

The Architecture of Film: Tarr, Angelopoulos and How to Ride a Wild Horse

By Hamid Amouzad Khalili

ORCID 0000-0002-2547-6537

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The Melbourne School of Design
The University of Melbourne

Principal Supervisor:
Dr. AnnMarie Brennan

Co-supervisor:
Dr. Greg Missingham

Advisory Committee:
Professor Hannah Lewi

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Abstract

With the dawn of moving images, architects started to develop an interest in studying and utilizing film for theorizing, critiquing and representing architecture. In recent years, a myriad of books and academic papers by architectural theorists have been published around the strong relationship between architecture and film. Simultaneously, leading architecture schools established subjects concerning the two interlocking arts, some academics dedicated their research career to studying the relationship between film and architecture, post-graduate degrees on film and architecture were devised and architects and architecture students have been involved in a significant trend toward creating architectural animations and film.

However, despite the advances of digital filming and editing and its availability to the public, sophisticated technologies of lighting, modeling, simulation and texturing in CGI programs used by architecture students, architectural films and animations commonly present certain shared symptoms such as fast and disturbing camera movements, aimless editing, weak compositions and narrative-less montages. These symptoms reveal an unfortunate truth that architects still do not know how to use the moving images effectively, and this knowledge has yet to be successfully transferred to the discipline of architecture.

This dissertation traces the roots of this challenge and tackles it in a series of research activities. This thesis proposes a toolbox named the 'film-architecture matrix' that can be used as a matrix of film design and analysis. Within the thesis, this film-architecture matrix is employed as an analytical tool in three chapters. The dissertation puts forward a pedagogical framework for teaching filmmaking to architects and utilizes the film-architecture matrix as the main design generator. In addition, this dissertation takes on the task of presenting and critically examining the two filmmakers, Bela Tarr and Theo Angelopoulos to architectural discourse. It is argued that the cinema of Tarr and Angelopoulos, and the cinematic movement represented by them known as

'slow cinema', entails certain features that make them useful studies to the field of architecture and can influence the quality of architectural films and animations, and the discipline of architecture in a broader sense.

Thesis Statement

This thesis examines architectural and cinematic features of three architectural elements and demonstrates how certain cinematic techniques and strategies respond to distinct properties of spatial elements. Through the development of an analytical and film design tool-box, this thesis makes the necessary knowledge of filmmaking accessible to architects and architecture students. Moreover, this thesis presents a series of methods in which film can be harnessed as a means of investigation and representation of space and develops a pedagogical framework to fill this gap in skills and knowledge within the field of architecture.

Declaration

This is to certify that:

- This research comprises only my original work towards the degree of Doctor of Philosophy (PhD).
- Due acknowledgment has been made in the text to all other material used.
- This research is fewer than the maximum word limit (100,000 words) in length, exclusive of tables, maps, bibliographies and appendices

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1 Introduction

1.1 Thesis Topic

The significant trend in the field of architecture toward using animations in the form of walk-through and fly-throughs has revealed that the moving image, because of its particular characteristics, could function as a representational tool for architects. Hence, for the 21st century architect, the ability to produce moving images seems to be fundamental knowledge, with moving images playing the same important role as drawings in previous decades.

Despite advances such as sophisticated technologies of animating, lighting, modeling, simulation and texturing, the majority of walk-through animations produced in architecture schools and professional firms appear to be inadequate to communicate spatial qualities and atmospheres of architectural spaces. These animations made by architects neither refer to the rich history of architectural presentation techniques, nor the enchanting power of moving images. After years of experimenting with animations, the visualizations by architects are rarely attractive and communicative. The weak presentations do not express the essence and spatial qualities of architecture and urban spaces, nor do they properly leverage the capability of the moving image.

Aside from a general attraction toward producing film and animation, there is a history in the past few decades of architects studying the relationship between film and architecture within academia. Architecture scholars and theorists have examined the reciprocity between the two disciplines from different perspectives and have extensively looked into the image of cities and the manner in which architecture is portrayed in films, in an attempt to theorize a genre of architecture that has cinematic characteristics. However, architects seldom direct a significant amount of attention to the methods and strategies that are used for filming architectural spaces and, as a result, do not know

how to properly express the qualities of a space using a movie camera. This is a gap of knowledge and a lost opportunity that will be examined in this dissertation.

1.2 Significance of Research; Why Film Form Matters?

In his documentary *The Form of the City* (1974), the Italian filmmaker, poet and theorist Pier Paolo Pasolini, while pointing to the iris ring of his camera remarked: “the only thing I have to do is to move this thing here ... and the city’s form, its profile and its architectural ensemble will be shattered, spoiled and disfigured.”¹ Pasolini probably knew better than anyone that a camera does not precisely capture how a space is experienced, however his explanation on how to depict an accurate and forceful cinematic representation of architecture underscores that film strategies and techniques are as vital, if not more so, as the architecture (content) that is going to be filmed. Pasolini points out that filming is a complex process encompassing various aspects such as cinematography, editing, *mise-en-scene* and camera movement which are equivalently important as the architecture that is portrayed in the film.

Other masters of cinema have similar statements about the significance of the medium of film and how content can be cinematographed. The prominent filmmaker, Werner Herzog, in his advice to young filmmakers, suggests:

[I]f you have a good plot, a good story, a good idea for your set design, good characters and situations and you are excited to make the film, it means that you are not a good filmmaker and your ideas are worth absolutely nothing...film is all about how you move your camera, how you edit and how you frame things. This is what matters. You should have a clear idea

¹ In the documentary *The Form of the City* (1974) made by Pasolini and Paolo Brunatto, Pasolini speaks about the relationship between film, cities and architecture and by mentioning various examples shows how adopting different cinematic strategies influences the image of the built environment in film.

about how you want to film and edit things... and this fucking camera is like a wild horse, if you do not have a clear plan about how to achieve what you want, it will dislodge you.²

After several years of producing filmic materials such as architectural animations in an age when the process of producing and distributing a video is as easy as pressing a button on a smartphone, the statements of Herzog and Pasolini raise a fundamental question concerning the role that film and filmmaking are playing in contemporary architecture. The remarks of Pasolini and Herzog emphasize that for film as a medium, techniques, tools and methods are essential as the subject matter to be filmed. Yet surprisingly, in an era where architecture is experienced remotely through the camera's eye more than ever, there is no systematic education about film as an ideal and fitting medium to present an accurate depiction of architecture within the curriculum of architecture schools.

As Pasolini suggested, film is a medium that can shatter, spoil and disfigure architecture. However, architects have not developed skills, methodological approaches and techniques required for architectural filmmaking and, in the field of architecture, studies into the cinematic techniques and strategies are close to non-existent. If the discipline of architecture has the intention to deploy film as a medium, educating architects about the best use of the film medium is a crucial necessity; otherwise harnessing the potentials of film, the 'wild horse' described by Herzog, becomes an impossible task.

Francois Penz, one of the most productive scholars in the field, noticed the fast-growing production of architectural animations, and lamented the "jerky" camera movements in the animations made by architects, claiming that "architects should learn

² Werner Herzog, "Werner Herzog Teaches Filmmaking," *Masterclass*, accessed March 14, 2018, <https://www.masterclass.com/classes/werner-herzog-teaches-filmmaking>.

from filmmakers how to represent the movement through space”.³ Nine years later, in the essay ‘Architecture and the Screen from Photography to Synthetic Imaging Capturing and Building Space, Time and Motion’ (2003), Penz takes the same stance and criticizes the “badly designed virtual camera strategies” in architectural animations that oblige a viewer to whiz “dizzily along spline paths which represent no known or recognizable point of view”.⁴ Elsewhere, he warns that “it is hazardous for unskilled architects” to engage in making animation. In his diatribe against these animations, Penz disapproves of the fast-paced and unplanned camera movements and finds the walk-through and fly-throughs unattractive and unengaging “particularly in comparison to the long history of sophisticated techniques used in cinema and television”.⁵

This lack of rigorous study into cinematic techniques to discover effective methods of filming architecture is two-fold. First, studies that investigate successful cases of filming and editing architecture are scarce.⁶ Second, there is an absence of a systematic film-design approach that can make the complex process of filmmaking graspable for

³ Francois Penz, "Cinema and Architecture: Overlaps and Counterpoints of the Studio-Made Features in the Film Industry and Studio-Based Experiments in Architectural Education," *A.D.* 112, no. special issue (1994): 41.

⁴ François Penz, "Architecture and the Screen from Photography," in *Architectures of Illusion*, ed. Maureen Thomas and François Penz (Bristol: Intellect, 2003), 135.

⁵ *Ibid.*, 138.

⁶ See for example, Stavros Alifragkis, "Constructing the Urban Cinematic Landscape: Theo Angelopoulos's Thessaloniki," in *Contemporary Greek Film Cultures from 1990 to the Present*, ed. Tonia Kazakopoulou and Mikela Fotiou (Oxford: Peterlang, 2017); Stavros Alifragkis and François Penz, "Dziga Vertov's Man with a Movie Camera: Thoughts on the Computation of Style and Narrative Structure," *Architecture and Culture* 3, no. 1 (2015); Stavros Alifragkis, "The Mythical Landscape, a Comparative Analysis of the Formation of the Landscape in Theo Angelopoulos' Voyage to Cythera and Andrei Tarkovsky's Stalker" (Masters Thesis, University of Cambridge, 2003); Simone Shu-Yeng Chung, "Reading Perspective and Architecture through the Film In the Mood for Love," *Thesis* 4 (2003). Many of these studies took place in or are conducted by people trained in the Department of Architecture and the Moving Image in the University of Cambridge that ceased to exist in 2005. As it was mentioned, other studies that highlight some aspects related to film form have other primary focuses and are limited to comments on notions such as montage (and sometimes cinematography) and does not utilize any sort of a systematic method of film analysis.

architects and architecture students. At a practical level, this gap in academic studies and pedagogy is reflected in the quality of architectural digital animations that became popular with the advent and development of CAD software packages. It appears that the poor quality of current architectural animations has not experienced a meaningful improvement after all these years.

It is notable that Penz is one of the rare examples, if not the only one, amongst the scholars of film and architecture to over-hype the use of architectural animations and tried to highlight the challenges of such visualizations. He expresses his belief that architects should learn what he called “the language of screen” or, in other words, techniques, tools and strategies of filmmaking in order to produce acceptable and engaging architectural animations. Through his post-structuralist terms, Penz encourages architects to learn the screen’s “vocabulary and grammar that are best suited to narrate architecture”:

[W]hen it comes to producing moving-image-based projects, using digital video or 3D walk-through animations, the visual raw material is not enough on its own. And here is the paradox: thanks to more than 100 years of cinema (and television more recently) within western culture, we all feel that we understand the language of the screen – and we do; but those of us who are not trained, or experienced moviemakers can rarely ‘speak’ it. Moreover, although we may not ourselves be capable of fluency in screen language, we are highly trained and sophisticated viewers, our tastes formed by a century of expert and sensitive portrayals of buildings and urban environments. Architects and their clients are naturally extremely critical of substandard products.⁷

⁷ François Penz, "Architecture and the Screen," 158-59.

