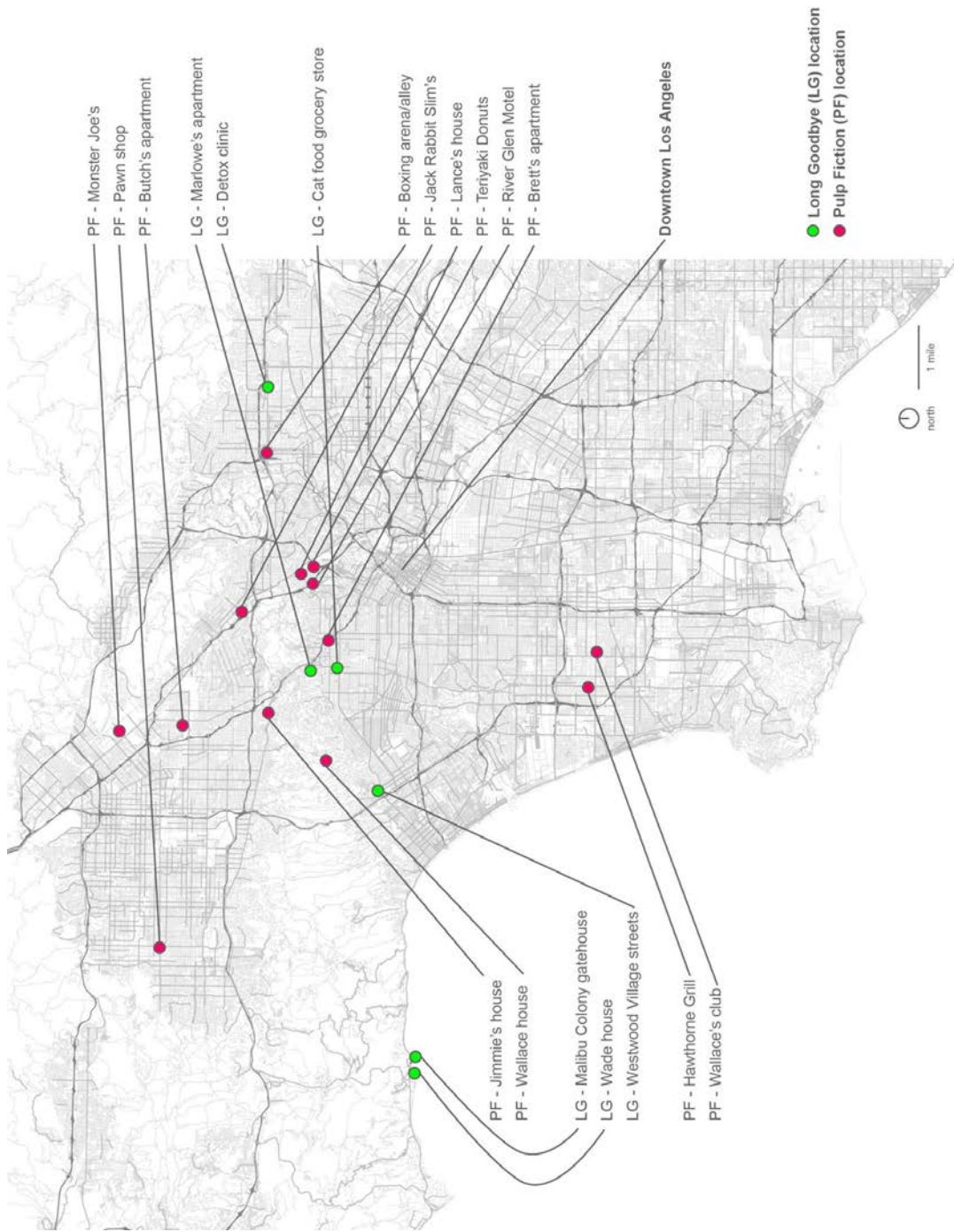


Figure 5.1: Map of Los Angeles film locations

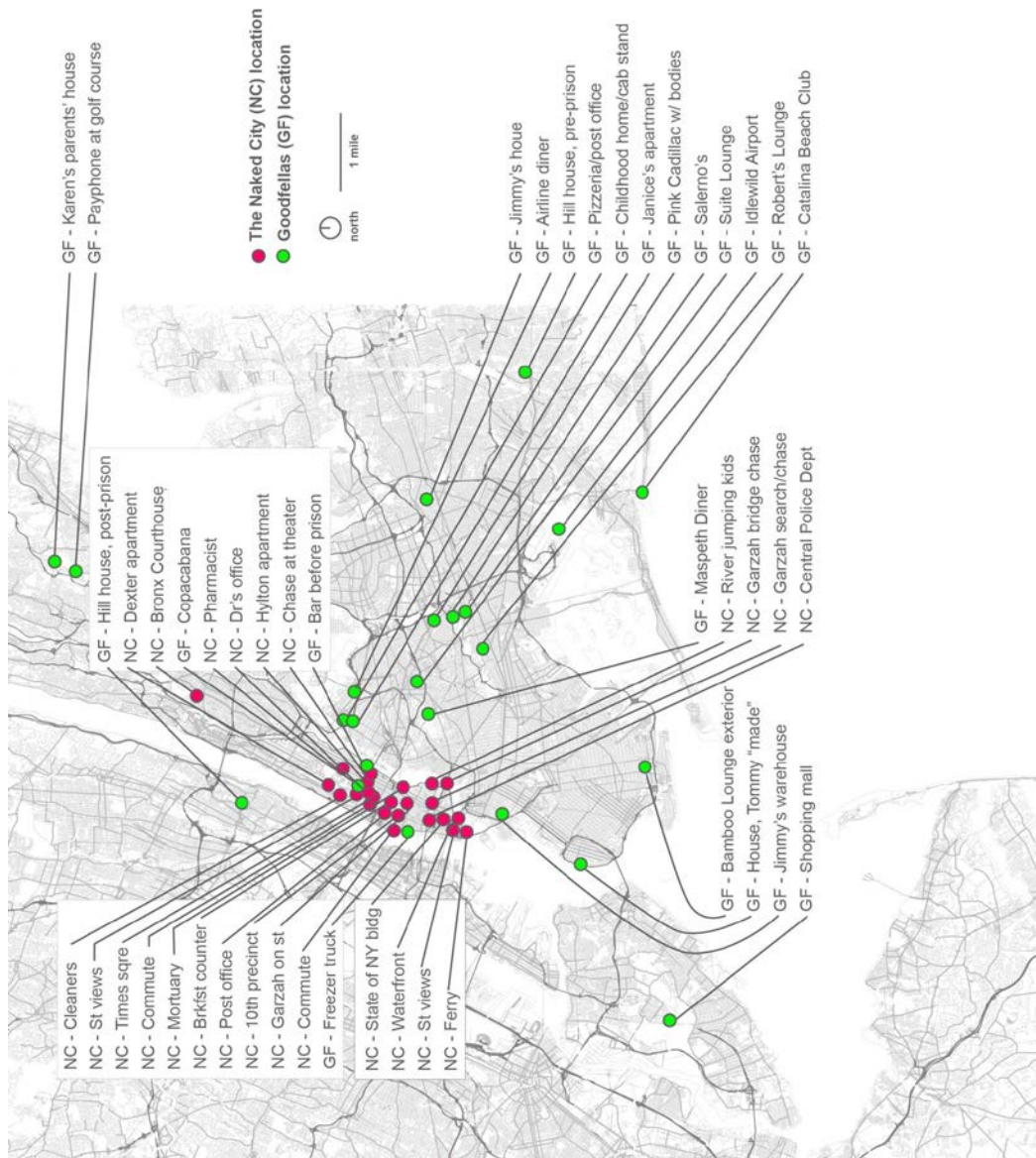


Figure 5.2: Map of New York film locations

Instances of each chase were selected using the following criteria. First, there must be an actual depiction of a chase (as distinct from an implied chase). Second, a mappable location for the chase scene must be identifiable. If there was more than one option available, locations that were less changed from the time of filming were selected.

Comparing movie imagery with plan and situated views of the city supports a comparison between what is available in the city and what is made visible in the film representation. These comparisons are made using movie screen captures, building footprint maps at two scales that have been corrected to resemble the date of filming, and Google Earth street views.

Plan views of each chase location are drawn as convex maps, which break the continuous space of the street into a series of perceptually stable spaces. We know that filmmakers are attentive to perceptual boundaries insofar as they are defined by camera views. Convex partitions, which are somewhat more abstract, reveal perceptual boundaries in space, and allow us to probe whether filmmakers exploit such boundaries to sharpen the presentation of the narrative.

5.1 Chases

5.1.1 The Naked City

The chase in *The Naked City* is filmed in two locations, the first of which is not locate-able using online resources. The chase sequence begins as a criminal, Willy Garzah, escapes an apartment he has robbed, with a detective, Jimmy Halloran, pursuing him down a fire stair and into the street. The next location shows Garzah running down the sidewalk past a theater with Halloran pursuing at some distance. Garzah rounds a street corner, ascends a stair to elevated tracks, and escapes by train. Halloran arrives on the platform in time to see the train rolling away.

In keeping with the date of the film's production, the shooting is comparatively static. The shots for the entire scene can be easily enumerated (Figure 5.3). First, a single shot from a camera pans at the street level as Garzah runs past. A second shot, situated on the platform, tilts and pans to capture his ascent to the platform and entrance onto the train. These two shots are repeated for Halloran as he pursues Garzah. Following these, a stationary shot that tilts up captures Halloran looking out at the edge of the platform. Finally, a long shot, taken from a position farther back on the platform, captures the train departing into the night (Figure 5.4).

Despite the slow, legible cinematography, this portion of a chase sequence shows several elements that recur in urban chases in present-day films. There is the crowd that is usually only marginally helpful, the rounding of corners as a strategy of elusion, the use of vertical circulation, and, perhaps the most recognizably urban signature, the shift in modes as a temporally limited portal to another scale of movement, with the capacity to effectively end a chase. Here, that shift is to the train, with its impersonal, amoral closing doors and schedule of arrivals and departures. These things are presented simply here, yet one could argue that the fundamental resources of urban chases have changed very little; crowds, various planes and vectors of potential movement, and modal changes for jumps in scales of motion remain important components in cinematic chases.



Figure 5.3: Garzah's escape



Figure 5.4: Halloran's pursuit

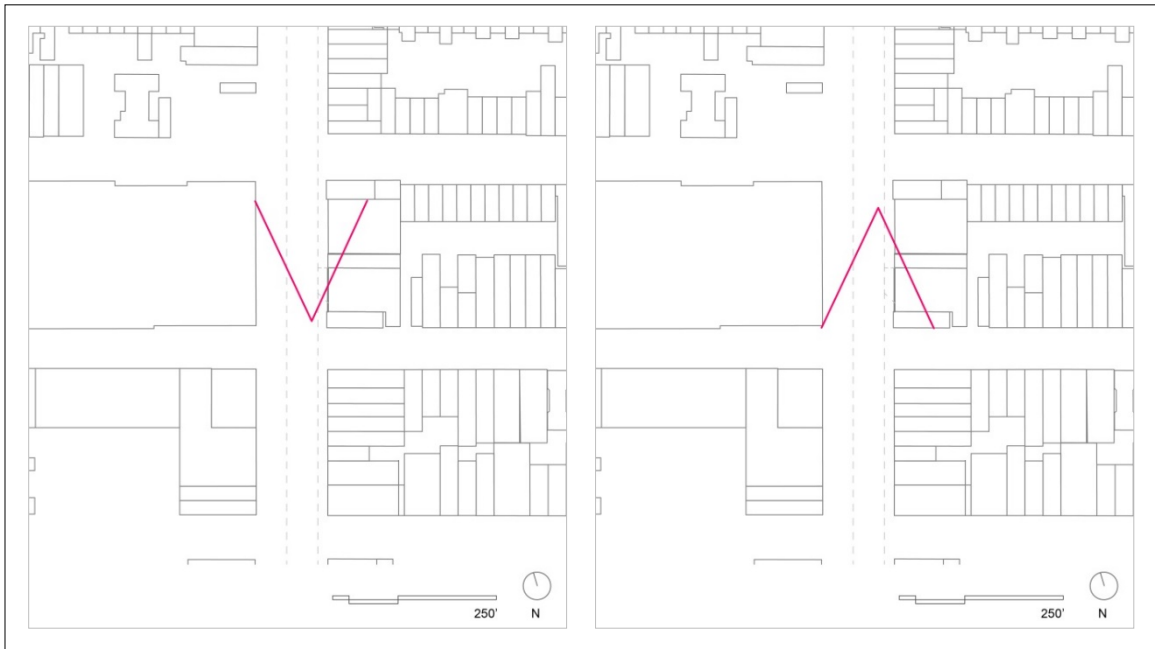


Figure 5.5: Approximate camera positions from *The Naked City* chase, as Halloran looks after the train (left) and as we share his view to it (right).

A notable aspect of the framing of urban form, as presented in here, is the placement of the camera in such a way that it captures corners (Figure 5.5), which may function to make the city grid more amenable to filming action by breaking up the tendency of the grid to present either shallow, transverse-to-street, stage-like space or deep axial space. A similar strategy is used to stage a simple encounter between a police officer and a lemonade vendor at Rivington and Essex Streets in Lower Manhattan (Figure 5.6). Corners also create a particular balance between occluding edges and hard edges. In a shot taken axial to the street, occluding edges are minimized in length. In a transverse-to-street shot, occluding and hard edges are balanced, depending on street width and viewing angle. In the corner shot, occluding edges are maximized. In short, the shot is set up so that space—and whatever it carries—flows into view from around edges, and the viewer occupies a position that assumes the incompleteness and mutability of the view. There is more “mystery”, following the

definition of the term as used by environmental psychologists (Kaplan, 1995). In terms of the narrative, the corner is used when the action focuses on actual and potential interrelationships between characters; the axial view, by contrast, coincides with the loss of someone into the city.



Figure 5.6: The building corner scene in *The Naked City*; the vertical edge of the building occludes the action beyond, framing a continuous flow of new information into the scene

The chase location is on the Upper West Side of Manhattan, at the corner of Third Avenue and Fifty-Ninth Street. In terms of the degree to which *The Naked City* portrays versus filters the city, the critical and historical literature on the film is clear that depicting the city “without makeup” (according to producer Mark Hellinger’s narrative voiceover) is central to the directorial intention. Relative to 2015 Google Earth imagery, we see few, large buildings filling spaces formerly occupied by more numerous, smaller buildings; the loss of the elevated train, and the dominance of the car and throughfare over the pedestrian and sidewalk. However, the overall pattern of *poché*, or built footprint, relative to open space remains similar. In the view south along Third Avenue, several of the old, small buildings can still be seen. Despite the many changes over time, the views to areas where action occurs look rather like the film. It is reasonable to

conclude that the filmmakers followed through on the stated intention to create a frank and realistic presentation of the city.



Figure 5.7: A context plan of *The Naked City* chase location, showing building footprints following the 1948 Sanborn map of the area; generally, the boundaries of the building footprints have remained the same, but there are larger, more monolithic buildings now instead of the finer 1948 fabric.



Figure 5.8: Left: View north along Third Avenue. The chase scene occurs in the area to the right of this photo, which is mostly not visible from this view. Right: View northeast along Third Avenue. This building was monolithic, spanning the whole block, as far back as 1948. This view is not seen in the chase scene.

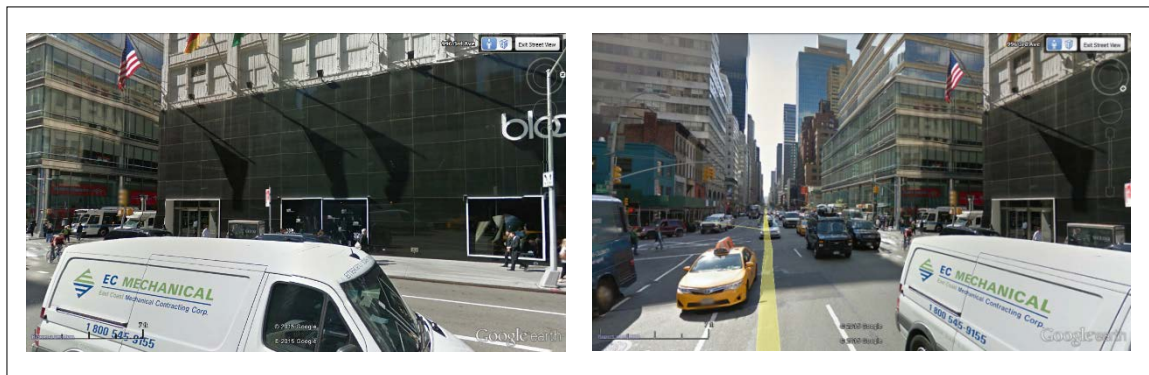


Figure 5.9: View east along Third Avenue, picking up the corner of 59th Street. This view is unseen in the chase as depicted. Right: View southeast along Third Street. Some small buildings appear at the left of the photo and can be seen in the view to the departing train.