Ten years after Penz warned of the low quality and underdevelopment of architectural animations, and despite the remarkable advancements in CAD software and animation packages, it seems that the same problems remain. In the preface to *The Architecture of Screen* (2013), Penz repeats identical criticisms regarding architectural animations and calls for learning from 120 years of cinema history. He states that the quality and poor execution of architectural animation does not reflect “the power of moving cinematic images, the most universal of contemporary communicative languages”.⁸ In 2013, Penz’s discussions about architectural animations are accurate but unexpectedly after almost seven years, the issues have not been tackled by Penz himself nor by other scholars in the field. This thesis is a proposition that follows and builds upon the work of Penz, by addressing the same concerns and proposes, from a different angle, an alternative approach.

1.3 Research Gap

From the early moment of cinema, it has been argued that, unlike still images and photographs, film by the virtue of its nature and form is an appropriate medium to communicate architectural experiences.⁹ By looking back at the body of literature in the field of film and architecture, a research gap emerges. There is a limited number of studies that seek to investigate the complexities of film techniques in detail to understand how spaces are represented in cinema. Furthermore, a structured toolbox that makes the intricacies of producing architectural film and animation easier and

⁸ Francois Penz, "Preface," in *The Architecture of the Screen: Essays in Cinematographic Space*, ed. Graham Cairns (Chicago, Illinois: Intellect, 2013), 2.

⁹ See Sigfried Giedion, *Building in France, Building in Iron, Building in Ferro-Concrete*, trans. Duncan Berry (Santa Monica, CA Getty Center for the History of Art and the Humanities, 1995), 176; Walter Benjamin, in *One-Way Street, and Other Writings*, trans. Edmund Jephcott and Kingsley Shorter (London: NLB, 1979), 61.

simultaneously covers the necessary skills required of filmmaking that architects need to learn has never been put forward.¹⁰ This is an indispensable direction that has not been covered in the field of film and architecture.

It can be construed that after years of scholars attempting to introduce the medium of film into architectural practice and pedagogy, the use of film in schools of architecture has remained as a type of muse; rarely does this knowledge translate into applicable and practical skills. As explained in the Literature Review, in the cases where the pedagogy attempts to break away from the territory of pure theory, it falls into the trap of an immediate, pragmatic translation of film techniques. In other words, the film techniques, themes and aesthetic regimes are extracted and transmuted into physical spaces, architectural forms, actual buildings and, so-called, design proposals. Drawing upon the classical montage theory, narrative structures or visual composition analysis and film thematic approaches, these educational experiments incline toward a direct translation of film in architectural design.¹¹ In most cases, cinema is utilized only if, after a quick analysis, it can generate, or lead to a useful three-dimensional form.

With the advances of easily accessible technologies, architects and architecture students are using architectural animations particularly in the format of walk-through and fly-thorough to represent their designs. However, most of these films are usually badly filmed and edited; containing uneven camera choreography, weak framing and compositions, coarse montage and placeless architecture. The poor results from this

¹⁰ The rare examples usually focus on montage and/or the cases of early cinema. See for example, Stavros Alifragkis and François Penz, "Dziga Vertov's Man with a Movie Camera: Thoughts on the Computation of Style and Narrative Structure," *Architecture and Culture* 3, no. 1 (2015).

¹¹ See the project *Agit-prop* by Liam Davis presented in Penelope Haralambidou, "The Architectural Essay Film," *Architectural Research Quarterly* 19, no. 3 (2015). The project proposes a direct architectural transfer of the montage of spatial fragments learned from *Man with a Movie Camera* (1929) by Dziga Vertov. The project montages different spaces as fragments in the same way as Vertov tries to construct a cinematic city through assembling the fragments of the real city. See also the section of Cinematic Architecture in the Literature Review chapter.

undertaking reveal that most architecture students and architects who produce films and animations are uninformed cinematic narrators of their own designed spaces and are inept in cinematically communicating the true spatial experiences and atmospheres through moving images. If we borrow the metaphor of “sculpting in time” as a description for filmmaking from the director Andrei Tarkovsky, we can imagine that architects are sculptors who own the sculpting tools (cameras, software and gadgets) but do not know how to aptly use the hammers, rasps and carving tools, or as Pasolini put it, they “destroy, shatter and disfigure” rather than enhance and communicate.¹²

These problems in the use of film and animation by architects and architecture students disclose an evident research and pedagogical gap that is rooted in two different levels within the culture of the discipline of architecture. Firstly, it demonstrates that architecture students and architects are not adequately educated about the techniques, tools and practical aspects of architectural filmmaking (film form). Secondly, a lack of a practical film-design and film-analysis toolbox that enables architects and architecture students to overcome the complexities of filmmaking and is evident. It is not the task of architects to master professional filmmaking skills, nevertheless, if architects and architecture students are going to adopt film as a medium of presentation, it is necessary to grasp the basic skills that are instrumental to making architectural films and animations. A toolset that can deconstruct the process of filmmaking appears to be a priority for the discipline of architecture.

As Penz proposed, learning from the rich culture of cinema is the most convenient way to gain an understanding of the film techniques necessary for producing architectural films and animations. This thesis has developed and will present, an effective toolbox capable of analyzing cinematic techniques and strategies. This toolbox

¹² Andrei Tarkovsky, *Sculpting in Time: Reflections on the Cinema* (Austin, TX: University of Texas Press, 1987), 63.

should be utilized as a film design matrix with the capacity to allow architects to overcome the problems existing in contemporary architectural films and animations. This dissertation endeavors to tackle these issues and the gap in the field of film and architecture through four acts presented in the next section.

1.4 Research Questions, Structure and Methods

This thesis asks the following research questions:

1. Can studying the way architectural spaces are filmed in the works of certain film directors, inform a series of cinematic techniques useful to making architectural films and animations?
2. Can a systematic toolbox for designing and analyzing film facilitate the process of filmmaking for architects?

In order to respond to the research questions this dissertation uses an interdisciplinary conceptual framework borrowing its concepts from the discussions in the field of film and architecture. Moreover, architecture theory (phenomenology in particular) and film theory support the arguments of this thesis to tackle the research gap highlighted in the previous section. The research gap is addressed through four key acts:

ACT 1, covered in Chapter 2, introduces the notion of a ‘species of spaces,’ which functions as the framework of the thesis. The term ‘species of spaces’ is borrowed from George Perec’s *Species of Spaces and Other Pieces* (1974). In the book, Perec explores the narrative characteristics of different kinds (or as he calls them species) of spaces based on their scale and the way they can be contained within one another. This dissertation selected three species of spaces (thresholds and doors, opening and windows and corridors) that play a significant part in the history of cinema and architecture. In the first part of Chapter 2 the framework of ‘species of spaces’ is briefly presented. The second part of ACT 1 (Chapter 2) presents a toolbox, designated as the film-architecture matrix, with its function as twofold: as an analytical toolbox for dissecting cinematic

techniques and strategies utilized for filming and editing spaces, and for designing architectural films and animations.

In ACT 2, this dissertation introduces two filmmakers, Bela Tarr and Theo Angelopoulos, who represent a type of cinema that, this thesis argues, offers a range of useful strategies and techniques to be utilized in architectural animations and films.¹³ In the chapter called 'Why Tarr and Angelopoulos?', it is thoroughly discussed that the films made by Tarr and Angelopoulos place a meaningful emphasis upon the notions of movement in space, real-time experience of spaces, and haptic qualities of spaces, and it is through this emphasis that, unlike mainstream cinema, architecture and physical spaces become the protagonists of Tarr's and Angelopoulos' films.

ACT 2 illustrates how the prolonged camera movements of Tarr and Angelopoulos prioritize space over the classical storytelling conventions. The filmmaking method of the two directors challenges the action-oriented narrative by practicing a space-oriented style of cinema. This chapter suggests that the cinematic techniques and strategies such as camera work, compositions and timing of their shots, possess the capacity to be studied, and subsequently, implemented in architectural films and animations. Overall, ACT 2 shows that the work of the two filmmakers, due to its formal characteristics, can become a significant area of study for the field of architecture. Tarr and Angelopoulos are two cases that have not been explored by scholars in the field of film and architecture until recently.¹⁴

¹³ It should be noted that this dissertation and the chapter 'Why Tarr and Angelopoulos' does not discuss what slow-cinema or contemplative cinema is. This discussion does not fit within the framework of this thesis and it is also well theorized and discussed in film theory books. See for example Tiago De Luca and Nuno Barradas Jorge, *Slow Cinema* (Edinburgh: Edinburgh University Press, 2016); Ira Jaffe, *Slow Movies: Countering the Cinema of Action* (New York: Wallflower Press, 2014).

¹⁴ See Thorsten Botz-Bornstein, *Organic Cinema: Film, Architecture, and the Work of Béla Tarr*. (Oxford: Brehahn, 2017). Michael Tawa, "Consilient Discrepancy: Porosity and Atmosphere in Cinema and Architecture," *Architecture_media_politics_society* 11, no. 3 (2017). In *Cinematic Aided Design* (2017), Penz refers to the films by Tarr in several cases. The films made by Angelopoulos are studied only by

ACT 3 of this dissertation focuses on three species of spaces addressed separately in each chapter: Thresholds and Doors (Chapter 4), Windows and Openings (Chapter 5) and Corridors (Chapter 6). Three criteria were considered in the selection of the species of spaces. First, the availability of architectural sources was taken into account and selecting elements and spaces with inadequate related theoretical and historical material were excluded. Second, the cinematic significance of the species of spaces was one of the key criteria and it was attempted to choose spaces that: play chief roles in films, have a recurrent presence in the images of cinema, and are discussed in various cinematic texts. Third, the importance of the species of space in the settings and narratives of the films by Tarr and Angelopoulos was a key component of the selection criteria as well.

Each chapter of ACT 3 briefly outlines the architectural features of the selected spatial elements. Looking into the cinematic and narrative significance and the image of the species in cinema is another task undertaken in each chapter. Once the spatial species in cinema is studied, each chapter focuses on the role of the spatial element in the films of Tarr and Angelopoulos. In the last part of each chapter, designated scenes entailing the species of space from the films of Tarr and Angelopoulos are analyzed through the film-architecture matrix. In turn, the analytical effectiveness of the film-architecture matrix is tested at the end of each chapter by analyzing the selected case. It should be mentioned I had the opportunity to interview Bela Tarr, and his comments accompany the arguments of these three chapters, and support the content of other chapters of this thesis as well.