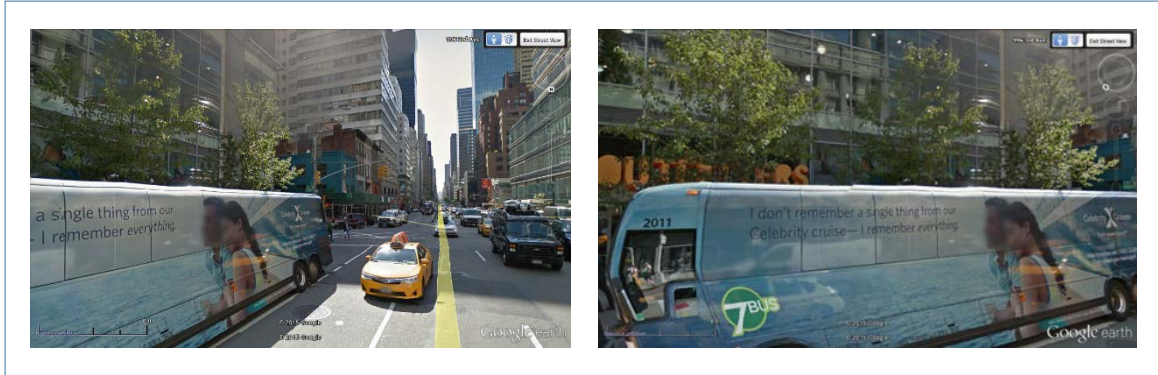


Figure 5.10: Left: View south along Third Street. In addition to the older buildings, now at the center of the building, the image includes the building line along which the chase took place at the left of the photo, behind the bus. Right: View southwest on Third Street. Behind the bus is the location of the chase.



Figure 5.11: View west along Third Street. The chase occurs along this sidewalk. This view fairly closely approximates the first shot of the chase. Right: View northwest along Third Street. This skyline in this direction forms the background as Halloran looks after the train; it is notably fuller.

Convex maps are drawn by breaking up spaces as configured by urban or building form into the set of convex shapes that approximates the fewest spaces to cover the entire map. When we look at the convex space map of the chase from *The Naked City* (Figure 5.12), two features of interest are apparent. First, the buildings act to create a very evident boundary between the private and public realms, and the street offers little scope for hiding; thus, crowds and other scales of transportation become

necessary to hiding oneself. (This assumes that chases will not extend indoors.)

Second, all of the cameras fall within the central convex space. Within the area shown, as 750 ft. x 750 ft. area surrounding the location, the central (vertical) street is the position from which all views are taken and is also tends to be the focus of the *mise-en-scène*, excepting some depiction around the stair to the elevated train. We see the street and/or the buildings that bound it, in two shots, of pursued and pursuer running, and again behind Halloran and in front of Halloran as he watches the train.

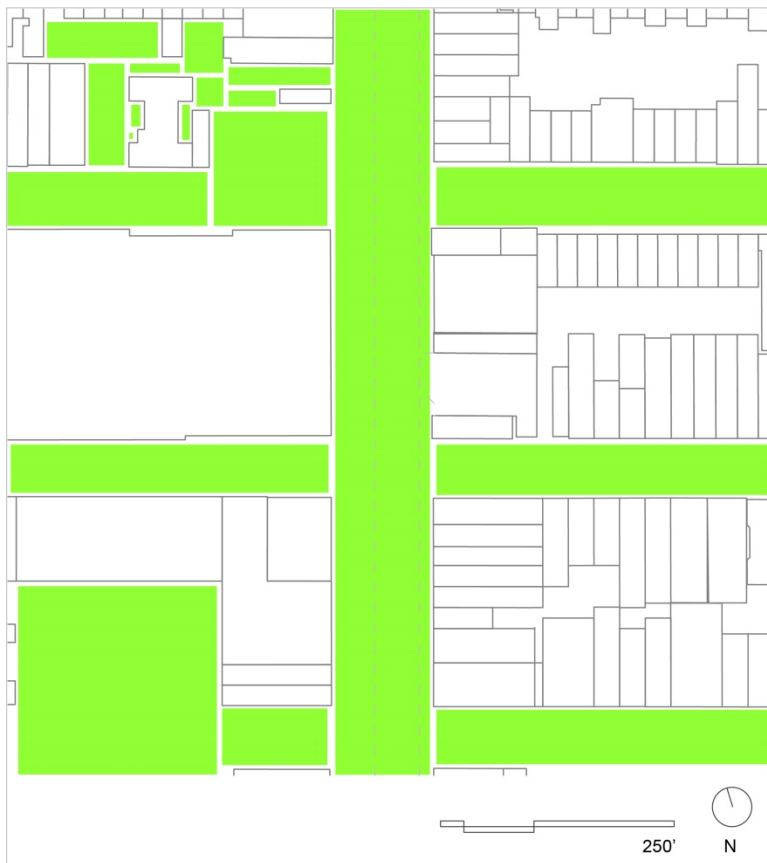


Figure 5.12: Convex map of *The Naked City* chase scene

Even within a single convex space, there is a multiplicity of points of view (Figure 5.13) that can show the same contents in different relationships. Through action, such as chases, co-presence develops into co-awareness, then progresses to some sort of coordination of action and locations, as various points of view are synchronized both for the viewer and for the participants.

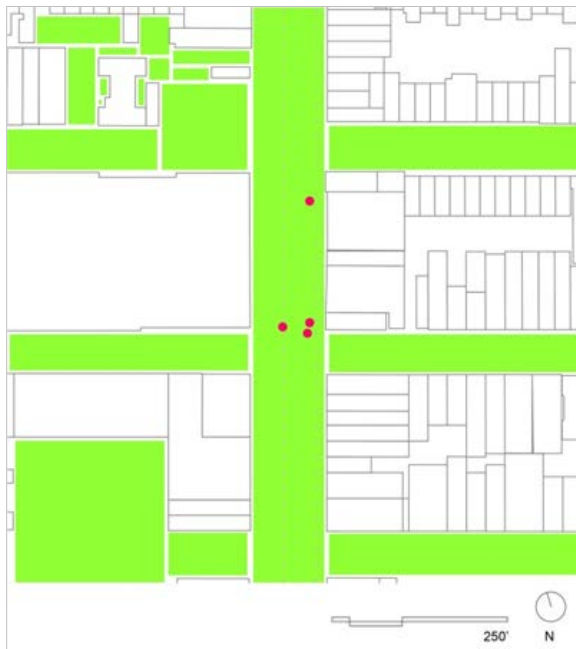


Figure 5.13: Convex map of *The Naked City* chase scene with several approximate camera locations marked by red dots

5.1.2 Goodfellas

Where *The Naked City* presents literal interscalar relationships available from a single perceptible space, *Goodfellas* emphasizes intersecting social groups and the overlap of different scales at which social forces operate. There are no chase scenes in *Goodfellas*; violence tends to punctuate activities without prior buildup. However, the scene at Jimmy Conway's warehouse shows a reasonable approximation of a chase;

perhaps a better term is a *pursuit*. In this scene, Karen Hill, the wife of Henry Hill, meets with Jimmy at a warehouse through which he moves black-market goods. The context to the scene is that Henry's colleagues fear he will sell them out to authorities and one another after a recent imprisonment, and Henry, for his part, fears they will kill him to prevent such a thing. Toward the end of their meeting, Jimmy walks Karen to the sidewalk and invites her to go pick out some dresses from one of his storefront properties, farther down the block in then run-down Brooklyn. As she progresses down the street, she becomes increasingly discomfited as she looks at the decrepit buildings while Jimmy stands at the hilltop, emphatically waving her on. Reaching the ordained door, she sees figures moving in the grimy light, and, fearing their job is to kill her, she slowly backs away, as Jimmy continues to enjoin her to go in. She turns suddenly, proceeds to briskly to unlock her car door, and calls to Jimmy that she has left her kids with her mother and needs to return to them. Her tires squeal as she pulls away. That this is a pursuit is not acknowledged by either participant, but Karen's terrified flight, the nature of which she does not quite manage to suppress, reveals her sense of being endangered.

The camera captures her friendly, parting embrace with Jimmy at the top of the hill in a comfortable two-shot distance. Jimmy is subsequently mostly framed in views that emphasize the long axis of the street. Karen and what-Karen-sees, by contrast, are shown in a number of choppy, short, transverse views. However, as she formulates her decision to flee, the camera shifts position around her, so that she is not framed by the close backdrop of the building facades but by the structural frame for a freeway overpass in the distance, which directly depicts a scale greater than the street she is on with Jimmy. As Karen begins to flee, a crane shot gives us the axial view of the street, with Jimmy toward the perspectival center. The extreme angle of the shot allows us to see both Karen, unlocking her car, and Jimmy, on the hill. This view is returned to as

Karen peels away. There are three main camera views relative to the street: axial down Smith Street, transverse to and facing the façade line along Smith, and oblique to Smith and tilted up to reveal the overpass structure.



Figure 5.14: *Goodfellas* screen capture and approximate camera location (1)



Figure 5.15: *Goodfellas* screen capture and approximate camera location (2)



Figure 5.16: *Goodfellas* screen capture and approximate camera location (3)



Figure 5.17: *Goodfellas* screen capture and approximate camera location (4)

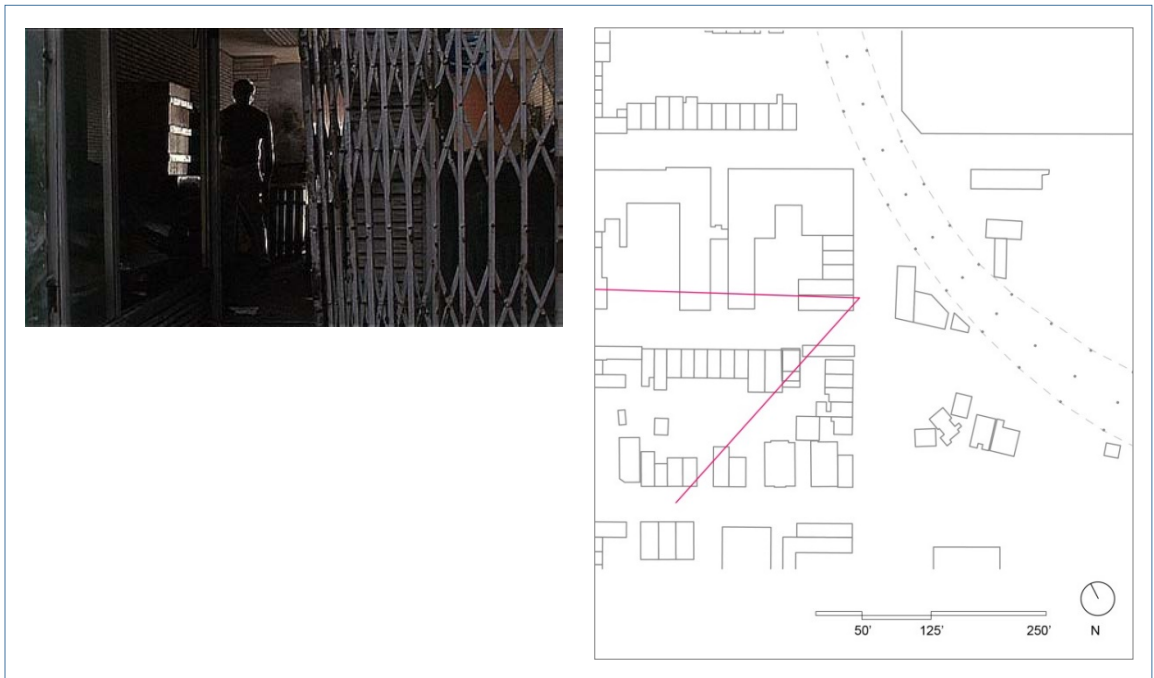


Figure 5.18: *Goodfellas* screen capture and approximate camera location (5)



Figure 5.19: *Goodfellas* screen capture and approximate camera location (6)



Figure 5.20: *Goodfellas* screen capture and approximate camera location (7)

Here, the pursuit on the street seems impelled by cross vectors of danger and opportunity, which are sometimes simultaneous. The axial view of the street depicts Jimmy as the origin of the danger, as he summons Karen toward the storefront, but the axial extent of the street also provides the means of escape for Karen. The scene directly precedes Karen and Henry's decision to enter the witness protection program. Correspondingly, Karen and Henry realign their identities from part of the mob to informants in hiding. In a number of previous scenes, such as those from Henry's childhood (at Tuddy's or the pizza parlor) , cross-threshold ties, typically filmed transverse to the street, bound him to the mob, protecting him and providing him with status in the neighborhood. In the present scene, such ties are familiar and beckoning, but also dangerous.

The transverse views can be interpreted as signaling the characters as defined in their existing relationships. The longer axial views occur for characters at the moments when at least one of them sees their relationship in a different way. The camera moves from depicting characters in ways that highlight personal interactions to depicting their relationship within a setting that is larger than, and subsumes, their present relationshipst. While the capacity to stage actors in this way may not be unique to urbanity, the pronounced differentiation between the situated and the bird's eye view that cities offer lends itself to switching between depictions embedded within and sympathetic to inter-subjective relations to depictions that are unambiguously anchored in a "third" point of view outside the prevalent definitions of characters and their relationships. Overviews, such as that of Willie Garzah in the final chase up the tower on the Williamsburg Bridge in *The Naked City*, meld the two, absorbing the outside perspective of the city into depiction of Garzah's relationship with the detectives and police who are chasing him.

Turning to the Google Earth present-day depiction of the location, we see that the general feel of the street is preserved, but it is presented as more enclosed than it actually is, as more focused along Smith Street. The presentation of the location maintains the impression of a small, bounded space, with a linear exit as the only means of escape. Jimmy's point of view is excluded from the views offered. From the perspective of the narrative, it is sensible to omit Jimmy's view; Jimmy must, of course, remain unknowable in the scene. The dramatic tension of the scene arises because the viewer does not know whether Jimmy wants to kill a woman or give a woman a dress. Not supplying Jimmy's point of view is consistent with keeping his intentions concealed.

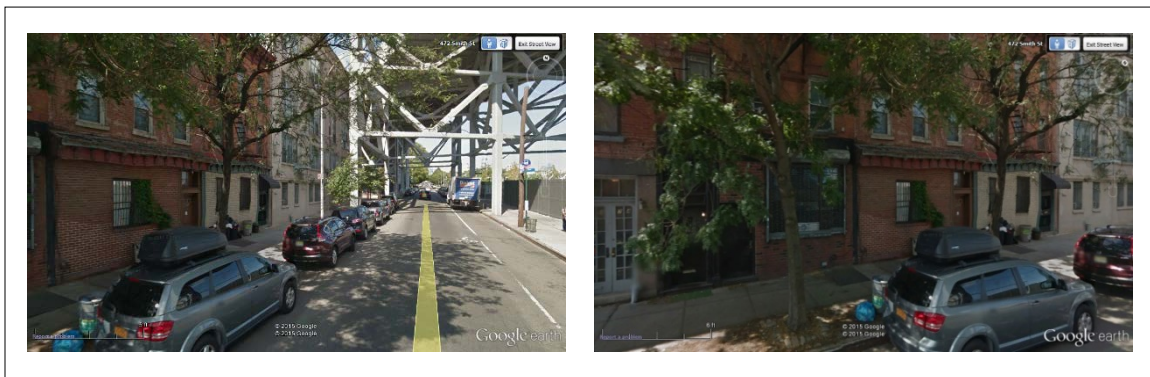


Figure 5.21: Left: view north along Smith Street, which corresponds to views to Jimmy, who stands near the door at the middle of the building now painted white. Right: Northeast view, showing some of the facades Karen walks past.

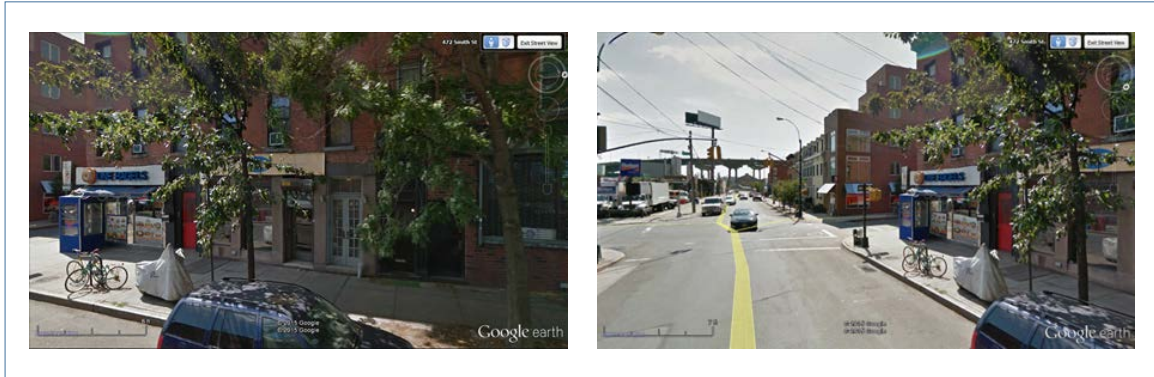


Figure 5.22: Left: East view, showing some of the facades Karen walks past, as well as the corner condition, not shown in the scene. Right: Southeast view, which is not shown in the scene, indicates a kind of openness inimical to the sense suffocating threat that drives the scene. This corresponds to Jimmy's view, not disclosed in the film.

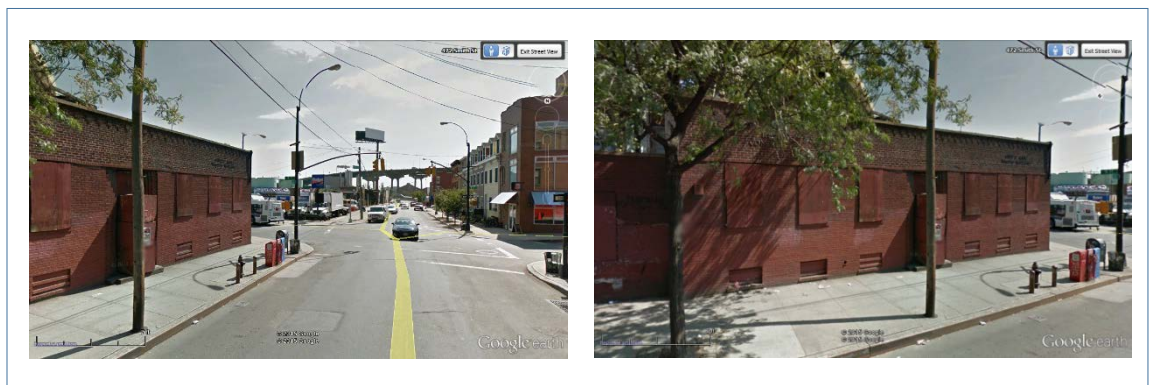


Figure 5.23: Left: Jimmy's view south along Smith Street is also relatively open. Right: View to the southwest along Smith Street is also not shown in the movie.



Figure 5.24: View to the west is shown, but only in upward-tilting shot that shows the freeway overpass structure, not the buildings. Right: View northwest along Smith Street.



Figure 5.25: Context plan of the *Goodfellas* chase location at Jimmy's warehouse

A context plan of the location shows the *Goodfellas* scene as occurring in a small, coherent spatial setting that is at a perceptual edge formed by the freeway overpass (Figure 5.25). The edge condition is pressed into service to simultaneously signal dangerous containment and the existence of a larger world. Elsewhere in *Goodfellas*, edges are depicted as bounding a coherent community that retains its integrity apart from larger scale society. For example, in Henry's childhood encounter with a man who has been shot outside a mob-owned pizzeria, the street itself is presented as contained, idyllic, and protective of Henry (Figure 26). When Henry's mob mentors abduct and threaten the postal officer who delivered a notice of his truancy to Henry's home, they do so at a location bounded by the columns that support the elevated train. Scorsese has, in other words, developed a systematic use of urban form, wherein enclosing elements suggest a world within a world. Elements from the outside are introduced along axial views, such as when Karen pursues Henry to the cab stand after he stands her up on an early date, or when Henry assists that man who has been shot. In the later scene with Jimmy and Karen, the elevated freeway still serves to carve off the streets for ownership. But the substitution of freeway overpass of the 1980s for the elevated train of 1950s indicate that times have changed, ownership of the streets is more fraught, and various characters will eventually come to terms with these changes. The cinematography pursues a strategy of fixing in close "here", then sweeping out "there". Scorsese has developed a narrative language of urban form, which is adaptable in his hands insofar as he is able to exploit edges as placemakers in both negative and positive senses. In the scene with Karen and Jimmy, the subversion of the language of city elements signals that a fundamental change to the identity of the characters is imminent.



Figure 5.26: Young Henry at the pizzeria. At the upper left, an outside force (the wounded man, an outsider relative to the pizzeria) emerges from an axial view of the street. Close transverse-to-street views frame most of the action. A high, distant transverse view closes the scene.

The convex map shows a small street space at the edge of a somewhat densely built grid that is disrupted by the underpass to the southeast of the shot location (Figure 5.27). Although the convex space that hosts the action is small, the shot contents are mostly contained within it. Except for the crane shots, which are taken from the large, wedge-shaped convex space just below the center of the map, camera positions appear to fall inside this small convex space (Figure 5.28). The only views to outside of the

convex space are those broken up by the elevated infrastructure, and they are not seen at street level. This, together with the Google Earth imagery, suggests that the storytelling is both inspired by the urban form, insofar as there is an established language on containment and axial and transverse street views, but it is also overlaid on top of the urban form, insofar as the more open and spatially permissive aspects of the city are excluded from the frame. Thematically, *Goodfellas* depicts overlapping social groups and institutions continuously bumping up against one another. The selection and framing of the ground and elevated street systems— each with its own geometry, each overlapping the other—may be the urban form counterpart to the superimposed social groups that animate the narrative.



Figure 5.27: Convex map of the *Goodfellas* chase location



Figure 5.28: Convex map of the *Goodfellas* chase location with several approximate camera locations marked by red dots

5.1.3 Pulp Fiction

The main chase in *Pulp Fiction* spans two locations, the intersection near the so-called Teriyaki Donuts and an alley near a pawn shop. The two locations are presented as spatially continuous, though they are about twenty miles away from one another as the crow flies.

The chase is depicted as starting at an intersection, where Butch and Marcellus meet by chance, with Butch in his car and Marsellus in the crossing carrying a box of doughnuts to a stakeout intended to trap Butch. Butch, knowing Marcellus's intent to kill him, runs Marcellus over, but is hit by another car as he speeds into the intersection. When Marcellus comes to, he sees Bruce, injured, across the intersection, pulls a gun, and pursues Butch. The two run—actually, they stumble— down the street where the collision occurred, rounding a corner, and next appearing in the alley of the second

location, near the pawn shop. The image cuts to the inside of the pawn shop, where the chase concludes.



Figure 5.29: *Pulp Fiction* screen capture and approximate camera location (1)

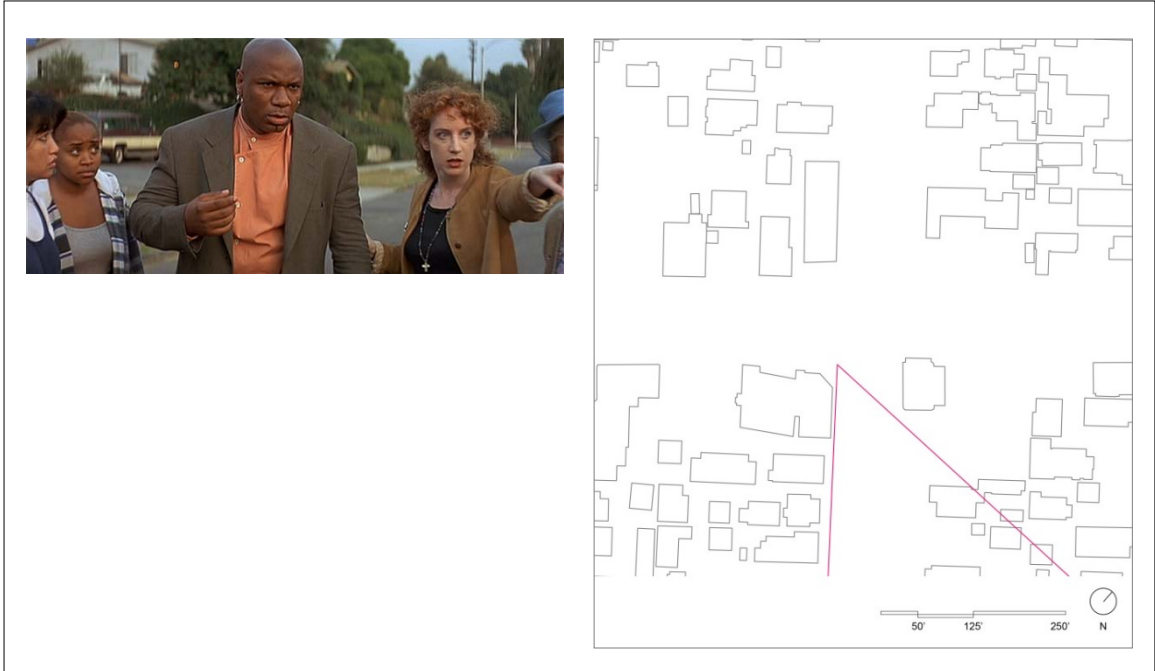


Figure 5.30: *Pulp Fiction* screen capture and approximate camera location (2)

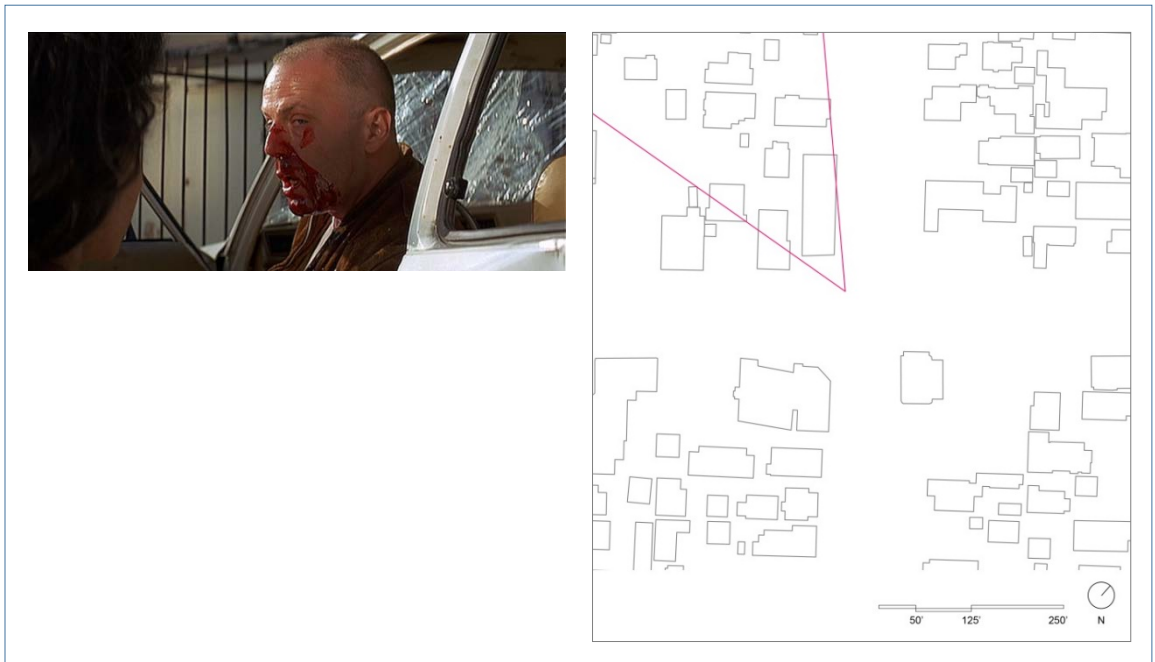


Figure 5.31: *Pulp Fiction* screen capture and approximate camera location (3)



Figure 5.32: Pulp Fiction screen capture and approximate camera location (4)



Figure 5.33: Pulp Fiction screen capture and approximate camera location (5)

A map view of the collision shows the context of the first location to be an urban grid that is disrupted by a freeway to the southwest (Figure 5.34). The intersection where the action occurs is a grid populated with freestanding buildings that bound the street edge rather weakly.



Figure 5.34: Context map of the *Pulp Fiction* intersection chase location

The intersection is presented from three main views; from Butch's position in the pre-crash car, from Marcellus's position as he comes to from being hit, and from Butch's position in the crashed car. Views from cardinal and ordinal directions in Google Earth, indicate that the location as depicted in the film and the location on the ground remain quite similar. The area appears not to have changed greatly since the early 1990s, when *Pulp Fiction* was filmed. Also, the filmic presentation of the location did not operate to present the location as looking different than it is; the city is presented here with some degree of transparency and inclusiveness.

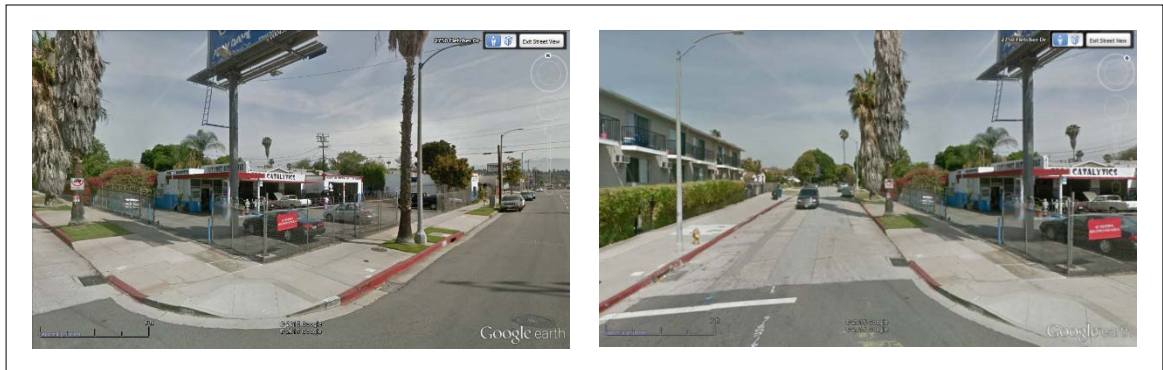


Figure 5.35: Left: View north at Atwater Avenue and Fletcher Drive; this view is not shown in the scene. Right: View northeast along Atwater Avenue and Fletcher Drive; this is the direction of Butch's view when he sees Marcellus in the crosswalk.

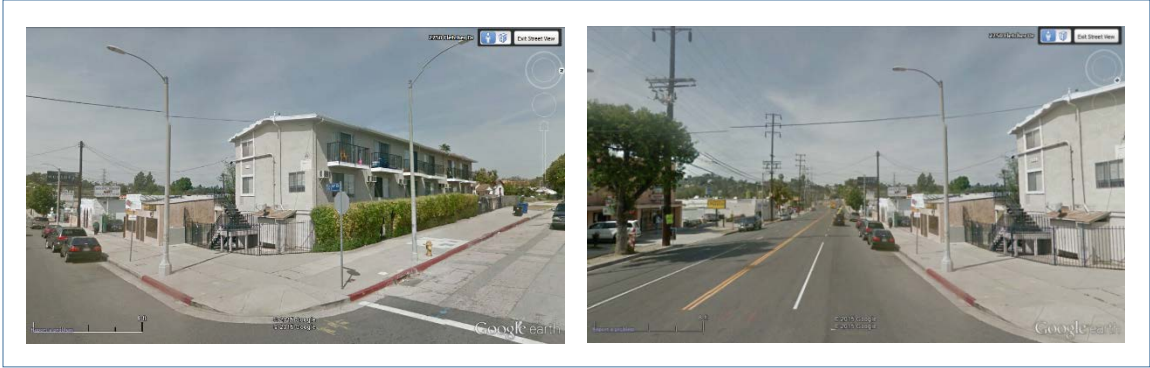


Figure 5.36: Left: View east along Atwater Avenue and Fletcher Drive; this corresponds to Marcellus's view to Butch after the accident. Right: View southeast along Atwater Avenue and Fletcher Drive; this corresponds to Marcellus's and Butch's chase on foot.

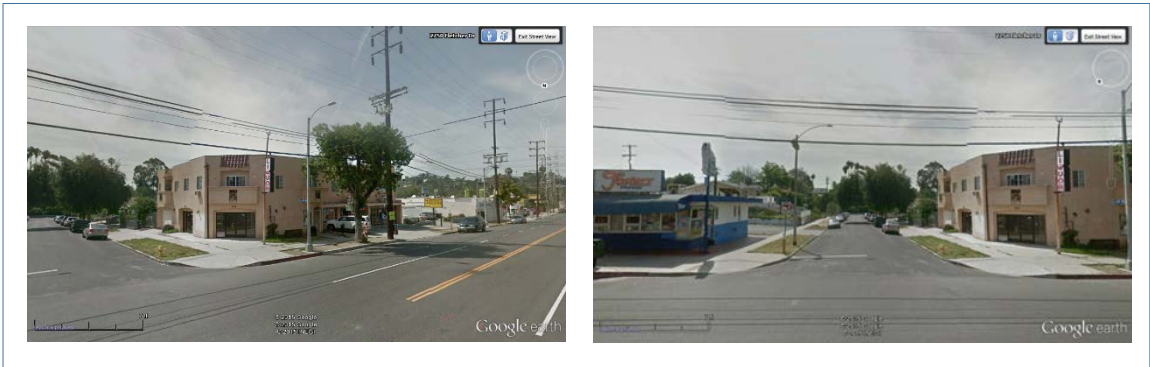


Figure 5.37: Left: View south at Atwater Avenue and Fletcher Drive; this view is not shown in the scene. Right: View southwest at Atwater Avenue and Fletcher Drive; this view is shown where we view Butch in his car.

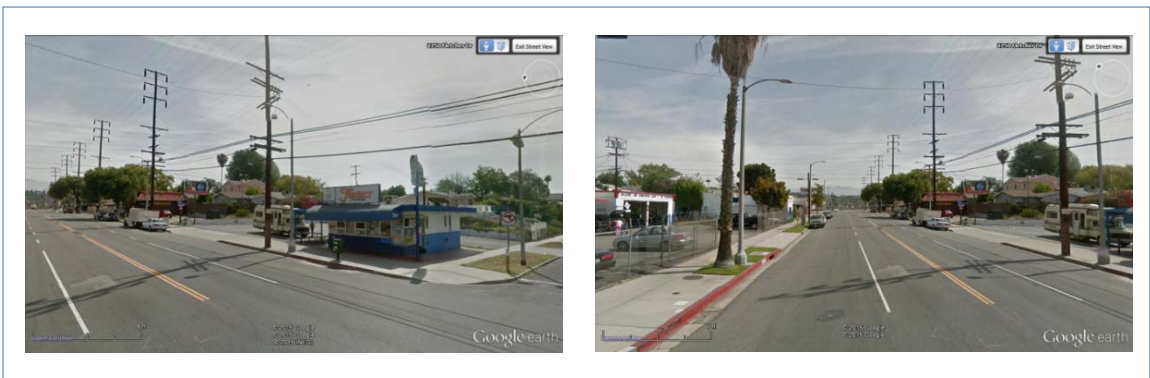


Figure 5.38: Left: View west at Atwater Avenue and Fletcher Drive; this view is shown as Marsellus comes to after Butch runs him over. Right: View northwest at Atwater Avenue and Fletcher Drive; this view is not shown in the scene.