In ACT 4 the proposed film-architecture matrix is put into practice and the efficacy of its use is examined. ACT 4 (Chapter 7) discusses the application of the film-architecture matrix to a series of filmmaking design studios led by myself at the

Stavros Alifragkis in the field of film and architecture. See Stavros Alifragkis, "Constructing the Urban Cinematic Landscape."

Melbourne School of Design for undergraduate and post-graduate students. In the studios, the film-architecture matrix was used by students as the main foundation for designing architectural films and animations. The goal of this chapter is to assess the pedagogical impact of the film-architecture matrix as a film-design tool on postgraduate students in detail. Comments and responses of students gathered in a document called a film-architecture diary are crucial to the discussions and observations of this chapter and support the arguments of the chapter.

At the end of the dissertation, the Ending functions as the concluding chapter, which narrates the findings that emerged in the course of this thesis, highlights the contributions of the thesis and discusses the possible future directions of the study. And finally, the Appendix of the thesis (presented as a separate volume) encompasses visual materials and catalogs of the films produced for this dissertation under the supervision of the author of this thesis.

1.5 Background and Literature Review

In order to depict an illustrative image of academic texts published on the topic of film and architecture, it is fundamental to draw a sharp distinction between what is called film form and film content. Sergei Eisenstein, filmmaker, is probably one of the first theorists who used the term “film form” and defined shot and montage as the key components of film form.¹⁵ It should be noted that there is no precise definition of film form.¹⁶ However, as per other arts, ‘content’ is *what* is said, and ‘form’ is about *how* the content is presented. Therefore, in the context of cinema, content can be defined as what is portrayed by the camera such as spaces, characters, dialogues, interactions between characters, etc. Conversely, film form is how an action or space is filmed. Cinematography and editing (shot and montage in Sergei Eisenstein words) can be considered the key components of film form.

By distinguishing between studies that investigate the content of films and the ones that look at film form, the body of literature on the relationship of film and architecture can be more accurately classified and understood. Moreover, this act of segregation uncovers what is lacking in this field of research. In the field of architecture and film, there are studies that fluctuate between form and content, nonetheless, this categorization is applicable to them. The film form and its relationship with architectural

¹⁵ See Sergei Eisenstein, *Film Form: Essays in Film Theory*, trans. Jay Leyda (London: Harcourt Brace Jovanovich, 1949), 26-31.

¹⁶ Other scholars such as David Bordwell, film theorist, define film form as the “narrative” and “stylistic” relationships between the constituent elements of what he calls “film system”. Bordwell gives examples of the components of film form and points to camera movement, color pattern (they both can be considered as cinematography or shot) and narrative structure (editing). Bordwell argues that film form can be interpreted as the “patterning” of “meaning”. Bordwell’s definition of film form inclines toward abstraction, particularly when he lists elements such as “expectations, preknowledge and convention, feeling and prejudice” as the elements involved in film form. Furthermore, his explanations about film form seem to be more relevant to feature films and less relevant to the field of architecture. Therefore what this research defines as film form is closer to the definition of Eisenstein. See David Jay Bordwell and Kristin Thompson, *Film Art: An Introduction* (New York: McGraw-Hill, 2010), 54.

discourse has been referred to by various terms such as “film language”, “architecture of film”, “screen language” and “film grammar”.¹⁷ The content of film is what is captured within the frame and film form is the way the content of film is recorded. Therefore, it is possible to narrate and film the same content in many different forms.

Bela Tarr, filmmaker, sheds a light on the difference between form and content in cinema with an intriguing example: “the same character, in the same setting, with the same lighting, can be filmed to look like a demon or a saint.”¹⁸ In the example, the character is considered as the content which remains the same but through a different form — perhaps by a different angle, composition, lens, or sound design — his/her depiction can be radically changed.

Film form consists of underlying aspects and processes such as cinematography and editing that inform the images on the screen. In cinema, content is filtered and manipulated by film form. How form and content respond to one another and perform as intertwined yet discrete elements is not the subject of the argument of this section. However, the distinction between form and content of film has to be made clear. The following section introduces investigations carried out in the field of film and architecture that are concerned with architecture as the content of films.

1.5.1 Architecture in Film

Architectural scholars who studied buildings and urban spaces portrayed in films fall into the category of theorists interested in the architecture as the content of films. The research of these scholars focuses on buildings, urban spaces and cities that are the settings and locations of films or buildings and cities portrayed in films as the content

¹⁷ See François Penz, “Architecture and the Screen,” in *Architectures of Illusion: From Motion Pictures to Navigable Interactive Environments*, ed. Maureen Thomas and François Penz (Bristol: Intellect, 2003), 135-137. Richard Koeck, “A Filmic Reading and Critique of Architecture in Cities” (paper presented at the Cities in Film: Architecture, Urban Spaces and the Moving Image, 2008).

¹⁸ Bela Tarr, unpublished interview by Hamid Khalili, 2018.

of films. In some of these films, architecture has a more significant role, while in others, the architecture makes a marginal contribution. In some cases, the architecture in a film is a constructed set, Computer Generated Imagery (CGI), or a real city. Nevertheless, buildings and urban environments and their surrounding issues and narratives are the subjects of inquiries of the scholars researching architecture as the content of films (architecture in film).

The direction of the work in the field of architecture in film is varied. Historical, social and mere architectural aspects of buildings and cities are often the angles through which the scholars of architecture in film look at cinema. In the writings of the authors who deal with the architecture as the content of film, the main emphasis is placed on utilizing film as reliable evidence through which the theories of architecture and urbanism can be observed. Penz has stated that “the ‘content’ of films is often a wonderful companion to elucidate, elicit and complement writings on urban and architectural theories at any given time”.¹⁹ Similar to Penz, Nezar Alsayyad, an urban and architectural theorist who considers film as a lens to analyze theoretical and historical notions relating cities and urban conditions, attempted “to raise film to its proper status as an analytical tool” for urbanism.²⁰ For the academics active in studies of architecture in film, cinema functions as a medium that facilitates the process of interrogation of the architecture represented through the medium.²¹

¹⁹ Francois Penz, “Preface,” in *The Architecture of the Screen: Essays in Cinematographic Space*, ed. Graham Cairns (Chicago, Illinois: Intellect, 2013), 2.

²⁰ Nezar Alsayyad, *Cinematic Urbanism: A History of the Modern from Reel to Real* (New York: Routledge, 2006), 4.

²¹ Various social, political, historical, aesthetic and experiential issues in relation to architecture have been addressed in the studies of scholars into architectures portrayed in cinema. For instance, the impact of modernity on architecture and cities as well as its emerging notions and experiences are one of the frequent themes and topics in the oeuvre of scholars who have studied the depicted architecture in films. See Dietrich Neumann, *Film Architecture: Set Designs from Metropolis to Blade Runner* (New York: Prestel-Verlag, 1996); Nezar Alsayyad, *Cinematic Urbanism: A History of the Modern from Reel to Real* (New York: Routledge, 2006); Giuliana Bruno, *Atlas of Emotion: Journeys in Art, Architecture, and Film* (New York: Verso,

There are studies carried out by a group of writers who examine architecture in film through a phenomenological framework. For example, Juhani Pallasmaa (2001) analyses the work of filmmakers such as Michelangelo Antonioni, Andrey Tarkovsky, Stanley Kubrick and Alfred Hitchcock from a phenomenological perspective. Borrowing from influential phenomenologists such as Maurice Merleau-Ponty, Gaston Bachelard and Martin Heidegger, Pallasmaa arranges what he calls an “arbitrary” selection of five films to draw phenomenological conclusions and tackles the notion of “existential lived space” in cinema.²²

In parallel with his phenomenological reading of spaces of cinema, Pallasmaa stitches the threads of different fields to one another. He does not hesitate to amalgamate architectural phenomenology with symbology and semiotics, literature theory and visual arts. Although Pallasmaa comments on aspects such as camera movements that are more related to the film form, the primary focus of his study is not film form. Pallasmaa concentrates on the theories and concepts informing the spatial elements portrayed in film settings. His main objective is to draw phenomenological interpretations based on buildings, interiors, objects shown in a film as well as the experiential relationship characters establish with the spaces depicted in a film.

Agencies of the Frame: Tectonic Strategies in Cinema and Architecture (2011) written by Michael Tawa can be compared to *The Architecture of Image: Existential Space in Cinema* (2001) by Juhani Pallasmaa in the sense that they both approach architecture in film from a radically philosophical point of view. Michael Tawa (2011) theorizes and interprets not only architecture in film but delves into the inherent qualities of cinema. Influenced by continental philosophers, Tawa chooses a broader theoretical framework and

2002); Richard Koeck and Les Roberts, *The City and the Moving Image: Urban Projections* (Basingstoke, UK: Palgrave Macmillan, 2010).

²² Juhani Pallasmaa, *The Architecture of Image : Existential Space in Cinema* (London: John Wiley and Sons Ltd, 1999), 4.

employs theories from Martin Heidegger, Gilles Deleuze, Gilbert Simondon, Jacques Ranciere, Felix Guattari, Giorgio Agamben and Jean-luc Nancy. Tawa describes his job as an act of “drawing parallels” between film and architecture to “discern within cinema the qualities, techniques and practices” that might be useful for the process of architectural design.²³ Tawa organizes his long discursive inquiry on the strength of elements that he defines as commonalities between film and architecture: place and setting, temporality, materiality, and agency (crisis and establishment).

Compared to Pallasmaa, Tawa’s study is richer in terms of the diversity of cinematic examples he uses. Tawa endeavors to probe into the fundamental features of film form; features such as temporality, framing and cinematography but his discussions remain at the level of comparative theories and debates about the nature of cinema and architecture. For example, in a chapter on ‘temporality’, Tawa mentions multiple instances of manipulated temporality in cinema, but he ignores the importance of an accurate analysis into the execution of film techniques and cinematic strategies and ventures toward extremely theoretical contentions about the concept of time and its meaning in cinema and architecture.

The discussions proposed by Pallasmaa about cinema can be seen as overlapping between architectural phenomenology and a sort of general philosophy of art with an emphasis on visual arts. Pallasmaa rarely involves film theory in his writings to underpin his observations. Unlike Pallasmaa, for Tawa film theory is a critical lens of examination. He tries to involve film theory in his discussions and consults with texts such as *Movement-image* (1983) and *Time-image* (1985) by Gilles Deleuze that are central books on film theory. Nevertheless, Tawa’s accentuation on film theory is restricted to the instances where film theory responds to theories of architecture that he develops

²³ Michael Tawa, *Agencies of the Frame: Tectonic Strategies in Cinema and Architecture* (Newcastle upon Tyne: Cambridge Scholars Publishing 2011), 1.

within his arguments. Although Tawa shows interest in the fundamental attribute of film form his emphasis is not on developing a systematic analytical method into techniques and strategies through which architecture is filmed.