The convex map for the Teriyaki Donuts location shows the largest convex space lying at the intersection in which most of the action occurs (Figure 5.39). While location shooting was inclusive here, the location has special spatial characteristics that allow the framing of the intersection to shift from presenting an unremarkable portion of LA grid as two intersecting lines to presenting a field across which enemies face one another, an old trope from Western movie gunfights. The framing of the space as linear takes place from Butch's car and focuses on streets and their vectors of movement; post-accident, the street becomes a field with multiple views into, from, and through it.

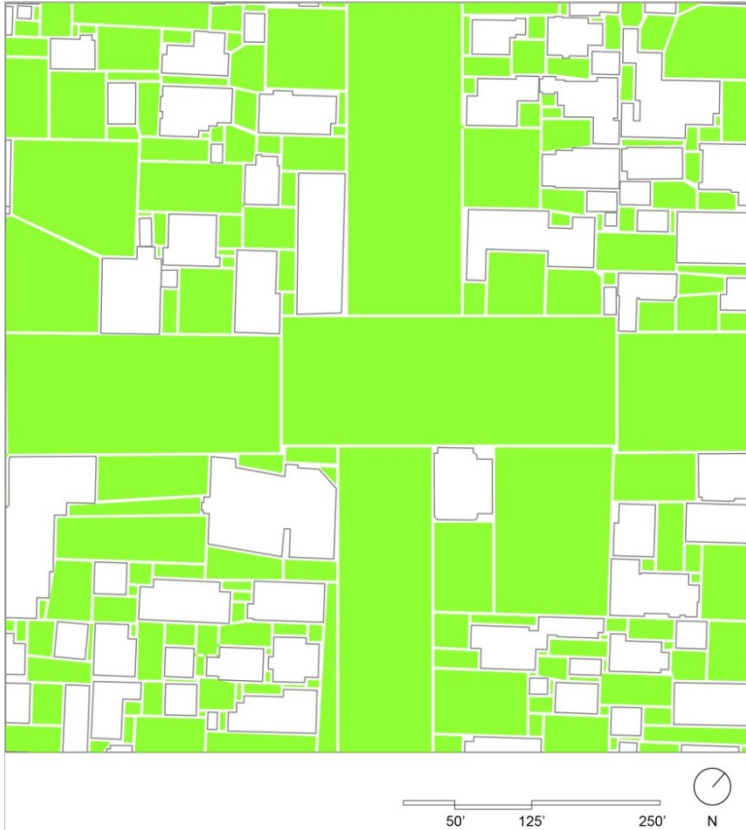


Figure 5.39: Convex map of the *Pulp Fiction* intersection chase scene

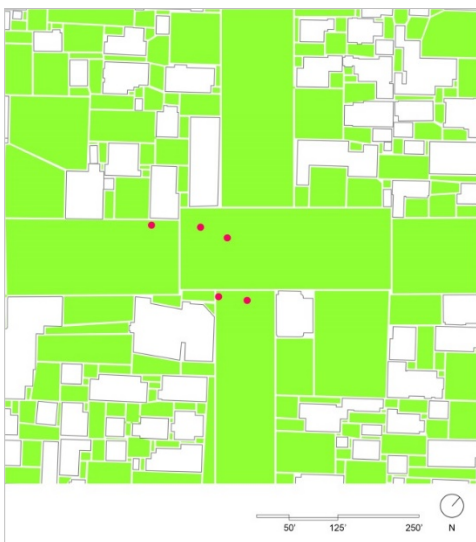


Figure 5.40: Convex map of the *Pulp Fiction* intersection chase scene with several approximate camera locations marked by red dots

The chase continues in an alley to the side of a pawn shop, where Marcellus pursues Butch down an alley with a pink wall; the final city shot of the chase shows Butch in big close up and Marcellus in a very long view, punch-drunk, firing his gun.

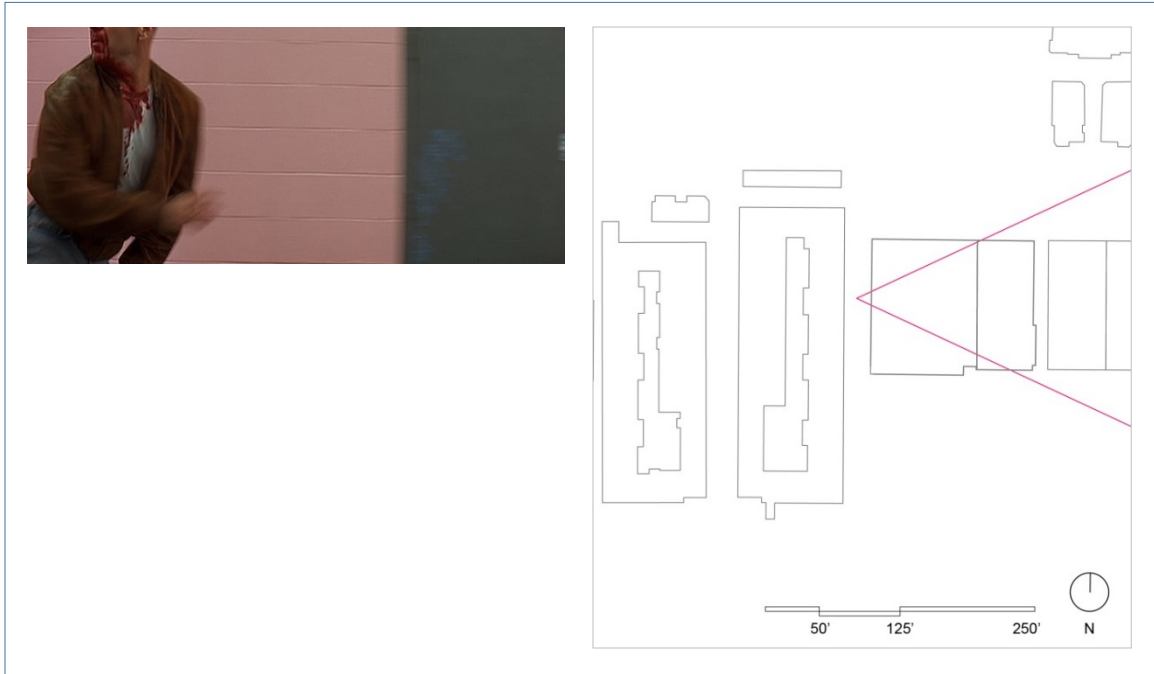


Figure 5.41: *Pulp Fiction* screen capture and approximate camera location (6)



Figure 5.42: *Pulp Fiction* screen capture and approximate camera location (8)

The building footprint map view for the area around the pawn shop shows a main road running across the middle of the image with a less clearly defined north-south running road toward the right of image; buildings are pulled farther back from the street than in the previous space, so the reading of the road network is less clear than in the previous case (Figure 5.43). The pawn shop is part of a strip mall that sits away from the road. The convex map shows the principal, or largest, convex space as spanning the parking lot and the street.

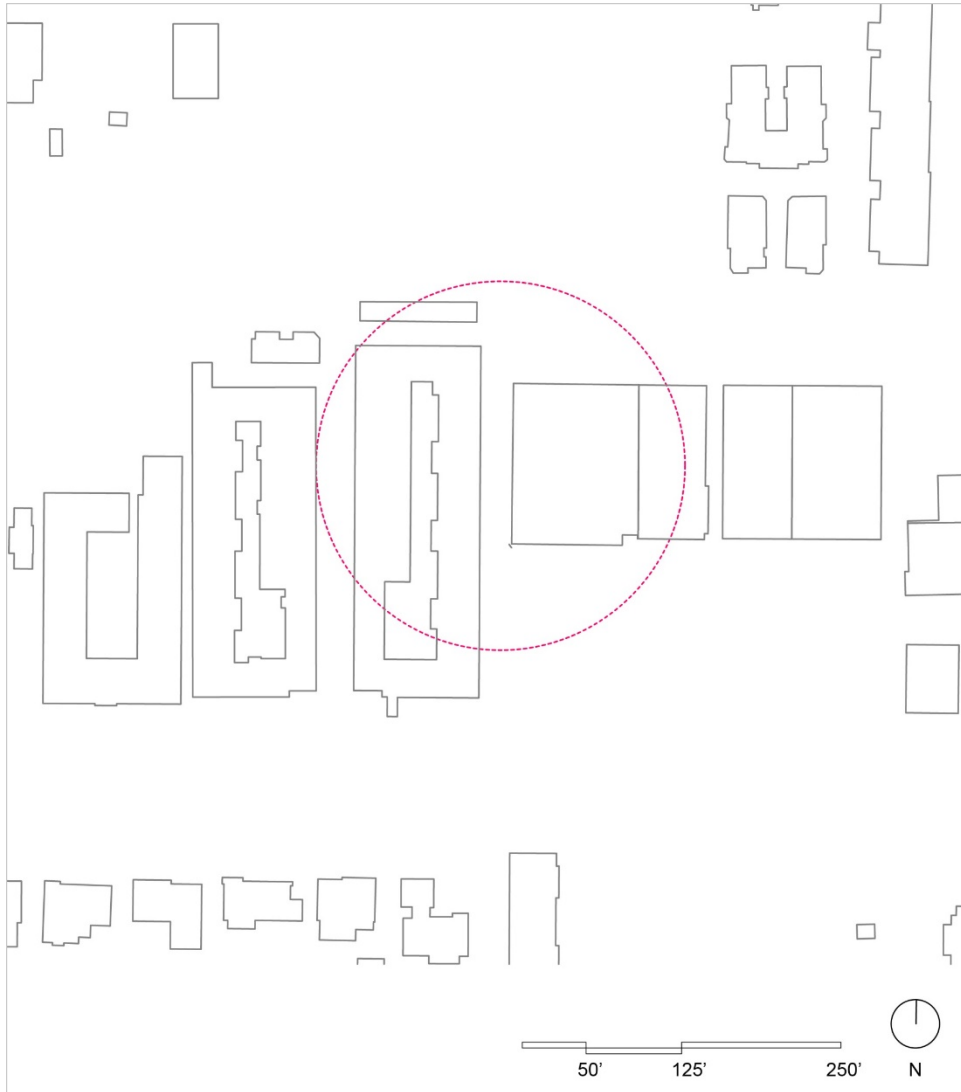


Figure 5.43: Context plan of the *Pulp Fiction* alley chase location

However, as distinct from the Teriyaki Donuts intersection, the main camera angles do not capture the principal convex space. The first view near the pawn shop is in a small alley and is framed very tightly, transverse to a pink wall. The second view is stationed longitudinally along the alley and dramatically composes depth staging. Depth staging, as the name suggests, engages both closer and more distant planes in the camera view. Butch is closely foregrounded, while Marcellus staggers up the alley in a very long view. The position for the camera in this view sits within the principal convex space, but is at its edge and does not depict it. Instead, only the slender space along the alley and a snip of the convex space beyond it are shown. While the views from Teriyaki Donuts crossed the geometric center of the principal convex space, the view along the alley is taken at a point with a high drift value. Drift, in reference to the area of a given shape, refers to the distance of a point from the geometric center of a shape.

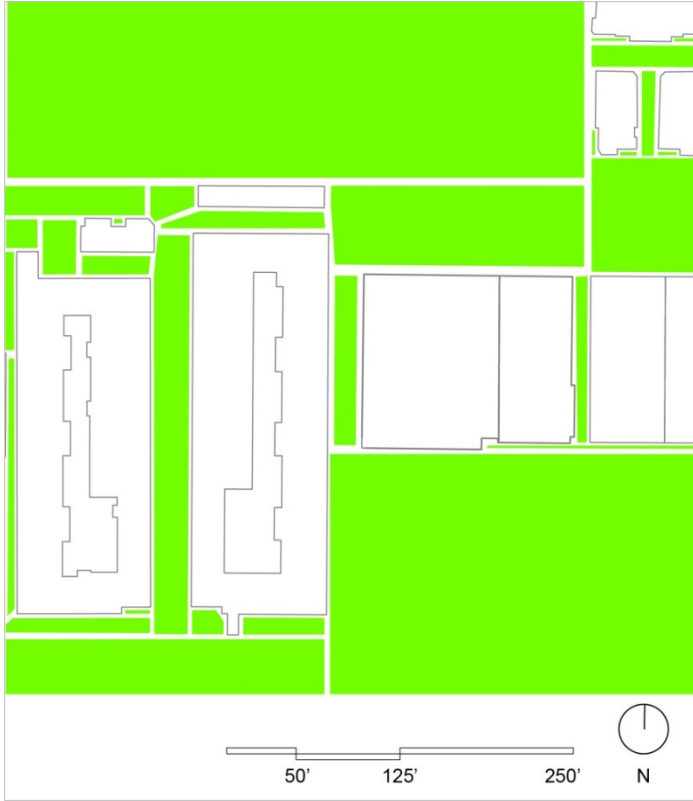


Figure 5.44. Convex map of the *Pulp Fiction* alley chase location

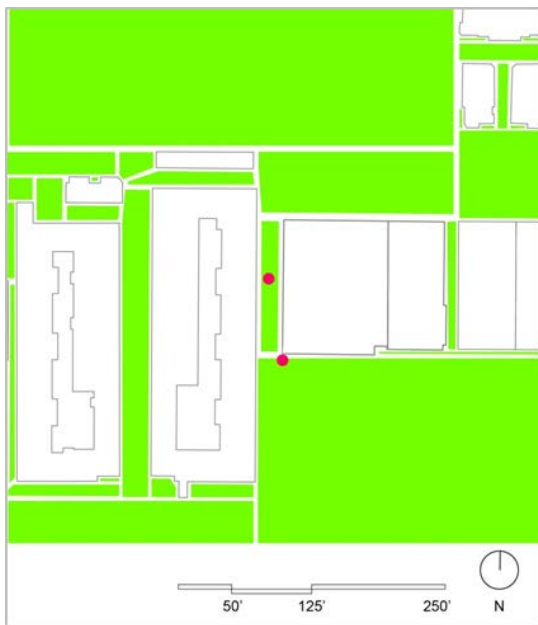


Figure 5.45: Convex map of the *Pulp Fiction* alley chase scene with approximate camera locations marked by red dots

A look at the Google Earth street views shows that urban form of the alley presented in the film, which implies isolation and removal, does not reflect the reality on the ground. The film location is dominated by a parking lot and runs alongside a six-lane street. Here, *Pulp Fiction* screens urban form to focus and intensify a mood of isolation and endangerment that was not available in the prior scene. The prior scene had to be dense enough with passerby and building uses so that a fortuitous encounter would be credible. The seeming isolation of the alley is also needed to foreshadow the subsequent scenes in the pawn shop, a bizarre and sadistic world that can only exist in isolation from broader society. Overall for the *Pulp Fiction* chase, the selective framing of the urban scene introduces greater variety in urban form than is available on location, collaging together different types of urban forms and activities that seem suitable to them. Although there is a great deal of motion through space in the frame, the characters occupy few positions in the city. This implies a general strategy of close framing to create mood as well as allusion to some shared stock of expectations about movie location and action. The closely framed views enhance the emotional tone of crises that characterizes the chase. Its participants are not professionals as depicted in spy movies, such as the *James Bond* franchise; they are not accustomed to the chase; they are amateurs, and they are plainly emotional as they go about it. We see their awkward movements and grimaces up close.

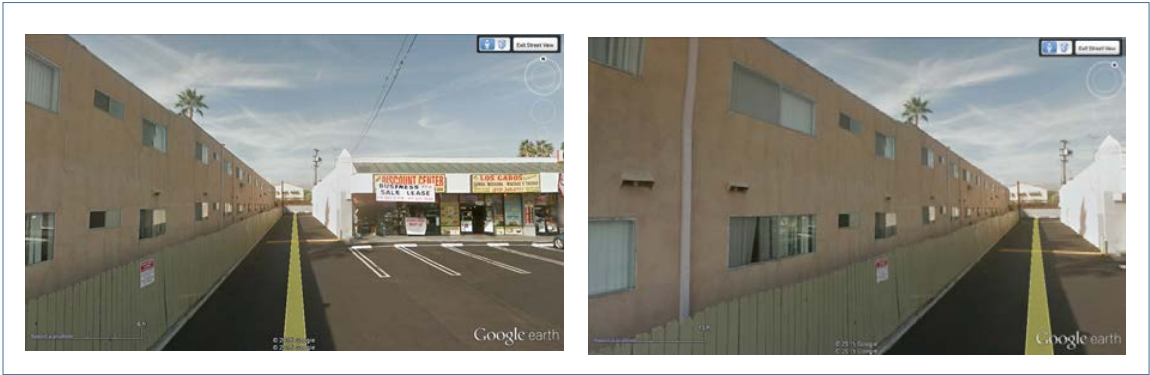


Figure 5.46: Left: View north in the parking lot near the pawn shop; this is partially shown in the scene. Right: View northeast in the parking lot near the pawn shop; this is shown in the scene.

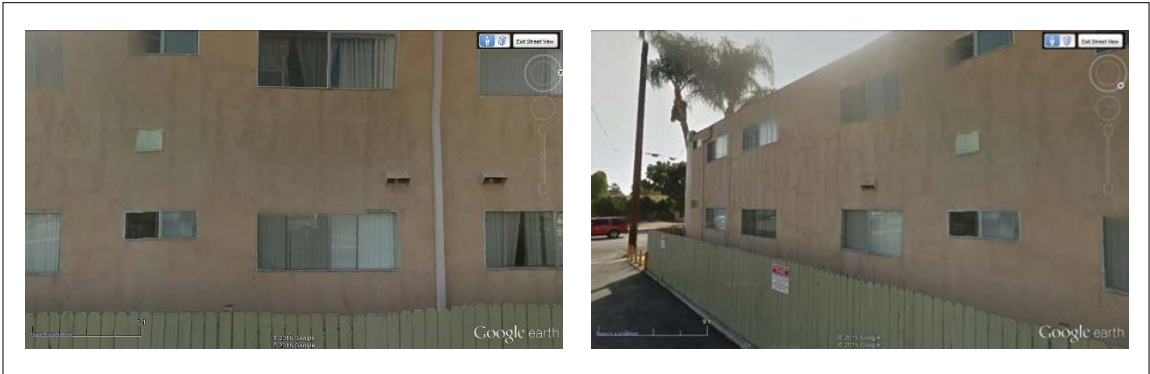


Figure 5.47: Left: View east in the parking lot near the pawn shop; this is not shown in the scene. Right: View southeast in the parking lot near the pawn shop; this is not shown in the scene.

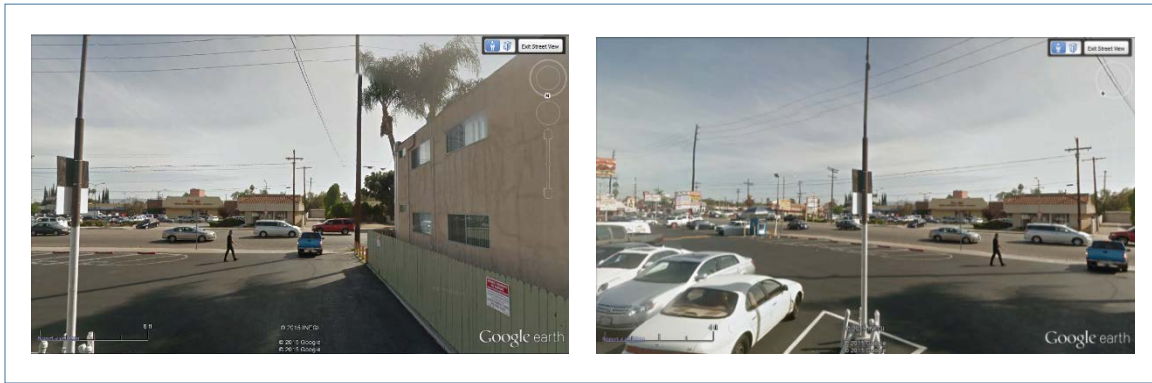


Figure 5.48: Left: View south in the parking lot near the pawn shop; this is not shown in the scene. Right: View southwest in the parking lot near the pawn shop; this is not shown in the scene.

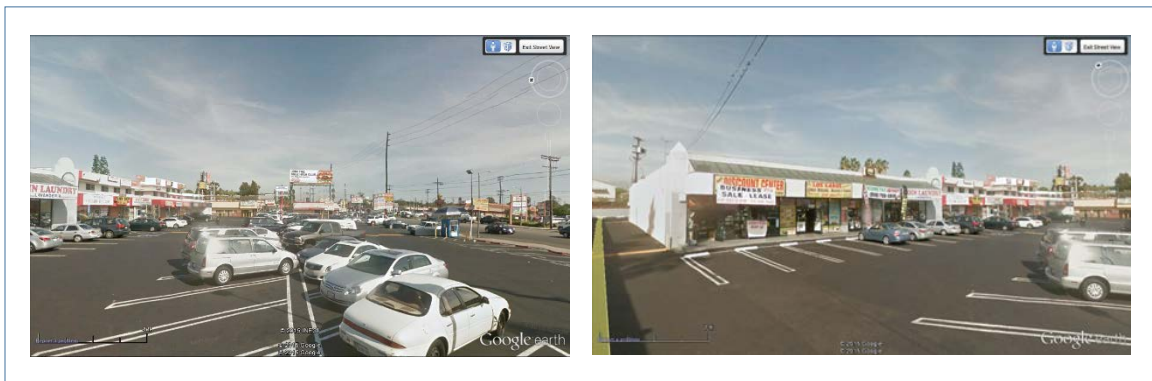


Figure 5.49: Left: View west in the parking lot near the pawn shop; this is shown in the scene. Right: View northwest in the parking lot near the pawn shop; this is not shown in the scene.

5.1.4 The Long Goodbye

This close framing of the figure in *Pulp Fiction* can be contrasted with the chase scene from *The Long Goodbye*, which spans a long path over multiple blocks. In this scene, Marlowe, who has just been released from the apartment of some thugs, sees his client, the newly widowed Eileen Wade, leaving the parking deck of the same apartment in her convertible. He chases her on foot, hoping to question her, through Westwood Village, an office, retail, and residential development near the University of California Los

Angeles campus. Eileen, unaware that Marlowe is pursuing her, drives several blocks through the development, speeding off as Marlowe is hit by a car.

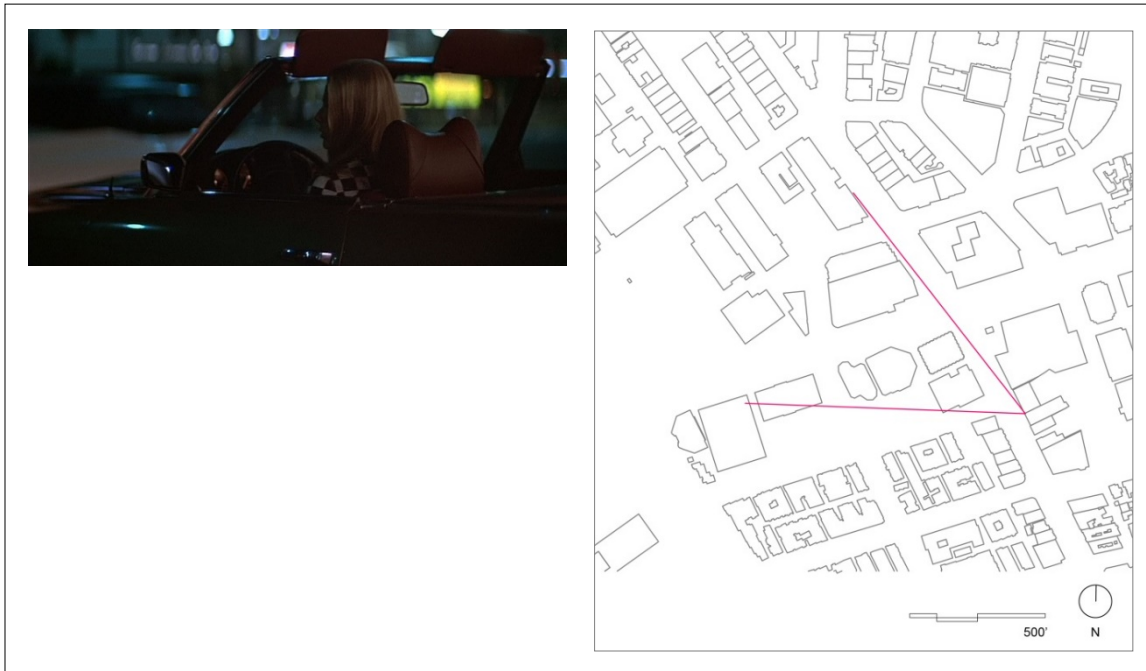


Figure 5.50: *The Long Goodbye* screen capture and approximate camera location (1)

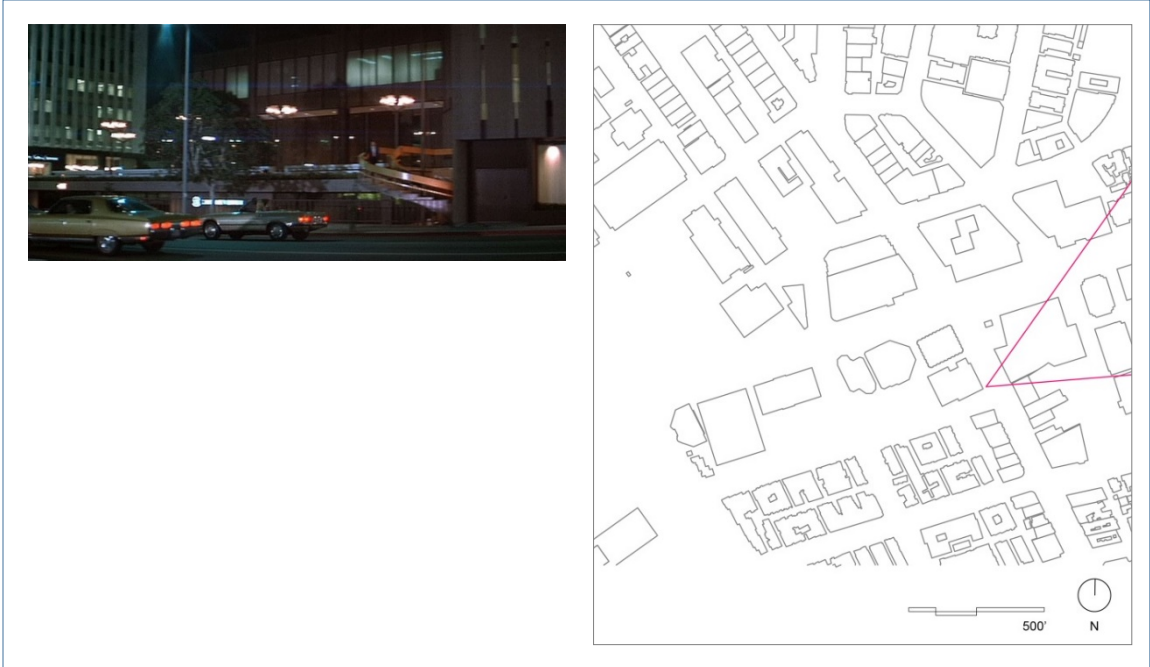


Figure 5.51: *The Long Goodbye* screen capture and approximate camera location (2)

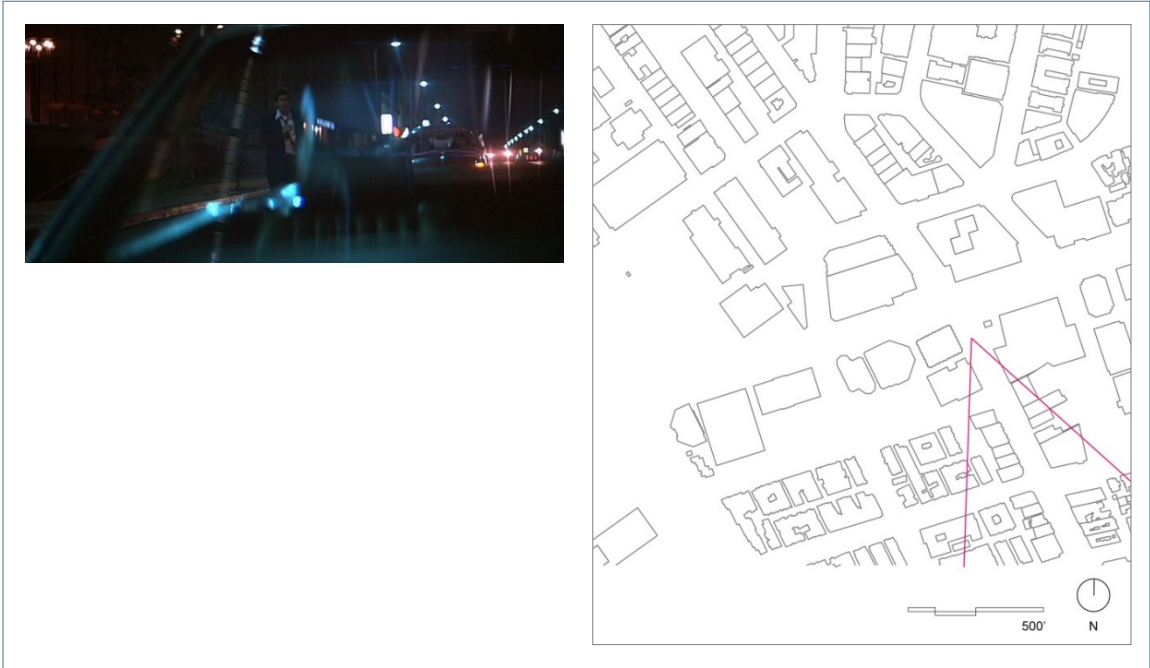


Figure 5.52: *The Long Goodbye* screen capture and approximate camera location (3)



Figure 5.53: *The Long Goodbye* screen capture and approximate camera location (4)

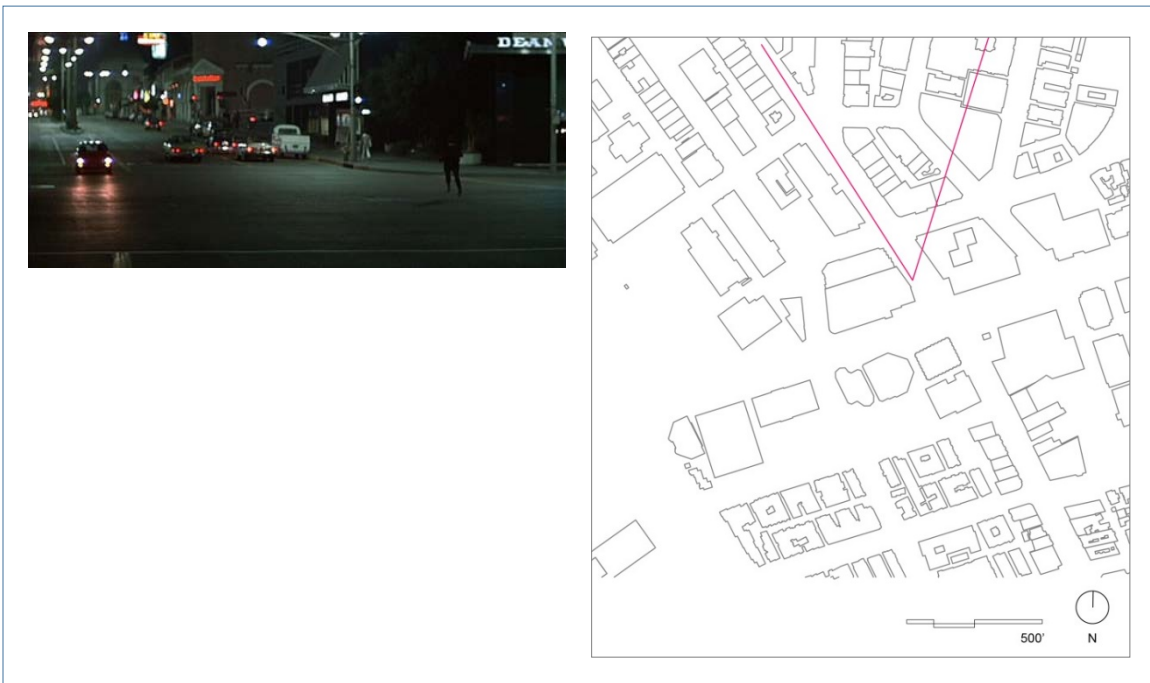


Figure 5.54: *The Long Goodbye* screen capture and approximate camera location (5)



Figure 5.55: *The Long Goodbye* screen capture and approximate camera location (6)



Figure 5.56: *The Long Goodbye* screen capture and approximate camera location (7)

The most salient feature of urban form relative to the chase is the revelation of alienating size and function of the streets relative to the body; the body is ultimately depicted as comically powerless in comparison to the material output of late capitalism. In the scene, Marlowe runs down the street, suited, smoking, and yelling "Mrs. Wade!"; he approaches her car at two different of stop lights, but as he comes within range to talk to and be recognized by Eileen Wade, the light turns green, and she speeds off. That he is hit by a car is a very direct expression of the hostility of the city culture to the individual body.

In *Pulp Fiction*, the chase scenes occurred in loosely-bounded grid systems, though the grids were occasionally disrupted by ravines or freeways. In Westwood Village, the grid is not so much disrupted as it is consistently deformed by a number of discontinuities and deflections from orthogonality.

Marlowe first sees Eileen from an elevated plaza, from which he must run down a winding stairs to approach street level. Eileen comes onto the road from a parking deck. These are the first two depictions of the city that introduce chase. The street is presented as a problem from the outset in the sense that it cannot be frankly encountered because neither of characters enters onto a direct relationship from building to street. This goes beyond the basic problem of the characters coming out of an elevator skyscraper, where the journey from some interior place to the street is disrupted by vertical circulation; the elevated plaza, especially, can be viewed as a gratuitous form of disconnection from the street, not wholly driven by functional exigencies. These interfaces to the street imply some degree of obfuscation that is highlighted in how the action is set and filmed.

Impediments to intelligibility are also apparent in the street network of Westwood Village, including the small deflections from an orthogonal grid that appear unrelated to systematic hierarchy and differentiation in the street network. Empirical studies indicate

that path segments that adjoin at or near a 45-degree angle are highly problematic for navigation and wayfinding; for deflections of less than 15 degrees, by contrast, people seem to “round” to the nearest right angle for purposes of navigation (Montello, 1991; Sadalla & Montello, 1989). The initial intersection that Marlowe chases Eileen’s car through deflects slightly, at less than 15 degrees. The subsequent intersection is more ambiguous, with the crossing street intersecting at an angle that is off from perpendicular from by about 30 degrees. The final intersection Marlowe runs through in the chase is a 5-way intersection. Marlowe turns left, following Eileen’s car, with several streets adjoining at angles of about 45 degrees. It is from one of these roads that the car comes in to strike Marlowe.