Giuliana Bruno is another significant scholar whose contributions to the area of film and architecture are indispensable to this field of discourse. Bruno's work is influential in terms of the methodology she deploys as well as for the novelty of case studies she offers. Her most notable book *Atlas of Emotion* (2002) is genealogical research into cultural history with a special focus on cinema, architecture and urbanism. From a methodological perspective, in drafting the cultural history she welds the fictional world of cinema to the language of theory.²⁴ In the book, the case studies she adopts are not examples frequently discussed in the field of film and architecture. For instance, Bruno advances her examinations into the relationship between the notions of gender and architectural and urban spaces — describing them as “socio-sexual spaces” — by looking at filmmakers such as Elvira Notari, Chantal Akerman and Dorothy Arzner which were unprecedented filmmakers in the field of film and architecture at the time.²⁵

Bruno pays particular attention to architecture in film and how it is inhabited and narrated by women. In addition to architecture in film, Bruno is keen to explore the new spatial encounters with the spaces of modernity that are facilitated and generated by the introduction of the moving image to the world. For example, the way the architecture of different film theaters gives rise to discrete experiences of viewing in the modern world is analyzed.²⁶ Although the spatial experiences of modernity (including cinema) and their related socio-sexual and historical issues seem to be fundamental to discussions proposed by Bruno, she endeavors to overcome two other tasks as well.

²⁴ Bruno, *Atlas of Emotion*, 13.

²⁵ *Ibid.*, 66-80.

²⁶ *Ibid.*, 48-56.

On one level, akin to many other film and architectural theorists, Bruno tries to draw parallels between the two disciplines and highlights the similarities in the nature of film and architecture (especially modern architecture), however, her debates do not stay on the surface of identifying similarities. By expanding upon commonalities between film and modern spatial experiences, Bruno successfully manages to illustrate a holistic constellation of tendencies and features of modernity in her oscillation between film and architecture. On another level, Bruno demonstrates how cinema and its underlying culture is fundamentally embedded into the experience of modernity. She provides readers with various examples and reasons for this argument. Key evidence she puts forward to support the idea of the inextricability of cinema and modernity is the fact that motion and travel are critical to both film and modernity.²⁷

Not only in *Atlas of Emotion: Journeys in Art, Architecture, and Film* but in other texts Bruno insists that one of the most notable contributions cinema made to modern culture is that film can convey and articulate emotion.²⁸ Bruno seems to be fascinated with the potential of film to affect emotions and finds cinema as a valuable “archive of emotion pictures” and “psycho-geographic journeys”.²⁹ Bruno principally sees cinema as an archive of emotional and psychological sub-stories connected to the built environment, and simultaneously, she argues that film can perform as a rewarding source for historical architectural studies. Considering film as an archive useful to architectural studies was pursued by other theorists in the field as well.

²⁷ Bruno presents countless examples through which she shows us that modern architecture is mobile, is perceived through movement in the same vein that the notion of movement is vital for cinema. Ibid., 24, 26, 30, 53, 56-71.

²⁸ Guiliana Bruno, "Future Ways of Living," MEET Digital Culture Center, accessed March 22, 2019, https://www.youtube.com/watch?v=T_jjqRe4Oh8; *Visualizing the City*, The Architext Series (London: Routledge, 2007).

²⁹ Guiliana Bruno, *Atlas of Emotion*, 92, 238-52. In the chapter 'An Archive of Emotion Picture', Bruno carries out a detailed analysis into the works of theorist, Walter Benjamin, Noel Burch, Bela Balazs, Guy Debord and psychologist Hugo Munsterberg and explores how film functions as an archive of emotions.

In the most recent case, in *Cinematic Aided Design: An Everyday Life Approach to Architecture* (2017), Francois Penz follows a similar approach to Bruno. Both Penz and Bruno recognize cinema as an archive for architectural examinations. While Bruno strove to illustrate a vast image of emotional, psychological, socio-sexual aspects of architectural and urban spaces archived in films, Penz looks at cinema as a comprehensive reservoir for studying the everydayness of architectural spaces. Adopting film as a source of architectural investigations is gaining a foothold in the field of film and architecture in recent years. For instance, the book *Cinematic Urban Geographies* (2017) by Francois Penz and Richard Koeck takes a similar point of view to *Cinematic Aided Design*. While *Cinematic Aided Design* focuses on mundane features of architecture in interior and domestic scale, *Cinematic Urban Geographies* (2017) is a cinematic and urban archaeology suggesting a remarkably comparable approach applicable to a bigger scale; cities and urban environments.

Cinematic Aided Design is inspired by Georg Perec's notion of species of spaces and, in parallel, utilizes the theories of Henri Lefebvre as one of the chief bases of its inquiry. In the book, Penz introduces three topics: everydayness and everyday life as archived in film, three species of spaces (doors, windows and staircases) and the everyday life practices around them and, thirdly, the notion of rhythm-analysis (studying cyclical activities of everyday life within architectural spaces) in cinema. In the chapter where Penz looks into the species of spaces, while reviewing the actions, events and sub-narratives taking place in relation to each spatial species, he comments on some of the film techniques and strategies (aspects related to film form). Nonetheless, since the main accentuation of the book is a sort of post-occupancy study through the lens of cinema and not about how architecture is portrayed in film, Penz immediately deviates from film techniques and film form.

The book does not offer any straight and literal translation from film to architecture. Penz unequivocally states his belief that, in his opinion, there is no possible

literal translation from film to the process of architectural design. Penz, elsewhere, remarks about the usefulness of a cinematic approach and writes that film is a “comprehensive encyclopedia of architectural spaces and building elements” and entails a huge amount of information that can be elicited from it: “cinema contains large chunks of everydayness of the type that we do not pay much attention to in our own daily life which may be useful to designers.”³⁰ Penz asserts that the usefulness of this approach is the fact that through film, the aspects of everydayness that might be glossed over in conventional architectural studies can be uncovered and scrutinized. Therefore, as he clarifies, what is stressed in the book is not how architecture is filmed, rather the emphasis of the text is placed on architecture as the content shown in film.³¹

Over the past ten years, there has been a myriad of scholarly papers and books discussing architecture in film. As explained here in the examples cited, these texts, in terms of approach and methodology, tackled the topic of architecture in film from different perspectives. Some of these texts are concerned with theoretical and philosophical facets of architecture, some are historical and cultural studies, while others focus on different styles and periods of architecture in the course of history, with recent investigations into everydayness and post-occupancy. In most of these examples film form is not looked at as the central subject of examination; what is studied is architecture as content portrayed in film.

³⁰ In the book Penz tries to emphasize the potential of cinema by repeatedly calling film as a “lived-in building data in existence” or as an “extraordinary archive of lived and practiced spaces”. François Penz, *Cinematic Aided Design* (New York: Routledge, 2017), 41.

³¹ François Penz has run a project called *CineMuseSpace: A Cinematic Musée Imaginaire of Spatial Cultural Differences*. In the project, hosted by the University of Cambridge, cultural difference in the everyday life of different countries is being studied. The focal points of the project are defined as follows: (a) everyday life and (b) architectural elements. Everyday life (a) examines everyday activities in everyday spaces, concentrating principally on the filmic representation of the home. Architectural elements (b) explores the varying uses of the basic elements of architecture, such as windows, doors, stairs or walls. See <https://www.cinemusespace.arct.cam.ac.uk/about>.

1.5.2 Cinematic Architecture

In the previous section, a brief background regarding the studies that look at architecture in film was presented. It was discussed that for the genre of texts that were classified as sources of architecture in film, researching architectural spaces portrayed on the screen is the primary goal, and film form and the manner in which spaces and actions are filmed is not a priority. There is another direction in the field of film and architecture studies that concentrates on what can be called cinematic architecture or filmic architecture. The terms ‘cinematic architecture’ and ‘filmic architecture’ are one of the most persistently recurrent phrases in film and architecture research.³² However, despite its prevalence as one of the most repeated terms used by film and architecture scholars, there is no consistent definition of cinematic architecture, since different theorists define and interpret these phrases quite discretely.

For instance, Richard Koeck, a key scholar in the field, defines cinematic architecture as “spatial qualities in film” and in *Cine-scapes: Cinematic Spaces in Architecture and Cities* (2013) he uses the terms ‘cinematic architecture’ to refer to the possible filmic readings of urban spaces.³³ In this thesis, the term ‘cinematic architecture’ is employed to refer to the studies that argue that buildings and cities have cinematic characteristics and can be both read and designed as a piece of film.³⁴

³² Bruno, *Atlas of Emotion*, 68. Richard Koeck, *Cine-Scapes: Cinematic Spaces in Architecture and Cities*, (Hoboken: Taylor and Francis, 2012), 159. Richard Koeck in "Cine-Tecture: A Filmic Reading and Critique of Architecture in Cities" (paper presented at the Cities in Film: Architecture, Urban Space and the Moving Image, Liverpool, 2008). Graham Cairns, *The Architecture of the Screen* (Bristol: Intellect, 2013), 27.

³³ Koeck, *Cine-Scapes*, 13.

³⁴ Bruno, *Atlas of Emotion*, 68. Koeck, *Cine-Scapes* 159. Penz, "Architecture and the Screen," 146. Modernist architects such as Le Corbusier and Robert Mallet-Stevens and their influence is a recurring topic in the studies that look into the notion of cinematic architecture. For modernists architects, architecture, similar to film, was informed as series of images in movement and was supposed to be perceived by walking and by movement through spaces.

There is a consensus amongst modern architectural theorists that the most forceful notion connecting modern architecture to film is the notion of montage.³⁵ In the same way that film was a montage of a series of carefully sequenced images, architecture was considered to be a montage of spaces perceived as a sequence of images by a walking spectator. Theorists and architects started to apply the theories of montage initiated by Lev Kuleshov and theorized by Eisenstein in *Montage of Attractions* (1923) to architectural design and theory. The theory of montage was a cinematic concept in nature but broadened its territory and entered the realm of theory and practice of architecture.³⁶

In the second half of the twentieth century the direct link to Soviet theories of montage has weakened, nevertheless the 'montagist' attitude, as Giuliana Bruno called it, toward architecture and urban spaces continues.³⁷ In the 1960s, the method of reading architectural and urban spaces as a sequence of images (or spaces) was introduced by theorists, particularly in two books, *The Concise Townscape* (1961) by Gordon Cullen and *The View from the Road* (1964) by Donald Appleyard. Kevin Lynch observed and examined urban and architectural spaces through techniques such as storyboarding and argued that urban spaces are perceived as a montaged flux of images in movement similar to a sequence of a film.³⁸

³⁵ Koeck, *Cine-Scapes*, 15-17. Penz, "Architecture and the Screen," 144-60. Bruno, *Atlas of Emotion*, 57-68. Robert Mallet-Stevens, one of the protagonists of France modern movement, argued that modern architecture is fundamentally a montage of images in motion. Robert Mallet-Stevens, "Le Cinema Et Les Arts, L'architecture," *Les Cahiers du Mois* (1925): 96. Davide Deriu, "Montage and Modern Architecture: Giedion's Implicit Manifesto," *Architectural Theory Review: Journal of the Department of Architecture, the University of Sydney* 12, no. 1 (2007).