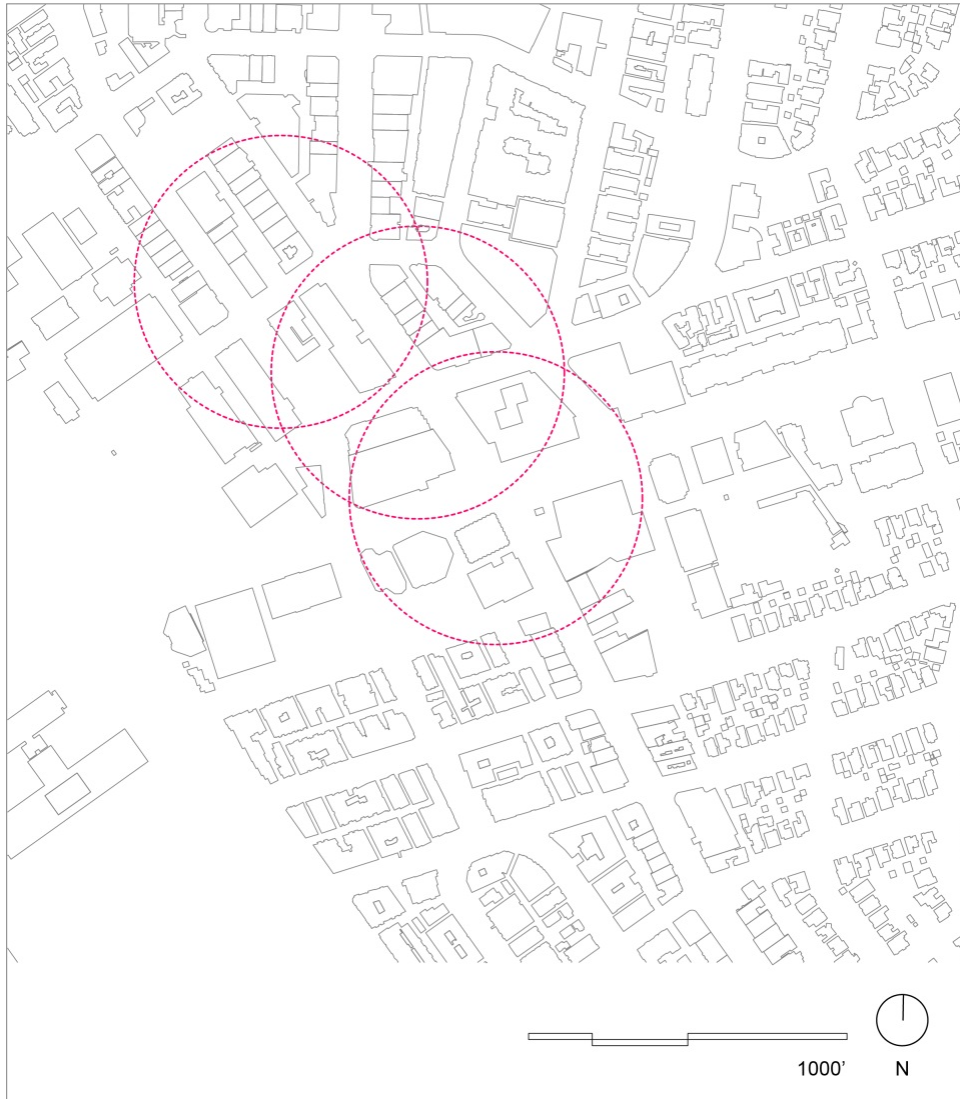


Figure 5.57: Context plan of *The Long Goodbye* chase location

In the narrative, the streets are presented as ill-suited to human habitation. In the plan, Westwood Village is full of streets that produce problems in legibility. The framing of city space in the *Pulp Fiction* chase acted to transform the streets into more iconic versions of themselves—the field across which enemies face off or the isolated alley of pursuit. *The Long Goodbye* is more inclusive of city form, dramatizing ways that the material culture of late capitalism is inimical to the effectiveness of individual action. Where the Los Angeles of *Pulp Fiction* is selectively framed to create mood, the Los

Angeles of *The Long Goodbye* discloses a critical, disillusioned perspective on city form. Once the decision was taken to use Westwood Village as the location of the action, there is little screening of the setting. The Google Earth images look like the film images in many ways, despite the passage of decades since the film was made.

Westwood Village presents a continuum of space with poor intelligibility and unclear connections and suggests that certain powerful entities, such as the investment company that created the development, define a city space where the difference between public and private domains is eroded. Rather than the street grid existing as an active system of public space in its own right, the street network seems instead to be the overlap of several coordinate systems with multiple, disjoint registers of intelligibility.



Figure 5.58: Convex map of *The Long Goodbye* chase location



Figure 5.59: Convex map of the *The Long Goodbye* chase location with approximate camera locations marked by red dots

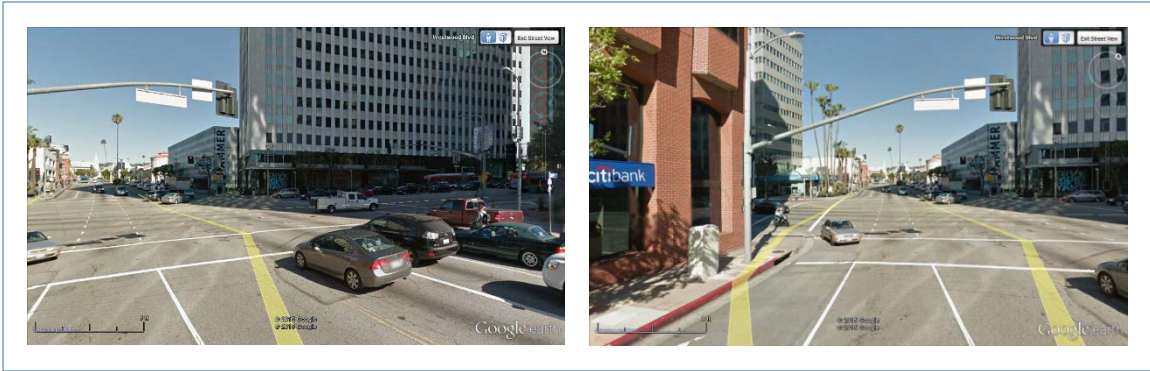


Figure 5.60: Left: View north along Westwood Boulevard near Wilshire Boulevard. Right: Northeast view. These views are shown as Marlowe chases Eileen’s convertible.

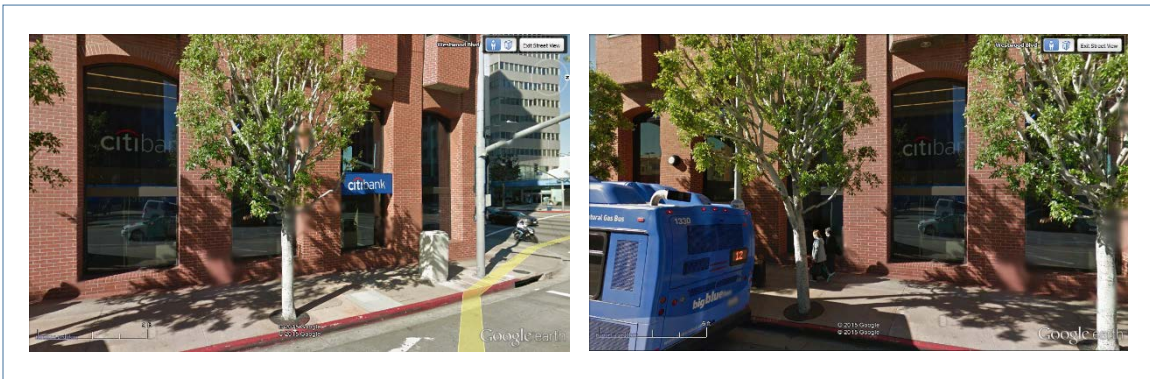


Figure 5.61: Left: View east along Westwood Boulevard near Wilshire Boulevard. Right: Southeast view.

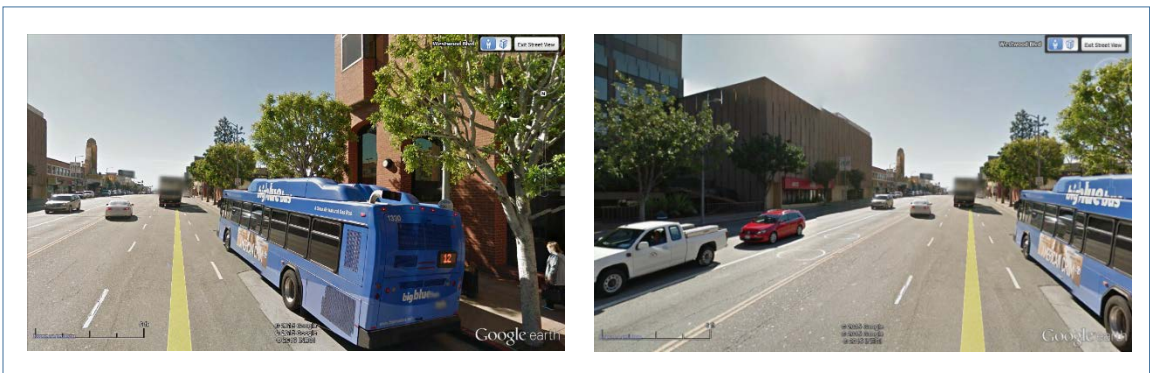


Figure 5.62: Left: View south along Westwood Boulevard. Right: View southeast, including the view to the parking deck Eileen emerges from.

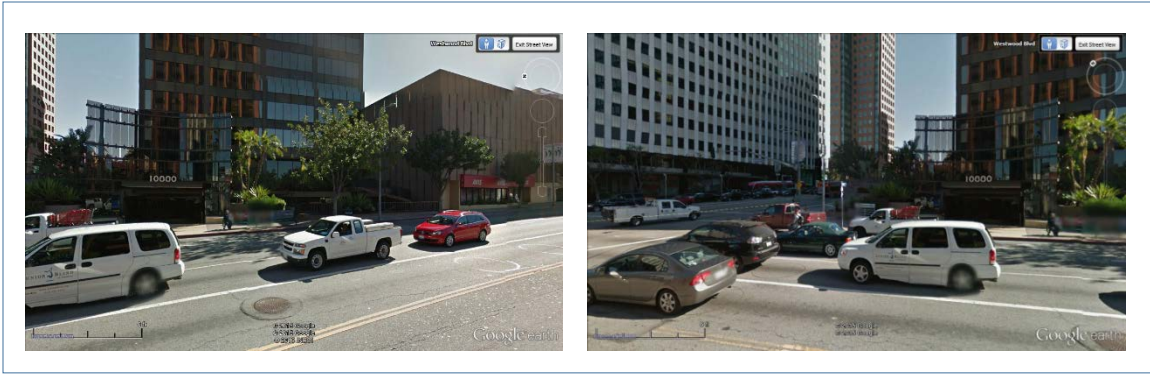


Figure 5.63: Left: View east, showing the stair and plaza Marlowe descends from to the street. Right: view northeast, approximating that along which we see the chase.

The Long Goodbye is a neo-noir film, and its chase can be interpreted in reference to the genre. Film noir emphasizes how the protagonist sticks, above all, to a code of ethics in a disorienting world. Win or lose, the protagonist remains heroic because of his (or, theoretically, her) adherence to his own moral code. Chases, in more traditional noir films, often come up empty, but they are not typically humiliating. The chase in *The Long Goodbye*, however, ends in a humiliating way. Marlowe, in chasing Eileen through the streets, is pursuing the same goal as the various cinematic and literary Marlowes before him, that of decoding the unknown city. The difference is that the narrative and the city conspire to make a fool, rather than a hero, of him.

The Pulp Fiction locations are so normal that the special emerges from strategies to reframe space more dramatically and fill it with story action. *The Long Goodbye* exposes the more general cultural oddities that one might easily become inured to. Ostensibly, *The Long Goodbye* scene is about the hostility of the streets in terms of car versus pedestrian. Over and above that, there is a return to the themes of the incongruity of personal ethical virtue with Angelino culture of the 1970s, an incongruity presented here in a darkly humorous manner. The traditional heroics of the leading noir man are not tenable in the Los Angeles of *The Long Goodbye*. Here, the film continually

presents then undercuts something heroic. Los Angeles is less the mysterious city that challenges one to decode it and more of a city that has stopped making sense. In *Pulp Fiction*, the city is used to establish mood; in *The Long Goodbye*, it is part of a critique of contemporary society.

5.2 Summary Comments

This chapter focused on the event of the chase and depictions of movie locations as street views and maps to discuss how city form participates in film narrative. *The Naked City* tends to be inclusive of urban form, sometimes to the point that individual identity is muted by long, axial views of crowded streets. *The Naked City* chase uses the corner to highlight actions and individuals before they are subsumed back into the axes of the grid (e.g., the axial view of Garzah's departing train). The occluding edge of the street corner is exploited to stage the visual presentation of the flow of life in a way that creates dramatic tension within the stable framework of the Manhattan grid and the comparatively static camerawork of the film. Compared to *The Naked City* chase, *Goodfellas* is selective, with a special interest in street views that are somewhat contained visually, but are also connected globally in their extent. This particular form of urbanism becomes central to the storytelling, acting as an index of the relationship of characters to the social groups in which they are nested. The interaccessability of New York locations suggested in the literature review seems to be counterbalanced by the corner, which acts as an anchor within the grid for the filmmakers.

The Los Angeles chases present us with a more polar approach. *Pulp Fiction* zooms in on urban space to render it iconic. In the case of the Teriyaki Donuts intersection, this framing closely reveals an intersection of linear flows to also be a convex field across which movie action can be staged. In the alley near the pawn shop, the close framing conceals the context, which is more animated and connected than is

suitable the narrative and its mood. Tarantino's de-contextualization of locations is consistent with his reputation as a filmmaker who draws on a culturally shared stock of television and movie references; it appears that the camera is used to sculpt city form according to some a priori vision of what the city should be. *The Long Goodbye* is much more inclusive and unfiltered relative to city form, including and dramatizing the status of the individual and the body and suggesting a political reading. *The Long Goodbye* reveals an intelligibility that only works at the most local scale and begins to suggest that Westwood Village overlays multiple frames of reference that are disjoint from the perspective of the situated user walking through the city. Of the four chases, it is *The Long Goodbye* that does the most to reveal the city by presenting it against its strengths; it shows the enclaves from the perspective of the residual spaces around them.

City form is not just disjoint or situated; the plot thickens when we compare how events take to various dimensions of city form. The present discussion brings the study a step closer to architectural design, revealing more about staging in city space. The concluding chapter that follows describes some qualities of the city as presented the movies. It also diagrams and discusses them relative to architectural precedents and ideas that might inform architectural design.

CHAPTER 6

CONCLUSION

6.1 The cinematography of city typologies

The foregoing research analyzed the way in which urban space is presented and conceptualized in four movies. Movie data was interpreted as evidence of shared frameworks of ideas and sensitivities that underpin our everyday understanding of recognizably different physical realities. Specifically, the analysis focused on the manner in which urban form creates both "concepts and subject positions" to adopt the terminology used by Hays (1, 2011). Goffman recognized that co-presence is suffused with context and that one's immediate context is a resource with which one constructs a working way of showing up in the world (Goffman, 1959). Goffman is sometimes criticized for his limited attention to the larger-scale power relations in which co-presence occurs (Giddens, 2009). However, this informational limitation is congruent with the film shots studied here; though shots show co-presence in cities using snippets that don't always provide insight into large-scale social forces, they nonetheless reveal ways in which the immediate setting is of structural importance.

The data revealed a number of tendencies and regularities in how city form suggests perceptual habits and conceptualizations of city space, many of which are in keeping with expectations set in the critical and theoretical literature. In movies, city scenes not only enhance the intelligibility of movie narratives, they convey their own form and culture as revealed relative to events. Different ways of seeing cities arise both from what is physically present as well as from what is presented in the narrative, including its cinematographic aspect, about what we should see and how we should direct our attention. New York gives us many views of many places, often in ways that emphasize context and some degree of integrity between the indoors and the streets.

Los Angeles, by contrast, belabors views of fewer place, decontextualizes characters from space, and connects the indoors to off-street city spaces.

When looking at the specific activity of the chase, *The Naked City* emphasizes the urban corner to maximize the depiction of the flow of life in city space. *The Long Goodbye* conveys the unintelligible city, which defeats heroic action. Where *Pulp Fiction* tends to decontextualize the action in order to emphasize the character, *Goodfellas* situates the action through views at multiple scales and these views show some regularity how they convey identity and the potential for narrative shifts. Bernard Tschumi's implied assertion that events reveal the underlying language of city form, linking it to inner experience, seems to find some support in how chases in the four movies reveal relationships between city form and life.