³⁶ In *Cine-scapes* Richard Koeck thoroughly explains how the theory of montage influenced both theory and practice of architecture and urbanism.

³⁷ Bruno in her studies of the historical reciprocities between film and architecture uses the term "montagist" for architects such as Bernard Tschumi, Jean Nouvel and Koolhaas in multiple instances. See for example, Bruno, *Atlas of Emotion*, 69.

³⁸ See for example Donald Appleyard, Kevin Lynch, and John Rudolph Myer, *The View from the Road* (Cambridge: Massachusetts Institute of Technology, 1964), 1-4.

The impact of treating (and reading) architecture as a work of film does not remain at the level of theory. The architect Bernard Tschumi, in *The Manhattan Transcripts* (1981), offers a cinematic reading of architecture. For him spaces, events and actions are undividable.³⁹ In the book, he demonstrates a noticeable obsession with purely cinematic concepts related to montage. Through the constituent elements of montage such as “temporality”, “jump-cut” and “fade-in” and different kinds of “sequences”, Tschumi tries to read, theorize and at the same time generate a cinematic architecture – an architecture that is processed as a film sequence. In his view, architecture, in the same vein as cinema, can be developed through cinematic techniques such as “architectural jump-cuts” and “fade-ins”; and the cinematic architecture can be read and comprehended through the same cinematic means.⁴⁰

Tschumi believed that architecture is cinematic and can be understood through cinematic techniques. Rem Koolhaas, similarly, has described his architectural work as a sort of “spatial montage” of events and spaces.⁴¹ Jean Nouvel, in a comparable fashion, has spoken about the resemblance between film and architecture stating that the job of an architect is to montage *plan-sequence* (a continuous shot) of the movement of people through the spaces of a building. Graham Cairns in *The Architecture of Screen* (2013) explains how Nouvel utilizes the techniques of cinematic montage in orchestrating the filmic sequences of his buildings.

Cairns argues that Nouvel employs an effective use of cinematic montage in his *Lucerne* project. By creating a long-extended corridor, equivalent of a long take, along with a dark narrow chamber, Nouvel generates an unexpected cinematic cut to a bright

³⁹ Bernard Tschumi, *Manhattan Transcripts* (London: Academy Editions, 1994). In *Manhattan Transcripts* He also talks about diverse types of sequences: repetitive sequence, disjunctive sequence, distorted sequence, fade-in sequence, insertive sequence.

⁴⁰ Bernard Tschumi, *Manhattan Transcripts*, 8-10.

⁴¹ Koolhaas’s statement is cited in Maggy Toy, “Architecture and Film”, *A.D.* 112, no. special issue (1994): 4.

and huge hall. This orchestration of the cinematic sequence makes the whole architectural sequence of the building more successful and simultaneously cinematic.⁴² The uninterrupted flow of the movement of users through multiple levels of the Seattle Library and Casa da Musica designed by Koolhaas are other examples examined by theorists, such as Bruno, Koeck, Cairns, and Penz, as an instance of spatial montage and cinematic architecture.⁴³

Part of the existing body of literature regarding cinematic architecture is dedicated to studio-based and pedagogical experiments in which educators attempted to use cinematic techniques to produce cinematic architecture.⁴⁴ For example, Cairns in *The Architecture of the Screen: Essays in Cinematographic Space* (2013) discusses a series of design workshops in which he endeavored to deconstruct films such as *Citizen Kane*, *The Battleship Potemkin* and *Russian Ark* to infuse their cinematic techniques (editing, cinematography and composition) into the process of architectural design.

The inspiration for Cairns comes from architects such as Lorcan O'Herlihy, who taught a montage-oriented design studio and Pascal Schöning, who inherited a cinematic architecture design studio, Diploma Unit 3, from Nigel Coates and Bernard Tschumi at Architectural Association (AA).⁴⁵ In most of the texts related to pedagogical experiments including the work by Cairns, authors have attempted to, first, study film

⁴² Cairns in another chapter discusses the similarities between *Lola Run Lola* (1998) and Koolhaas' cinematic urbanism. See Cairns, *The Architecture of the Screen*, 65.

⁴³ Koeck, *Cine-Scapes*, 17-114. Bruno, *Atlas of Emotion*, 69. In one of the recently published texts, Holger Klein, architect takes a similar approach and reviews multiple buildings from a "dramaturgical" perspective. Klein reads the buildings through the cinematic means such as "panning shot", "tracking shot", "opening scene" and dramaturgical parameters such tension and suspense. See Holger Klein, *The Drama of Space: Spatial Sequences and Compositions in Architecture* (Basel: Birkhauser, 2018), 170.

⁴⁴ Cairns, *The Architecture of the Screen*, 180.

⁴⁵ See Ingerid Almaas "Is It Really There?," in *Cinematic Architecture*, ed. Pascal Schöning, Julian Löffler, and Rubens Azevedo (London: Architectural Association, 2009). Pascal Schöning ran the Diploma Unit3 from 1991 to 2008. In the studio ran by Lorcan O'herlihy, students were to apply the cinematic techniques in designing an open-air cinema. Cairns talks briefly about the works of other educators such as Aurora Herrera Gómez at the University of San Pablo CEU but does not analyse their work and methods.

techniques such as editing and its mechanisms and, second, show how the techniques were transferred to the practice of architectural design with the assumption that the visual language of cinema can enrich the process of architectural design.

Cairns is particularly influenced by Pascal Schöning's book, *Cinematic Architecture* (2009); a repertoire of student work under Schöning for the Diploma Unit 3. In Cairns' opinion, Schöning appears to be one of the pioneers and the most consistent teacher of cinematic architecture, however, theoretical and practical offerings of the book are questionable.⁴⁶ In the case of Cairns, the applications of cinematic techniques to the design process might seem too direct, literal and sometimes superficial, but in comparison with Schöning, Cairns' approach is more structured from a methodological point of view and is richer in the way he supports his experiments with theoretical discussions.

Cairns defines two ways of generating cinematic architecture: "direct incorporation" and "analogy strategy". Direct incorporation is a straight transference of visual techniques used in film such as lighting techniques, perspective and framing. For instance, when the same lighting effect is implemented in the design of an architectural space, it is labeled as 'direct incorporation' by Cairns. He believes that through what he calls 'direct incorporation' the visual techniques used in film "can be directly incorporated from a cinematic context into an architectural proposal".⁴⁷

⁴⁶ Although *Cinematic Architecture* by Pascal Schöning, Julian Löffler, and Rubens Azevedo was a novel and valuable collection of cinematic architectures (chiefly the works originated at Diploma Unit 3) at the time it was published, in terms of methodology and theoretical discussions the publication does not offer new perspectives compared to the previous texts in the field. The selection of essays and projects in the book does not focus on the relationship between cinema and architecture and involves other experiments with videoart, installation and photography. In fact, *Cinematic Architecture* functions as a curated catalogue of the experiments conducted in Diploma Unit 3 and does not get involved in any sort of theoretical and methodological discussions.

⁴⁷ Cairns, *The Architecture of the Screen*, 180.

On the other hand, he defines ‘analogy strategy’ as finding a spatial way of using film specific techniques in designing architectural spaces. In the method that Cairns designates as ‘analogous strategy’, an architectural equivalent of doing a fade, a cut or a long take (as film-specific techniques) can be generated for an architectural project. For example, he explains that a glass wall that is opaque on one side, gradually lit along its length becomes transparent on its other side, which is an architectural equivalent of fading in cinema.⁴⁸ In the teaching experiments conducted by Cairns, film form (aspects such cinematography and editing) are studied, nonetheless, a direct and immediate translation of these formal aspects of film to architectural design is the central aim. For Cairns, and scholars who perused a similar goal, film is not seen as a powerful medium to communicate and present architecture. For them, studying film, and particularly film form, is useful as long as some of these techniques and formal aspects can be transformed into built form – similar to the fading example mentioned earlier.⁴⁹

Koeck proposes that architectural spaces that are designed on the basis of cinematic approaches, as well as architecture in general, can be interpreted cinematically. In *Cine-scapes: Cinematic Spaces in Architecture and Cities* (2013), he encourages architects to look at “*filmic significance and properties of architecture and urban environments*” as opposed to the architectural significance of spaces in films (architecture in film).⁵⁰ He analyzes everyday urban and architectural spaces using film editing terms (which he calls “spatial editing” techniques) such as urban continuity, urban cut and urban dissolve. Koeck acknowledges that there is a cinematic architecture in which cinematic techniques

⁴⁸ Ibid. The question that whether or not these direct translations of film terms and techniques are always successful is not at the heart of the discussion of this chapter; what matters here is how the notion of cinematic architecture is explored and experimented within previous studies.

⁴⁹ It should be mentioned that film as a medium was utilized in the works of Schoning. For example, his students produced short films for the projects of Sarajevo and Hiroshima. However, the main focus of Schoning’s work seem to be on producing cinematic architecture and not on film as a medium for communicating and presenting architecture.

⁵⁰ Koeck, *Cine-Scapes*, 4.

are utilized as design tools but he questions why cinematic techniques and film language are not used to read and interpret architecture: “If visual theories, film and cinema influence the design of spaces, does this not suggest that we should consider the use of film and cinematic principles as a natural instrument to facilitate engagement with architectural spaces?”⁵¹ Dissimilar to other theorists and architects such as Cairns and even Nouvel, the question posed by Koeck is not restricted to visual, physical and material features of architectural spaces.

He utilizes the example of the cinematic technique of cut, and explains that a cut in an urban environment can be interpreted “as material joints between two adjacent buildings or districts” but these cinematic acts (cuts, dissolves, fading and continuity) take place on a “topological, socio-economic or political form” as well.⁵² From this point of view, what Koeck moots is relatively new in the works of academics who have analyzed the notion of cinematic architecture. He proposes that through a cinematic reading of architecture in addition to the form and physicality of spaces, more complex social, political and economic aspects of architecture can be scrutinized.

Based on the texts described and analyzed above, it can be inferred that there are two types of studies that fall under the category of cinematic architecture: studies concerning the designing of cinematic architecture and studies that suggest a cinematic reading and interpretation of architecture. The first group includes scholars and architects who deal with design processes and pedagogical practices applying film techniques and terms into architectural design. These authors pursue architectural equivalents of the components and processes of film form — for instance, a spatial juxtaposition between two spaces that resembles a jump cut (or other examples earlier mentioned in the chapter).

⁵¹ Ibid., 71. (*Italics in original*)

⁵² Ibid., 80.

The second group of scholars who advocate a cinematic reading of architectural and urban spaces makes use of film form and techniques to dissect architecture. These authors suggest that through drawing similarities between the way film and architecture are experienced, a filmic reading of architecture will unveil significant properties of architectural spaces that will remain otherwise unnoticed. From this perspective, physical features of architecture, as well as political, social, experiential and economic facets of the built environment, can be analyzed through cinematic terms. *The Concise Townscape* (1961) and *The View from the Road* (1964) are some of the early works that employ the cinematic techniques of analyzing architecture. *Warped Space* (2002) and *Cine-scapes* (2013) are other examples engaging directly with the act of cinematic interpretation of architecture.⁵³

1.6 Conclusion

Cinema, after more than 120 years from its birth, has shared a range of various common areas with architecture and influenced both the theory and practice of architecture. The embryo of the research field of film and architecture was born as early as 1895 and became an emerging topic during the 1980s and 90s. In the 21st, the topic of architecture and film is considered an established field of interdisciplinary research. In the past three decades, a copious number of academic texts have been published on the strong affinity between film and architecture. During the past 20 years, on the one hand, the production and distribution of digital and real images have become faster and more accessible. The development and introduction of new technologies that have cinematic characteristics such as virtual reality and narrative video-games indicate that the fertile shared ground between film and architecture has growing relevance.

⁵³ Gordon Cullen, *The Concise Townscape* (London: Architectural Press, 1971); Appleyard, Lynch, and Myer; Koeck, *Cine-Scapes*; Anthony Vidler, *Warped Space: Art, Architecture, and Anxiety in Modern Culture* (Cambridge, Mass.: MIT Press, 2000).

The Literature Review sought to sketch a bird's-eye view of the body of existing text in the field of film and architecture. The two main frameworks of research have been discussed briefly and were classified as studies into architecture in film and scholarships regarding cinematic architecture. It was explained that the gamut of scholarly work in the realm of 'architecture in film' studies the portrayal of architecture and its relevant narratives as the content of films.

While architecture as the content of films is the topic of investigation for scholars working within this framework, studying what is defined as the form and techniques of film is not central to their discussions. Conversely, the second category, 'cinematic architecture' is not primarily engaged with the content of film, but studies film form and its components such as montage and cinematography techniques and transfers them to architectural forms and design processes or uses them as means of architectural and urban interpretation. Although there are intriguing case studies and significant methodologies to be explored within these two principal directions, this research does not look into these two main directions.

This research acknowledges the importance of studying architecture in film, however, studying architecture in film is not the chief goal of this thesis. In sections where architecture in film is examined, the main intention is to see how the architectural features respond to certain film techniques and strategies and how film form captures those architectural qualities. This dissertation does not engage in any attempt to produce cinematic architecture and does not propose any architectural design method based on the features of cinema and the process of filmmaking either. Cinematic readings of architecture and making theoretical parallels is not a task that this thesis addresses.

Although the existence of both research tendencies (architecture in film and cinematic architecture) is necessary, neither approach looks at film as an independent *medium* of communication that can serve the practitioners and students of the discipline of architecture. There are scholars such as Francois Penz who repeatedly warn that film,

as a medium of representing and promoting architecture, should be instructed in the same way as drawing and still-image production are taught at architecture school.⁵⁴ And there are already educational attempts that utilize film as the principal medium of presentation.⁵⁵ However, a systematic research that prioritizes film form for the purpose of learning cinematic techniques and strategies has yet to be proposed and formulated. This is a major task that this dissertation endeavors to tackle in the following chapters.

In order to address the existing research gap in the field, this research examines film as a medium of representation; its main objective prioritizing film form as it is achieved through four acts. In ACT 1 (the following chapter) a toolbox, called film-Architecture matrix, is proposed to be used for two purposes: film analysis and film design. In ACT 2, two filmmakers whose film form will offer a new perspective for filming architectural spaces are introduced. Then, ACT 3 is dedicated to cinematic methods used for filming three species of spaces (doors, windows and corridors). Within the chapters of ACT 3, the thesis discusses how film form articulates architectural features of the species of spaces and the film-architecture matrix (introduced in ACT 2)

⁵⁴ Penz, "Architecture and the Screen," 135.

⁵⁵ Unit 24 at the Bartlett and the subjects taught by Liam Young at Sci-Arc are famous examples of these pedagogical attempts. Although in both cases the work of students is presented through the medium of film, the emphasis on the content and what is portrayed in the films is more noticeable. Both examples offer sophisticated courses and workshop of visual and special effects but a more rigorous process of filmmaking and a more theoretically enriched methodological approach through which the film form is studied, in both cases, is absent. In both examples, the teaching of filmmaking equals with visual effects workshops. The CGI-oriented style of the works produced in the studios, especially in the case of Liam Young, tend toward entertainment and advertisement industry and what might be seen in the works of students, in terms of style, is similar to music videos and promotional videos. These videos are imbued with refined special effects, however, sometimes, are full of basic errors of cinematography, editing and narrative which reveals that the focus is on VFX qualities, realism of animations, texturing and lighting and the complex design of spaces is not on film form. It should be mentioned that the works produced in the studios ran by Liam Young and Alexey Marffin have a high quality. Nevertheless, students who took those courses are not necessarily architecture students. Also, the focus of course is not architecture and architectural filmmaking. The courses are designed to prepare students for fiction and entertainment industry and many of the students who attend the courses already have a background in filmmaking and VFX.

is implemented to test a series of selected cases for the purpose of film analysis. Finally, in ACT 4, the use of the Film-Architecture Matrix as a film-design tool is examined in a studio-based experiment.

2 ACT 1

2.1 Species of Spaces & Film-Architecture Matrix

2.1.1 Species of Spaces

The act of categorization and classification has been considered a significant theoretical exercise and an “essential aspect of cognition” by various scholars in different fields.⁵⁶ One of the novel categorizations applied to architectural spaces is practiced in the book *Species of Spaces and Other Pieces* (1974) by George Perec, writer and theorist.⁵⁷ Perec designated his taxonomy as ‘species of spaces’ and categorized the species based on their scale, from small to large: page, bed, room, building and street. Similar to other kinds of classification, the intention behind the list of the species enumerated by Perec was to study the nature of each individual category as well as their differences and similarities. More importantly, Perec endeavored to measure how the species of space shape our experience of everyday life. He believed that the issue is not to invent spaces, but to interrogate and read the species of spaces. For him, this was the only way to comprehend the notion of space as well as to break away from the “form of blindness” and “anesthesia mode” in which we are using the species of spaces in the real world and watching the ingredients of architecture in films.⁵⁸

This research takes a similar approach to the work of Perec. Nonetheless, the central point of the discussion in this thesis is to investigate not only what constitutes the species of spaces, but to examine how the elements are depicted in cinema. While Perec’s classification and examination of a species of spaces was based on the size and

⁵⁶ See Umberto Eco, Marco Santambrogio, and Patrizia Violi, *Meaning and Mental Representations* (Bloomington: Indiana University Press, 1988), 88. In the book it is argued that the “essential aspect of cognition and understanding is the ability to categorize and identify novel aspects for a known type”. Wang Shu, architect, in “The Narrative of the Mountain” argues that categorization is a “theoretical pursuit”. Wang Shu, “The Narrative of the Mountain,” *Log 45* (Winter/Spring 2019). See also Eleanor Rosch and Barbara B. Lloyd, *Cognition and Categorization* (New York: L. Erlbaum Associates, 1978), 27-48.

⁵⁷ Georges Perec, *Species of Spaces and Other Pieces.*, trans. John Sturrock (London: Penguin Books, 1997).

⁵⁸ *Ibid.*, 19.

scale, alternatively, this research categorizes spaces according to their inherent architectural nature into three main categories: windows and openings, doors and thresholds and corridors. This classification takes into account the form, function, symbolic power and how these types of spaces are inhabited in everyday life, and ultimately recreated and cinematographed in films. For this categorization, the role these spaces play in cinema and their architectural significance is examined in each chapter. Amongst the three categories, the category of thresholds, windows, openings, doors and thresholds has been examined by other authors.⁵⁹ However, this research strives to benefit from the potentials offered by the chosen case studies to look into them from new angles and prioritizes the use of a film-architecture matrix to decipher the way the species of spaces are illustrated in cinema.

By structuring the research upon these categories of spaces, the dissertation aims at discovering the aspects that are neglected by architects but are rediscovered (and emphasized) by filmmakers. By observing the species of spaces through the lens of cinema and the way in which the cinematic approaches and strategies of our case studies depict the architectural elements, we can identify certain patterns, tropes and cinematic regimes to be employed in the films and animations produced by architects. Different kinds of spaces, due to their inherent spatial features, influence the way they are illustrated in film. Moreover, different directors, different film styles and cinematic methods can be adopted to film the species of spaces. Here, the important point that

⁵⁹ Simultaneous to this research, *Cinematic Aided Design* (July, 2017) written by Francois Penz has been published. In one of the chapters of the book Penz uses the framework of species of space to examine doors, windows and staircases of cinema. Utilising the notion of species of spaces as a research approach for this research was chosen in September 2016 and was officially confirmed and recorded at the Melbourne School of Design. Thomas Elsaesser and Malte Hagener have also alluded to the role of doors and windows in film. Thomas Elsaesser and Malte Hagener, *Film Theory : An Introduction through the Senses* (Oxfordshire, England: Routledge 2015), 37. A series of publications of OMA has also looked at architecture in an approach emphasizing the importance of architectural elements. See Rem Koolhaas et al., *Elements* (Venice: Marsilio Editori Spa, 2014).

must be emphasized is to elicit the lessons from cinema that are transferable into the practice of architectural filmmaking. These spatial lessons inscribed into the cinematic scenes will make the architectural films, animations other architectural time-based media, more potent to communicate spatial quality, atmosphere, and ethos of spaces. Furthermore, by employing the species of spaces as a guiding framework and the film-architecture matrix (that will be introduced in the next section) the process of transferring these cinematic approaches and strategies into the field of architectural knowledge becomes smoother.

2.1.2 Film-Architecture Matrix

This dissertation puts forward a multilayered film-architecture matrix that, on the one hand, can act as a design generator matrix for designing films and animations and, on the other hand, can be adopted for analyzing the spatio-visual strategies employed in films. Drawing inspiration from previously experimental cinematic and architectural methods, the chapter proposes a detailed yet digestible matrix for designing architectural films and analyzing cinematic strategies utilized for filming architecture.

The proposed matrix is comprised of the fundamental components for designing an architectural film, animation, short film, virtual reality (VR) or any kind of moving image in which architecture is supposed to be a protagonist. Each section of the chapter will cover one of the components of this matrix, discussing why the component is necessary and how it effectively facilitates design or analysis. This matrix is a synthesis of all the components, claiming that the components will function only together and, in relation to one another, inter-connectedly; each one eliciting a cinematic agency interwoven within others. By answering the questions of why and how to use the components of this film-architectural matrix, the following sections review the literature, previously employed methods and introduce the individual components of the film-architecture matrix.