Rowe and Koetter's basic distinction between solid and field cities (1978) held up for the New York-as-solid and Los Angeles-as-field distinction. Hays (2011) understands the traditional, "solid" urban form to be under greater architectural control than that of the field, with the solid city extended under typological and tectonic rules, while the perceptual habits of the field city are taken to be defined in the context of a plural, suburban, consumerist society (12). However, to Banham's point, Los Angeles can be understood as an urban culture in its own right; in the present study, this came through insofar as urbanism in Los Angeles, compared to that of New York, emphasized the enclave and off-street outdoor space, sharply distinguished interior and exterior space, and suppressed the street as a sociologically rich entity. Los Angeles urbanism in film can be said to invoke the "archipelago" urban type proposed by O.M. Ungers and Rem Koolhaas in their 1977 essay outlining an urban schema for Berlin, insofar as Los Angeles movies show fewer locations and each location is elaborated in a higher number of shots. For its part, New York exemplifies an urban schema with streets of continuous co-presence, streets that link to interiors, and city locations that are

numerous and receive comparatively brief, simple visits from the camera. This resonates with several accounts of New York, from Jane Jacobs to Richard Sennett, wherein the streets in their connective capacity are central to the development of civic morality.

Thus, the typological distinction between New York as a city that embeds and Los Angeles as a city that is disjointed has rich connections with multiple themes in the discourse of architecture and urbanism. Of particular interest here is the implication that identity is formed in relation to streets in New York and in relation to separate and less public domains in Los Angeles. Below, this finding is elaborated, together with emphasis on specific architectural strategies for staging seeing in city spaces.

6.2 Narrative affordances of New York and Los Angeles

The research herein has had to do with describing the visual language of cities and the culture of two cities through the lens of spaces and events depicted in movies. An additional initial motivation of the dissertation was a search for more involved linkages between city form, co-presence, and the narrativization of space. To that end, the present section extrapolates two findings from the foregoing analysis into diagrams of design principles related to schema for visual engagement in urban space.

6.2.1 New York, Los Angeles, and perceptible carrier space

To begin with, we noted early on in chapter 4 the different basic camera pattern in each city, with New York showing the tendency for the camera to cover many locations, implying the legibility of various spatial scales. Los Angeles, by contrast, is associated with cinematography that is more elaborate in far fewer locations. The rich coverage of few locations can be thought of as a reflecting decontextualization, especially as compared to the New York strategy, which spreads over the city,

acknowledging and engaging the extent of the urban context. As filmed, New York and Los Angeles, suggest basically different ways of organizing space, mental representations of where one is, and ways one goes about the activities of life.

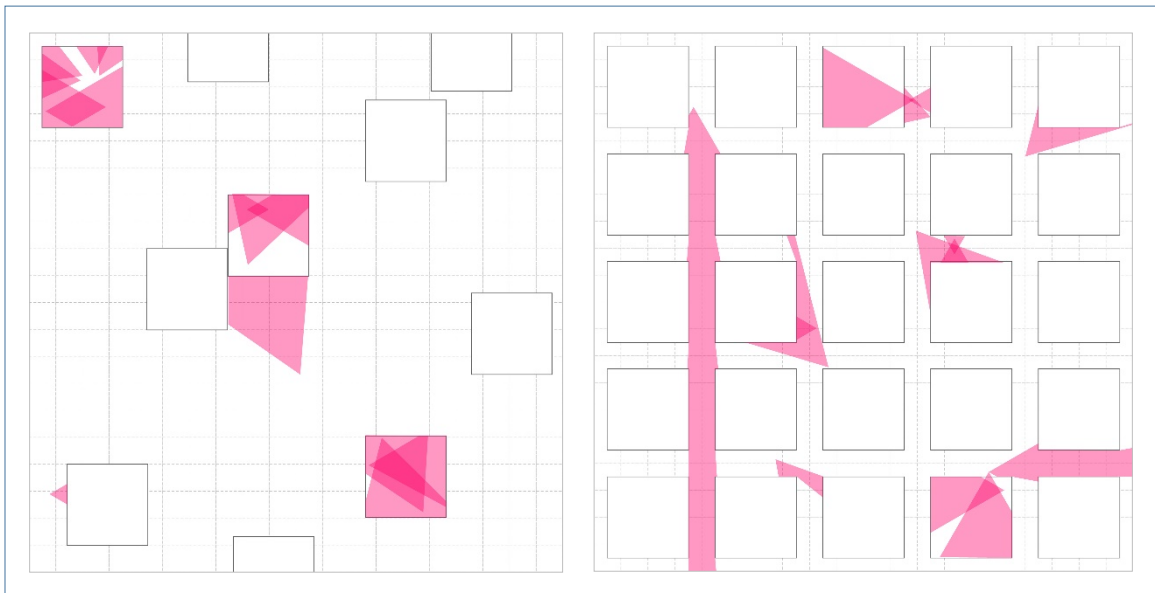


Figure 6.1: Conceptual diagrams of camera positions relative to urban form in Los Angeles (left) and New York (right)

This distinction has analogs in architectural design. The diagrams above indicate that the camera is carried in space that is outside of or residual to the activities of the film. Carrier space is a concept from space syntax theory that refers to the containing or surrounding space in which some finite building or settlement sits (Hillier & Hanson, 1984). The camera is, in the conceptualization diagrammed in Figure 6.1, associated with the carrier space, sitting always just outside the life that is depicted, forming a single point on the edge of the represented scene. In Los Angeles, the camera, through its many views to few places, surrounds and engulfs life. In New York, the distribution of views in many places enmeshes the camera in life.

In a study relating spatial and visual form, Bafna (2004) invokes the idea of carrier space in his inspection of several design iterations of a multi-story Parisian apartment by Le Corbusier, located at Nungesser and Coli streets. He found that changes that initially appear to be merely stylistic based on visual inspection of the plan, turn out to contribute centrally to Le Corbusier's formation of a distinct spatial typology representing a fundamentally different principle for organizing and experiencing space in the later scheme. Visual inspection showed that key thresholds in the entry *gallerie* in the revised plan were opened up and redesigned to both contribute to a free-flowing plan in "look and feel" and also to embed a typologically different spatial structure (Figure 6.2). Bafna notes how the presentation of vertical surfaces in the revised scheme softens sharp transitions between spaces and introduces experiential asymmetries so that the *gallerie* appears as carrier space; in other words, one room appears to contain the others in the revised scheme. This room takes on the function of carrier space, which here equates to the visual and spatial function of container, while maintaining a definite and configured shape.



Figure 6.2: The old (upper left) and new (upper right) plans for the apartment building, with spatial blocks outlined (lower row) (Source: Bafna, 2004)

If we are willing to entertain the correspondence of the camera with carrier space, then the city space of New York as depicted in film can be associated with a carrier that distributes life and its activities along a shallow, interconnected spatial commons. The carrier space of Los Angeles is not only more atomistic and more often accessed at points of some depth from the street, but it actively surrounds and isolates activities. It may be, following Bafna, that the greater continuity of vertical surfaces (e.g., building facades) in New York creates some experiential asymmetry, or sense that the street is a both visual and spatial carrier to the buildings in New York. Such a sense of hierarchy is missing in Los Angeles, where the buildings are more often completely surrounded by a carrier space of indefinite shape. In principle, this induces an equivalency between indoor and outdoor and public and private; this kind of

shapelessness may be more malleable and amenable to sculpting than the discipline of the New York carrier space, a theme that will be taken up in the following section.

The continuous carrier of Le Corbusier's later scheme provides a perceptual base and direct access to many locations, and, in these characteristics, it corresponds to the solid city. The implication is that when the carrier space takes on a perceptible form, it binds subsidiary spaces in such a way as to create a sense of directionality and differentiation. The opposite condition, which is too perceptually atomized for a perceptible carrier to emerge, creates no overarching hierarchy between types of space. This corresponds to the observation that in *Pulp Fiction* the exterior is a specimen of interior in terms of how people are framed in it. This condition has, as a resource, a sense of flatness that can be associated with freedom (corresponding, for example, to the fragmentation and mobility celebrated by Banham). It also implies that passing from one place to another does not proceed according to any consistent principle, and, as such, traversing spaces may fall into a blind spot of consciousness. By contrast, movement, identity, and knowledge of one's position are hammered together in the perceptible carrier of the New York streets.

There is here an implication that designers working within an urban context can proceed in at least two ways. First, relatively simple spatial units can be connected through an extended network of shared spaces. The network is intelligible in its own right, but it is also enriched as new spatial units with distinct characteristics are attached to it. In such a strategy, the network and its attached elements work as a single whole; while the network itself provides global cognitive integrity, the units create local differentiation. The second alternative is to create complex units, each with its own internal structure. As spatial relationships are elaborated within such enriched internal structures, each independently of the others, the network that holds the units together is reduced to the minimum function of providing access from one enclave to the next. If we

consider such alternative potential emphases as distinct typologies, we can say that the first type is defined by interlacing of views along and across domains. The predominant experience is one of becoming aware of what is going on at the other side of the boundaries that define the space one is in. On the other hand, the second type rarely provides for such views across domains; relationships revealed through movement are often intrinsic to one domain, whether an expansive domain, such as a freeway, or a more contracted domain, such as a system of backyards. Below, two examples of how each type plays out are drawn from the chase scenes. Following Tschumi, the event—here the chase—is taken to reveal the formal language of the city.

6.2.2 *Pulp Fiction*: The world falls away

In the first part of the chase between Marcellus Wallace and Butch Coolidge, something remarkable happens; what first appears as a simple crossroad transforms into a field. Peponis and Bellal have described a similar phenomenon at Frank Lloyd Wright's Fallingwater, where the visually and spatially remote placement of doors relative to the main space gives the sense that the world has fallen away (2005); however, the "through" function is rather more challenging to suppress for a street intersection than for a building because streets in cities are typically more visually dominant than doors in buildings. In chapter 5, the convex map revealed that the visual emergence of the spatial percept of a field from a crossroads at Teriyaki Donuts was possible because the building footprints along the street delineate and frame a space wider than the road (Figure 6.3). However, when viewing the film, connecting roadways remain visible even when the intersection is presented as a field, and the visual presence of these street ought to remind us of the function of the space as an intersection, and not as some combat turf. The staging of the scene, however, tamps down the visual cues by which the connecting roads distract from the emergent field. We

are primed by depth cues of the scene when Butch first drives up to the intersection; we see the one-point perspective view converging in front of us, implying a well-defined wall of buildings. When the time comes to act, action converges toward the perspective, with Butch barreling down the road to run over Marcellus (Figure 6.4). The next few shots act as palate cleansers from the city scene: the crash occurs; a black screen follows; Marcellus lies on the ground; Marcellus stands, assisted, with the city out of focus behind him; Butch sits near a building wall, face bleeding. When the city space appears again, it is as Marcellus charges across the field of the intersection, his figure thrown into relief by the white façade of the Teriyaki Donuts building behind him. The façade that is a background to Marcellus is seen in oblique view, but the visual impression is of a field whose back boundary is roughly parallel to the viewer. The road that adjoins on it fails to visually signal that we are looking at the spatial channel of the roadway receding away from us in space. This may be due, at least in part, to a false frontal view implied by the horizontal tendency of the trees and rooflines along the adjoining road (Figure 6.5). Whether it was fortuitously or deliberately captured, the items disposed down the receding street suggest a plane roughly parallel to the viewer, rather than roughly perpendicular to the viewer. More generally, the implication is that the emergence of shapes, a phenomenon well documented for plans and other orthographic representations (e.g., Stiny, 2006), can also be played out in visual form as experienced in situ, as at the Teriyaki Donuts intersection.

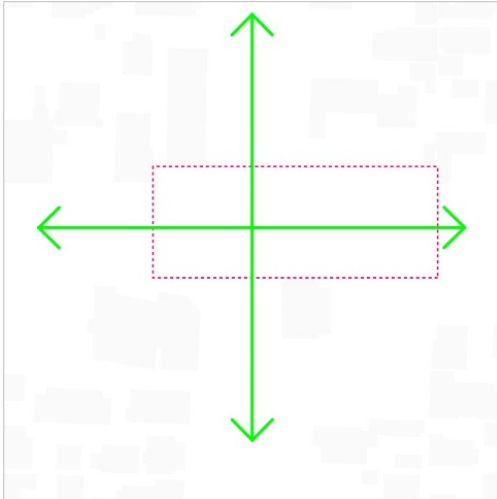


Figure 6.3: Ambiguous crossviews



Figure 6.4: Perspective cues emphasized in the first view of the intersection



Figure 6.5: Perspective cues suppressed in the second view of the intersection

In *Los Angeles: The Architecture of Four Ecologies*, Banham alludes to some losses inherent to the ideal of the bourgeois homestead when he describes the deep cultural identity of Angelinos using Ray Bradbury's science fiction story *Dark They Were and Golden-Eyed*. In it, the cultural identity of a family of Mars colonizers slowly dissolves under the influence of their new home. Despite some attempts to hold on, the sheer pleasure of their new setting, the sheer beauty of their new bodies (which had become taller, darker, and healthier under the influence of the Martian habitat), induces them, finally, to let go of commitments and even remembrances of their history, civilization, and society. Banham's identification of *Dark They Were and Golden-Eyed* as a post-hoc founding myth for Los Angeles implies that the reinvention of the self comes at the cost of social conscience. Correspondingly, the perceptual and conceptual malleability of the Teriyaki Donuts scene depends on very specific viewing points that are available to individuals at precise points in space, as distinct from percepts and concepts that are more generally available; for example, in New York, important characteristics of the city may well be visible from any number of points along the street. The *Pulp Fiction* urban scene and its affordances thus resonate with a culture of individuals, the private and individual view on the city, and the inventiveness-that-borders-on-delusion that is underwritten by such private perception.

6.2.3 Goodfellas: The expanded view

In several scenes, *Goodfellas* shows a tendency to hug the street inhabitant close to the building line, and then reveal the larger world. Typically, in the "hugging-close" phase, most of the view is concentrated inside the convex space associated with a specific stretch of street frontage, though a single view, perhaps introducing the scene, looks from the inside to the outside, and, often, a single view, perhaps closing the scene, looks from the outside in. Such scenes usually take place at locations with a traditional

fabric of continuous building frontage, often filmed in transverse-to-street views, and across the street is some filigree of urban form that directly alludes to a larger scale, such as the columns of a freeway overpass or of an elevated train. These elements are sometimes depicted using a crane shot or another elevated and expansive point of view. The reveal of the expanded point of view typically comes at the end of such scenes. This is related to *Goodfellas*'s language of street views, as described previously. The question is whether this is relevant to architecture and life in cities.

In a study on imaginative engagement at the Tadao Aando-designed Pulitzer Prize Museum in Saint Louis, Bafna, Losconzi, and Peponis (2012) tested responses to several paths in a gallery space inside the museum. Bafna and his colleagues partitioned the space into informationally distinct areas in plan and section using e-partitioning (Peponis, et al., 1997). In section, the partition boundaries were drawn at thresholds where the lower floor and stair landing would come into view. In plan, this systematic partitioning procedure divided off a slip of space between a large window and the main viewing space (Figure 6.6). For each path, the researchers tested subjects' response to images of the building as viewed from three sequential vantage points using digital renderings of the building; vantage points were selected according to the partitions of space defined previously (Figure 6.7). Four paths were tested. One merely brought the view closer (corresponding to the cinematographic technique of tracking in). Three others shifted one's position laterally while moving closer; these paths also resemble tracking in, but include a diagonal vector. Using a linguistic test of imaginative engagement, they found that the most engaging path was one that held the viewer in the peripheral space for the first two viewing positions, and then shifted into the larger, more central space for the third (positions 2, 4, and 5, in Figure 6.7). This disrupted linear sequence resembles the schema for presenting locations in certain scenes from *Goodfellas*. That it appeared to be the most engaging of the four ways of presenting

architectural form suggests the potential for some common tendencies in processes of narrativizing space. Both *Goodfellas* and the work on the path at the Pulitzer emphasize engagement in a more visually restricted area, and then provide the expanded view by changing the vector of the view. Such staging of path and view, which maintains a specific visual dynamic in a natural-feeling way, represents a scheme for visual engagement that is distinct from that suggested by the Teriyaki Donuts scene. More than that, though, such a sequence can be said to be relevant to the development of awareness of the world, as Sennett argues.

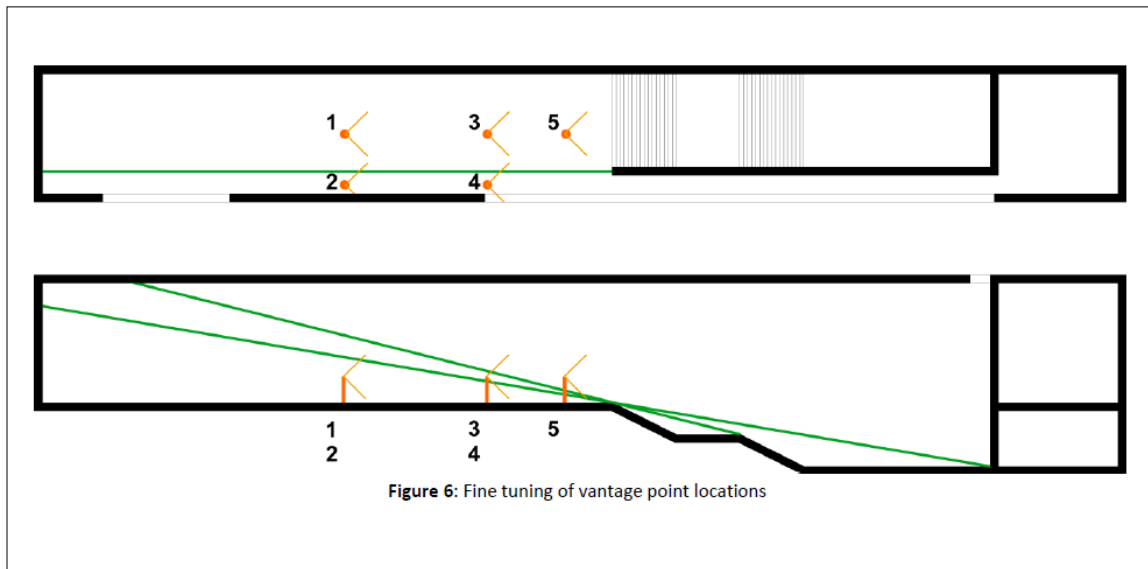


Figure 6.6: Partitioning of space at thresholds that introduce new information (Source: Bafna, Losconzi, & Peponis, 2012.)