2.1.2.1 Architectural Plans, Cinematic Plans

In both film and architecture, there is an inherent tendency toward mapping and diagramming a space or scene and its events. Architects design a conceived space by translating their ideas into orthographic images, maps, drawings, sections, and, probably, the most significant architectural orthographic projection, the floor plan. According to classical definitions, a plan is a horizontal cut through or a view from an object, building, or space, typically directed down and parallel to the ground.⁶⁰ The principal aim of employing this conventional architectural technique of drawing is to make a unconstructed space imaginable, easier to design and build.

Film makers, similar to architects, draw cinematic plans (also known as over-head views) and use other visualization techniques and drawings to schematically layout shots and scenes. There are diverse methods of drawing a cinematic plan for discrete aspects of filming such as camera staging, scene blocking, mise-en-scene and the movement of characters. As with architecture, these sorts of cinematic plans, with other two-dimensional diagrams, function as a “generator” and showcase how spaces look, how the camera moves within them and how the interactions between human bodies and space, camera and characters are established.⁶¹ While architectural plans unveil the form and scale of a space that will be used and occupied by people and their activities, cinematic plans usually reflect the form of space from the top view, as architectural plans do, and indicate cameras’ and actors’ performances and actions in the space.

⁶⁰ Mo Zell, *The Architectural Drawing Course: Understand the Principles and Master the Practices* (London: Thames & Hudson, 2008), 54. It should be noted that there are various types of plans, such as construction plans, reflected ceiling plans, figure-ground plans, design plans and roof plans, for conveying different information at various scales. In this dissertation, an over-head view of a scene is considered a (cinematic) plan.

⁶¹ Le Corbusier, *Towards a New Architecture* (New York: Dover Publications, 1986), 180. Le Corbusier, employed the term “generator” for architectural plans.

Within film history and theory discourse, customarily there are drawings that look like architectural floor plans, demonstrating a director's design regarding mise-en-scenes and action of a scene (Figure 1). Alfred Hitchcock used to sketch the spaces and staging of his films meticulously.⁶² Amongst the contemporary filmmakers Carlos Reygadas, the acclaimed Mexican filmmaker, considers floorplans as an inseparable part of his visually complex cinema and designs all of his camera movements through carefully drawn floorplans (Figure 2).⁶³ Fred Klemen, the contemporary film director and Bela Tarr's cinematographer, reveals that cinematic plans were utilized in designing the complex choreography of camera movements and actors in Tarr's best-known film, *The Turin Horse* (2011). This film was designed using top-view drawings and diagrams which were "like [an] architect's floor plan, with lines for the movements of the actors and camera".⁶⁴

⁶² Steven Jacobs, *The Wrong House: The Architecture of Alfred Hitchcock* (Rotterdam: 010 Publishers, 2007), 12-27.

⁶³ See Carlos Reygadas, *Luz* (Monterrey: Ciudad de México anDante Monterrey, 2016). *Luz* is dedicated to Carlo Reygadas' drawings and sketches.

⁶⁴ Fred Klemen, "The Thinking Image: Fred Kelemen on Béla Tarr and the Turin Horse," *Cinema Scope*, accessed March 14, 2017, <http://cinema-scope.com/cinema-scope-magazine/interview-the-thinking-image-fred-kelemen-on-bela-tarr-and-the-turin-horse>.

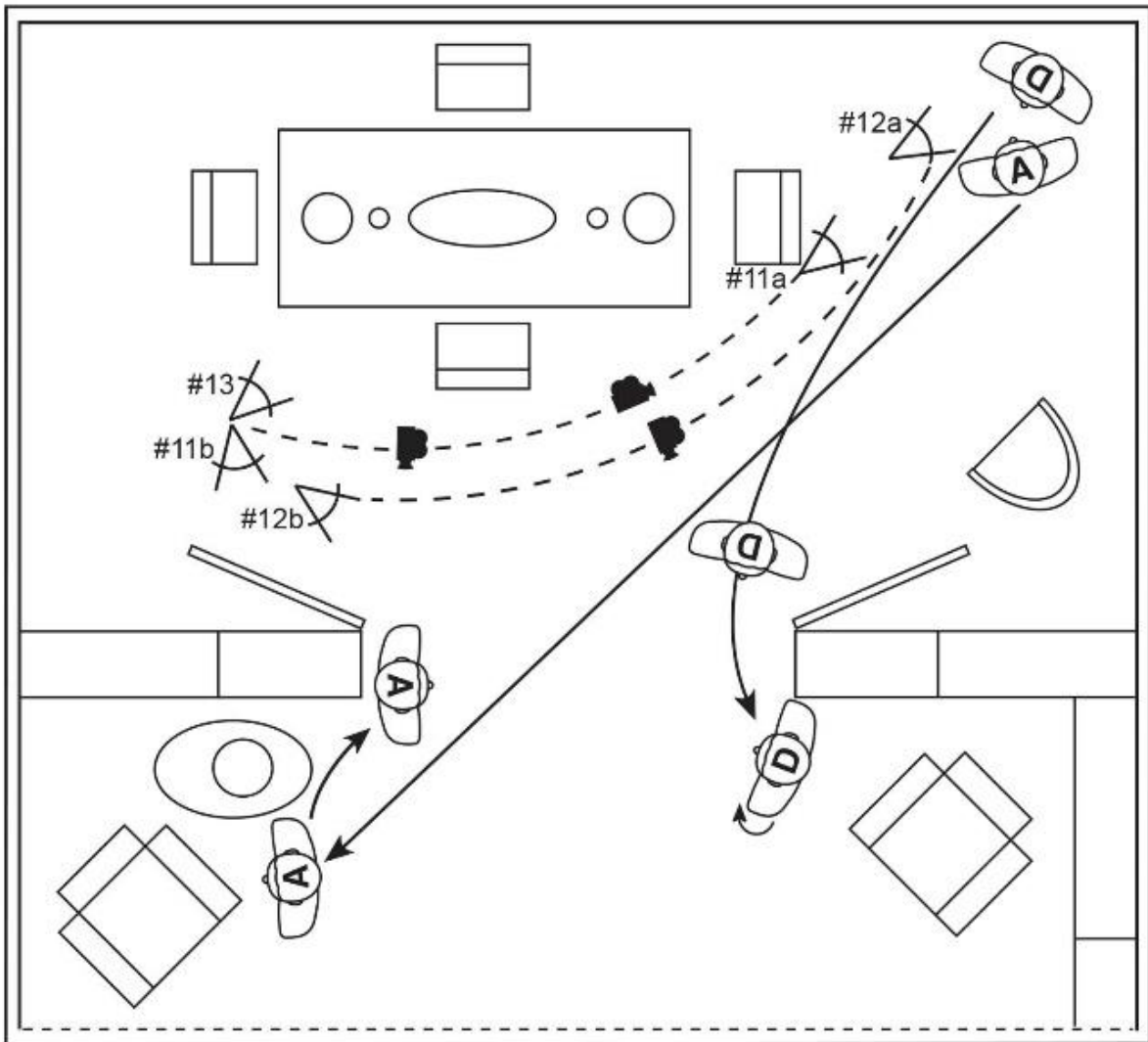


Figure 1. A cinematic plan of Alfred Hitchcock's *Notorious* (1946). by Nicholas Proferes.

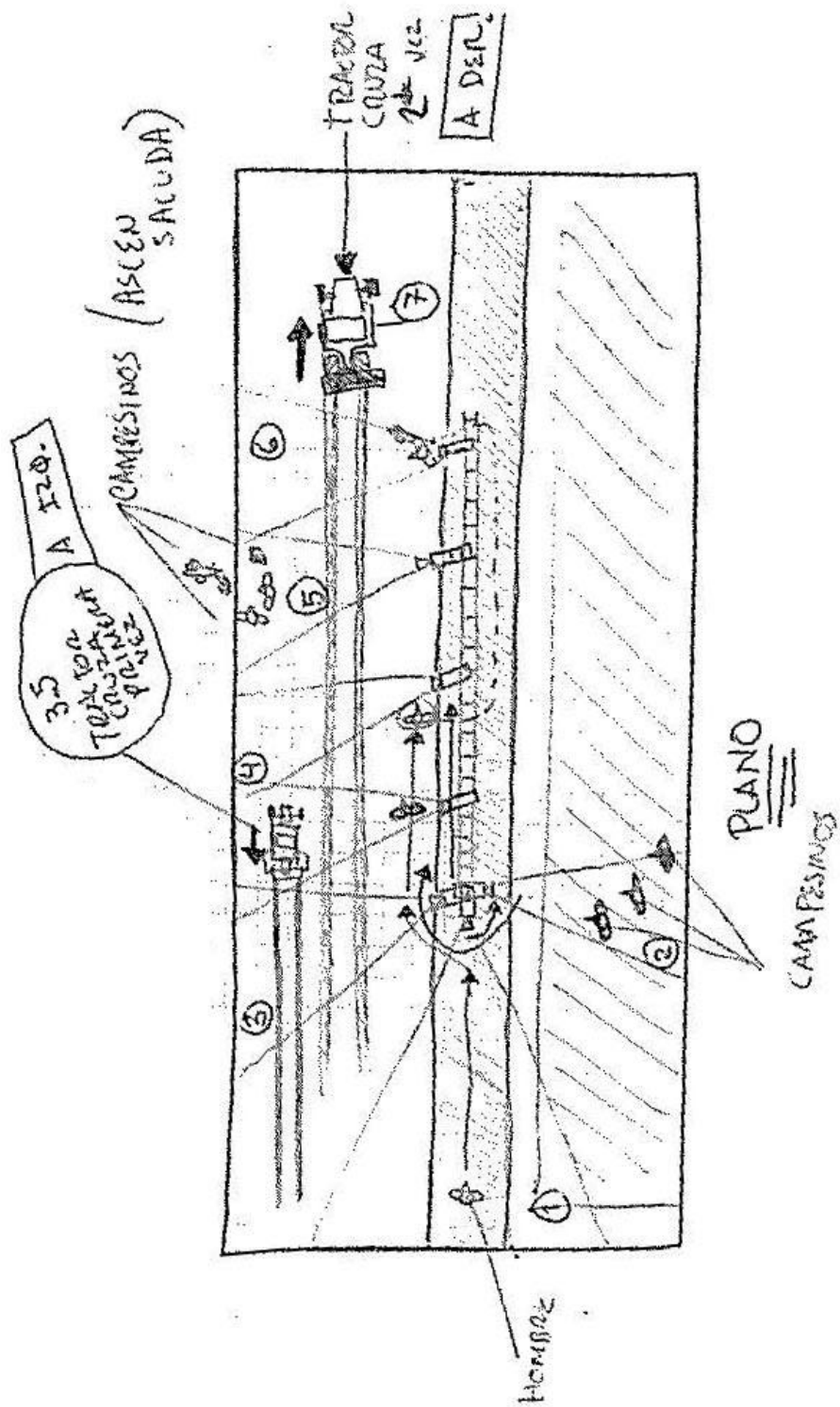


Figure 2. Cinematic Plan by Carlos Reygadas. From *Luz* (2016).