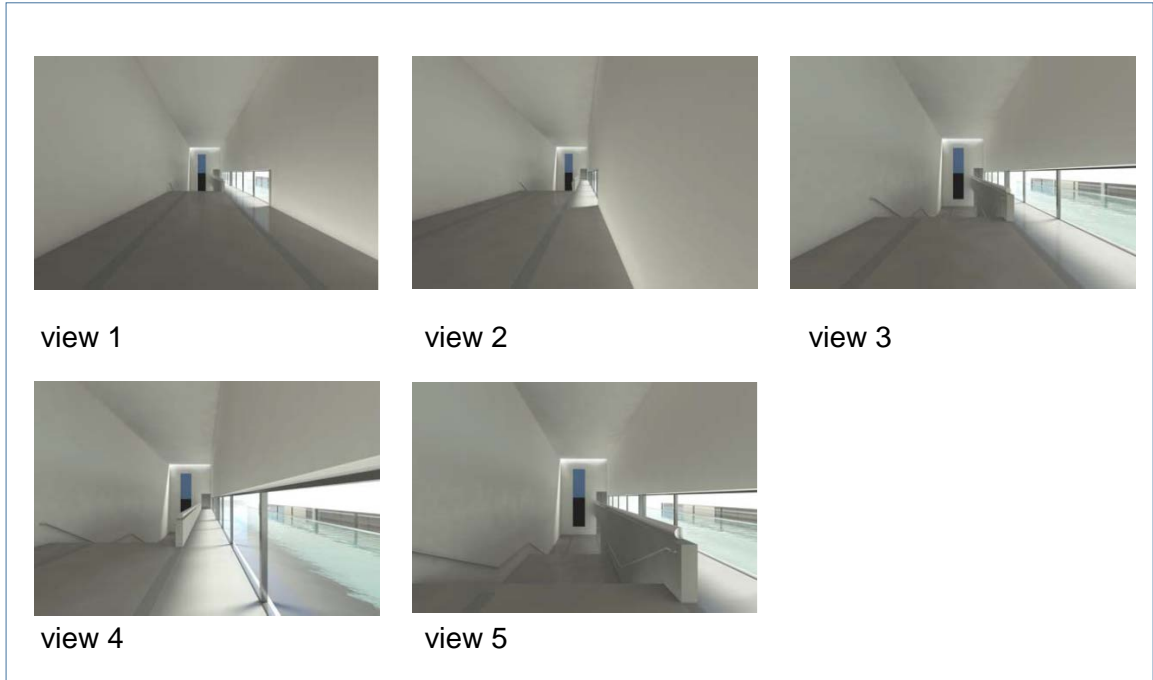


Figure 6.7: Views from points along paths; the sequence 2-4-5 appeared to be the most engaging. (Source: Bafna, Losconzi, & Peponis, 2012.)

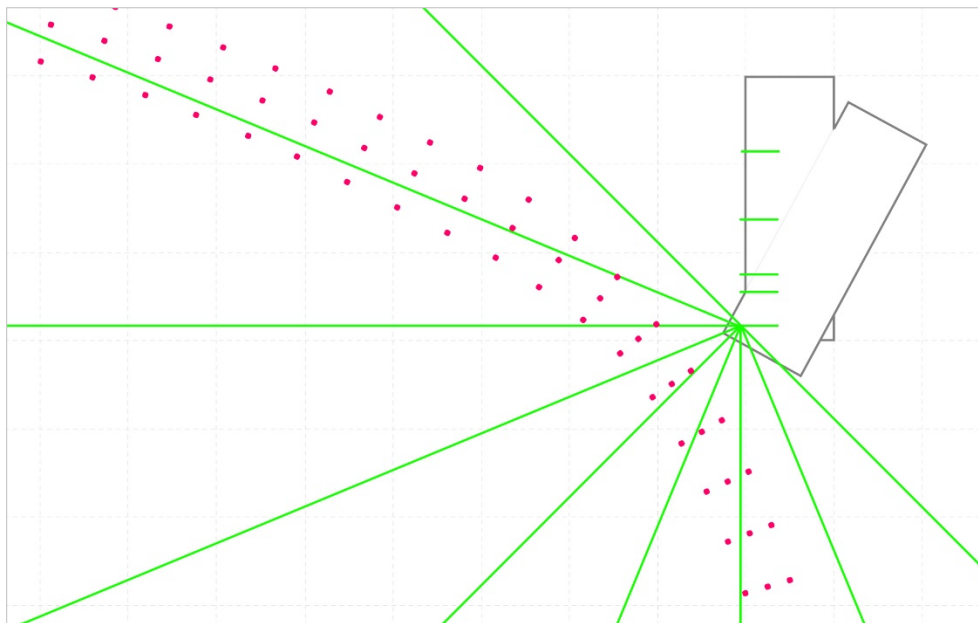


Figure 6.8: The disrupted linear sequence

In his book on how cities inculcate perceptual patterns tied to the development of social conscience, Sennett describes “the disruption of a linear sequence” (1990, 168) as a typical experience of urban form in New York City that is fundamentally tied up with the development of civic ethics. Sennett acknowledges that the disrupted linear sequence would appear at first blush to encourage the idea that the city is a place of spontaneous happenings and thus of an expanded sense of personal freedom, but as Sennett looks closer, he concludes that such sequences actually check one’s own impulses as one’s consciousness of others emerges. He compares this dimension of urbanism to James Baldwin’s essay *The Fire Next Time*, in which Baldwin narrates a restless account of American racism that haltingly adopts an inclusive tone as Baldwin, before the readers’ eyes, encounters and comes to terms with complex layers of social reality. Similarly, *Goodfellas*’s disrupted linear sequences trigger awareness of layers of society that had been previously invisible or otherwise unintelligible.

The foregoing may be discussed in terms of typology at a somewhat more philosophical level. Hays links Tschumi’s call for experienced space to the diminishing integrity of architectural language, and, from there, to Tschumi’s development of the event as that which distills and fuses contextual forces with architectural potentialities (2011, 141). The scholar Nick Kaye describes Tschumi’s concern with architecture at the gap between ideal and real space as a fundamentally site-specific architectural strategy (2013, 46). In more pragmatic terms, both readings highlight the importance of understanding context to architectural intervention.

In *The Third Typology*, Anthony Vidler (1979) outlines a history of ways that architecture has sought to make claims about its own legitimacy, first with appeals to the so-called natural that go at least as far back as Laugier, then, in early-twentieth-century Modernism, to the exigencies of industrial production processes. Vidler describes how the city itself—its elements, its layers through time, its status as the locus of language—

underlies the third and current typology, which typically filters its formal elements through a modernist idiom. This typology is distinct from its predecessors in that it is self-referential. The New York and Los Angeles diagrams above can be regarded as representing two ways of working within the third typology, with each organizing the gaze in urban space differently, through shallow-space and through deep-space arrangements. More specifically, in the disrupted sequence that can be directly observed in *Goodfellas* and was separately noted by Sennet, the gaze serves to embed the individual, not merely by creating a regime of intense co-presence, but by structuring in the continual discovery of others that has the potential to inculcate civic ethics. By contrast, the perceptually and conceptually malleable objects-in-field of *Pulp Fiction* are dependent on specific viewing points in space and not the more general schema of New York; the structuring of the gaze thus resonates with Banham's description of Los Angeles as a realm of constant reinvention aimed at the perfection of the self, which comes at the cost or with the liberty (depending on one's perspective) of the loosening of civic ties.

In these extended notes on typological differences between cities, we see that the use of movie shots allows us to dig deeply into the solid city/field city distinction, past truisms that notes broad formal and social differences between the embedded and the disjoint city, arriving at the conclusion that such typologies have rather precise implications for urban co-presence and the perception of city space. The parsing of the movies into shots allows a quantitative description of patternly differences in perceptual practices and habitual forms of co-presence between the cities. The case studies of chase scenes in the four films would seem to resist typification. Ultimately, however, the disrupted sequence of New York and the rich ambiguity of Los Angeles can be said to imply that the types go rather deeper into perceptual and social experience than

previous accounts have fully described. The systematic demonstration of the existence of such patterns is a novel contribution of this dissertation.

As far as design, the study suggests two schema for visual engagement with cities that is inspired by city form, rather than merely accommodative of it. The disrupted linear sequence supports the discovery of the city at multiple scales, while the emergent field suggests the potential imaginative richness of the visually ambiguous urban scenes. In both schema, there are moments of real-time transformation in how space is seen and conceptualized; as field emerges from a crossroads, so an expanded view from a small, seemingly complete view of the world. One implication extending beyond these close descriptions of cities is that such perceptual and conceptual dynamics are lacking to some degree in architecture, urban design, and their representations; perhaps, under current modes of production, there is little awareness that designed space can or should transform thusly. Perhaps greater capacity for such experiential transformations would impart an enhanced sense of the flow of life, to borrow Kracauer's phrase, to designed space.

6.3 Limitations and future research

The study has several limitations. In looking at location shooting, the degree to which locations reflect directorial intention versus contingent factors was not known, even as the present study has treated locations as expressing deliberate choices on the part of filmmakers. Information on addresses was not available for all outdoor filming locations, and nearest-year maps and aerial photos, used to correct more recent GIS-based imagery, were, on occasion, difficult to decipher. Finer-grained issues in cinematography, such as lens lengths and aspect ratios, were not addressed, nor were issues in film production discussed in any depth; all of these surely impact the final form of films, but were beyond the scope of the present study. The various approaches to

characterizing New York and Los Angeles form a very large literature; I have, of necessity, been selective. I have also worked rather directly on the interpretation of the four films, with little resort to what is a massive body of critical literature. Finally, the sample of films was not designed to be generalizable.

Quantitative space syntax, a generally sound approach to making controlled comparisons, was not used in the study because it would not have picked up relevant things related to perceptual boundaries and their significance. Instead, basic principles and related methods from space syntax were used. In spite of a commitment to systematic data collection and reporting of statistical properties of cinematography, the approach here thus remains fundamentally critical and interpretive. Given more focused hypotheses—perhaps emerging from studies such as this one—, future research could use numbers-based syntax as part of a quantitative study of urban form and cinematic, narrative, or aesthetic variables of interest. Alternatively, closer studies of individual scenes could be made using more precise measures of informational boundaries in space, such as the e-partition (Peponis, et al., 1997), as used by Bafna, Losconzi, and Peponis (2012).

From another perspective, studies of interventions into design processes could be undertaken to assess whether requiring designers to depict their buildings using strategies from critically well-regarded commercial films would impact the architectural design that emerges. For the present, however, this study evaluated movies and cities in relatively concrete terms in pursuit of the ambition to sketch out some nuances in the interstices between film representation and city form.

APPENDIX A

INFORMATIONAL TABLE ON THE MOVIES STUDIED

	Naked City	Goodfellas	Long Goodbye	Pulp Fiction
runtime	96 minutes	146 minutes	112 minutes	154 min
aspect ratio	1.37 : 1	1.85 : 1	2.35 : 1	2.35 : 1
director	Jules Dassin	Martin Scorsese	Robert Altman	Quentin Tarantino
cinematographer	William H. Daniels	Michael Ballhaus	Vilmos Zsigmond	Andrzej Sekula
writers	Albert Maltz & Malvin Wald	Nicholas Pileggi & Martin Scorsese	Leigh Brackett (screenplay) & Raymond Chandler (novel)	Quentin Tarantino & Roger Avary
release date	March 4, 1948	September 21, 1990	March 7, 1973	October 14, 1994
color	Black and white	Color	Color	Color
production company	Warner Brothers	Hellinger Productions & Universal International Pictures	E-K-Corporation & Lion's Gate Films	Miramax, A Band Apart, & Jersey Films

APPENDIX B

DATABASE COLUMN HEADINGS

#	MovieTitle	MovieReleaseDate	MovieAverageShotLength	City	CityMSA Population-Near est-Decade-InThousands	SettingName	SettingLocAddress	DifferentNon diegeticAddressifKnown	SettingGrossType
1	PulpFiction	1994	7.9	LosAng	13522	HawthorneGrill	13763 S Hawthorne Blvd, Hawthorne		interior
2	PulpFiction	1994	7.9	LosAng	13522	Credits			non-diegetic
3	PulpFiction	1994	7.9	LosAng	13522	DrivingToBrett			closed or moving car
4	PulpFiction	1994	7.9	LosAng	13522	ParkedCarTrunk			exterior-unk location
5	PulpFiction	1994	7.9	LosAng	13522	BrettApt	1525 N Van Ness Av, Los Angeles		exterior
6	PulpFiction	1994	7.9	LosAng	13522	BrettApt	1525 N Van Ness Av, Los Angeles		interior
7	PulpFiction	1994	7.9	LosAng	13522	Intertitle			non-diegetic
8	PulpFiction	1994	7.9	LosAng	13522	Club	2528 W Rosecrans Av, Gardena		interior
9	PulpFiction	1994	7.9	LosAng	13522	Club	2528 W Rosecrans Av, Gardena		exterior
10	PulpFiction	1994	7.9	LosAng	13522	Club	2528 W Rosecrans Av, Gardena		interior
11	PulpFiction	1994	7.9	LosAng	13522	LanceHouse	3519 La Clede Av, Los Angeles		interior

SettingGrossType	SettingInteriorExterior	AddressKnown	DiegeticSettingStartTime	SettingStartTime-Hour	SettingStartTime-Minute	SettingStartTime-Second	SettingStartTime-TotalSeconds	DiegeticSettingFinishTime	SettingFinishTime-Hour	SettingFinishTime-Minute
interior	interior	yes	0.00.00	0	0	0	0	0.06.32	0	6
non-diegetic			0.06.33	0	6	33	393	0.10.31	0	10
closed or moving car			0.10.32	0	10	32	632	0.12.20	0	12
exterior-unk location	exterior	no	0.12.21	0	12	21	741	0.12.44	0	12
exterior	exterior	yes	0.12.45	0	12	45	765	0.23.14	0	23
interior	interior	yes	0.12.45	0	12	45	765	0.23.14	0	23
non-diegetic			0.23.14	0	23	14	1394	0.23.18	0	23
interior	interior	yes	0.23.19	0	23	19	1399	0.27.52	0	27
exterior	exterior	yes	0.23.19	0	23	19	1399	0.27.52	0	27
interior	interior	yes	0.23.19	0	23	19	1399	0.27.52	0	27

SettingFinishTime-Second	AmendedSettingStartTime-TotalSeconds	SettingFinishTime-TotalSeconds	AmendedSettingFinishTime-TotalSeconds	SettingDuration-TotalSeconds	SceneLabel1ForSetting	SceneLabel2ForSetting	SceneChanceEncoder	SceneFirstEncoderNonDiegetic
32	0	392	392	392	Prologue		no	yes
31	393	631	631	238	OpeningCredits:Miserlou		no	no
20	632	740	740	108	RoyaleWithCheese		no	yes
44	741	764	764	23	RoyaleWithCheese		no	yes
14	765	1394	1394	629	RoyaleWithCheese		no	yes
14	765	1394	1394	629	RoyaleWithCheese	Ezekiel25:19	no	yes
18	1394	1398	1398	4	BoxersDontHaveAnOldTimersDay		no	yes
52	1399	1672	1672	273	BoxersDontHaveAnOldTimersDay		no	yes
52	1399	1672	1672	273	BoxersDontHaveAnOldTimersDay		no	yes
52	1399	1672	1672	273	BoxersDontHaveAnOldTimersDay		no	yes

Scene First Encounter Diabetic	Scene Wayfinding	Scene Search	Scene Chase	Scene Violence	Scene Conversation	Shot Start Time	Shot Start Time -Hours	Shot Start Time -Minutes	Shot Start Time -Seconds	Shot Finish Time	Shot Finish Time -Hours	Shot Finish Time -Minutes	Shot Finish Time -Seconds	Shot Start Time -TotalSeconds	Ammended Shot Start Time -S	Shot Finish Time -TotalSeconds	Ammended Shot Finish Time	Shot Duration -TotalSeconds
no	no	no	no	no	yes													
no	no	no	no	no	no													
no	yes	yes	no	no	yes													
no	yes	yes	no	no	yes	0.12.21	0	12	21	0.12.44	0	12	44	741	741	764	764	23
no	yes	yes	no	no	yes	0.12.45	0	12	45	0.13.32	0	13	32	765	765	812	812	47
yes	yes	yes	no	yes	yes													
yes	no	no	no	no	yes													
yes	no	no	no	no	yes													
yes	no	no	no	no	yes	0.25.45	0	25	45	0.25.56	0	25	56	1545	1545	1556	1556	11
yes	no	no	no	no	yes													

Shot Action Spans Bldg Threshold	Shot Location On Or Visually Connected To Street	Shot Distance -Preponderance	Shot Camera Movement -Preponderance	Shot Viewshed Animated -Max-prsn	Shot Axial To Street	Shot Oblique To Street	Shot Transverse To Street
no	no	MediumClose	LittleToNon	2	no	no	no
no	yes	MediumClose	Track	2	no	yes	yes
yes	yes	Closeup	LittleToNon	3	no	no	no

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