The disposition toward mapping camera positions and movements, employing overhead views and floorplan-like diagrams, is present in key filmmaking grammar texts. The plan-view of a scene including a camera, actors and the space of scene, is, traditionally, one of the first images filmmaking students become familiar with. The top-view drawings help filmmakers, in the same fashion as they help architects, to design, organize and program the layout of a scene. In theory, a cinematic plan is supposed to illustrate, in a legible way, how the spaces are occupied by camera and actors. Moreover, the spatial relations, directions, proportions and, at the same time, the geometry of spatial elements, their interaction with actors, and the distances in between are depicted on plans. Film theorist Steven Katz encourages filmmakers to draw floor plans and suggests that this “non-camera view”, assists filmmakers to “discover new ways of thinking about how a scene might be staged”.⁶⁵

Cinematic floor plans, in Katz’s view, force filmmakers “to consider some of the technical aspects of lighting, camera movement and scheduling” and assist them to take into consideration the “space needed for dolly track, the crew and the lighting equipment”. On another level, as Katz explains, “a plan-view” enables filmmakers to see a space in which the camera will move and “simultaneously see the space the camera will view”.⁶⁶

The top view drawings, in both film and architecture, facilitate the analysis of spaces and activities associated occurring within them. Architects use the plans to analyze and document, while filmmakers utilize the overhead drawings to examine the mise-en-scenes, cinematic techniques and spatial compositions in the scenes which are

⁶⁵ Steven Katz, *Film Directing: Cinematic Motion* (Studio City, CA: Michael Wiese Productions, 2004), 190.

⁶⁶ Ibid.

usually difficult to grasp by looking at the images of the screen. One of the most noted examples regarding the use of the plan for analytical purposes in the history of cinema is the plan of the set and camera movements of *The Crime of Monsieur Lange* (1936) directed by Jean Renoir (Figure 3). This plan, illustrated by the prominent film theorist and director, Andre Bazin, depicts the entire space of the scene with all the thresholds and details along with the Renoir's complex camera movements. The intention of Bazin was to show the "inherent rigor", as he put it, and the complexity of the camera choreography that was not appreciated by film critics by watching the film.⁶⁷ The experiment by Bazin implies that some of the cinematic intricacies are only intelligible if the plan of the scene is drawn.

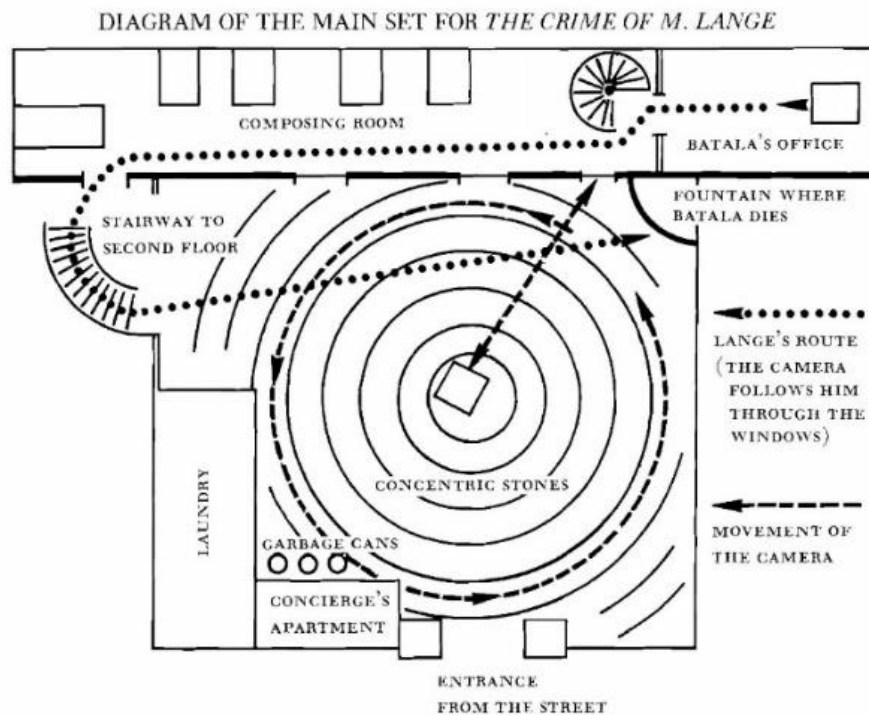


Figure 3. The floor plan of *The Crime of Monsieur Lange*, drawn by Andre Bazin.

⁶⁷ André Bazin, *Jean Renoir*, trans. W. Halsey and William Simon (New York: Da Capo Press, 1992), 74.

Recently, following the tradition of analytical plan-drawing in cinema, various academic papers and online magazines approached the issue of investigating architecture and interior spaces in film by resorting to drawing the plans of the action and spaces of films (Figure 4).⁶⁸ The thesis considers the technique of drawing a cinematic plan as a major component of the film-architecture matrix.

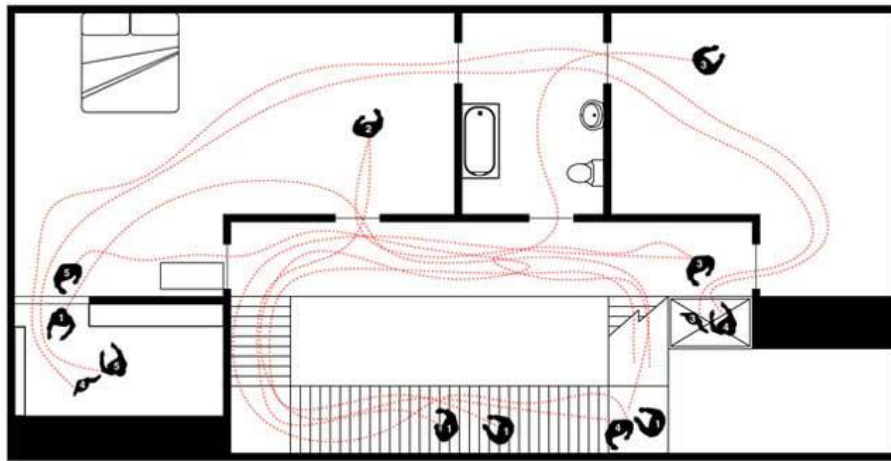


Figure 4. Cinematic plan of one of the scenes of *Panic Room* (2002), directed by David Fincher. Drawn by Mehruss Jon Ahi and Armen Karaoghlanian.

2.1.2.1.1 Eisenstein's plans

The eminent film director, editor and cinema theorist Sergei Eisenstein, in his essay, 'Montage and Architecture' (1938), contends that the most effective way of filming architecture is to conceive it through the points of view of a "mobile spectator".⁶⁹ In order to explicate his contention, Eisenstein takes his audience for a peripatetic journey through the Acropolis of Athens, deploying the plans drawn by the architectural historian August Choisy (Figure 5). These floor plans show the location of the spectator

⁶⁸ Mehruss and Karaoghlanian Jon Ahi, Armen "Panic Room," *Interior Journal*, accessed May 12, 2019, <https://www.intjournal.com/0112/panic-room>.

⁶⁹ Sergei Eisenstein, Yve-Alain Bois, and Michael Glenney, "Montage and Architecture," *Assemblage*, no. 10 (1989): 118. Sergei Eisenstein was trained as an architect at the Petrograd Institute in Saint Petersburg.

and architectonic composition of the site of the Acropolis. The plans provide a more lucid understanding of the site by highlighting the location of the viewer (position), the range of the viewer's perspective, and the direction of his/her gaze and movement. However, these drawings, in parallel with the content of Eisenstein's essay, imply that he considered a plan as an effective medium only in combination with the perspectival views depicting how spaces are viewed through the eyes of an upright position body of an observer or camera.

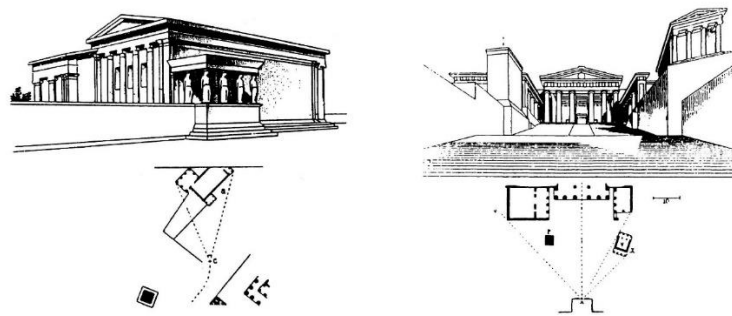


Figure 5. Plans and perspectival views by Auguste Choisy used in 'Montage and Architecture' (1938) by Sergei Eisenstein.

Floor plans, in general, reflect the geometric form, juxtaposition, composition and the scale of the spaces in a comprehensible manner. The geometric and expressive nature of plan has led architects to employ it as a fundamental design tool, and this tool has been drawn into the realm of filmmaking and other arts. Nevertheless, it should be noted that buildings and the way a user experiences them, is not conveyable in the inelastic geometrical rigidity of a plan. The experience of architecture, as Walter Benjamin suggests, is apprehended by "touch and sight" and a plan does not provide an impression of how spaces and events might look through the eyes of an occupant.⁷⁰ Therefore, the inescapable combination of view and plan is something to be taken into

⁷⁰ Walter Benjamin, *The Work of Art in the Age of Mechanical Reproduction*, trans. J. A. Underwood (London: Penguin, 2008), 35.

account. Moreover, based on the method through which Eisenstein put forward his contention in 'Montage and Architecture', the following information should be indicated on a cinematic plan: the position (location of the viewer) who experiences the architectural space, his/her approximate range of view and the direction of his/her gaze and movement.

2.1.2.1.2 Cullen: The Concise Townscape

In his book, *The Concise Townscape* (1961), architect, urban designer and theorist, Gordon Cullen benefited from a method similar to the one proposed by Eisenstein's in 'Architecture and Montage' (1938). Cullen drew storyboard-like views to accompany his plans to illustrate how people view spaces through their movement in the urban environment (Figure 6). Similar to cinematic plans of Choisy and Eisenstein, Cullen's plans show the form of space from the top-view, the position of his spectator and the direction of a spectator's journey and gaze. The views, functioning in parallel with the plans and simulating the gaze of a beholder who is present on a specific point on the site, demonstrate what the spectator sees in the spaces as a sequence of multiple views.

Cullen, comparing the experiences of "a man on the edge of a cliff" and "a man at the end of a deep cave", stresses the importance of "the sense of the position" on a plan.⁷¹ He visualizes the position of his moving spectator by arrows, representing direction at the same time. Cullen finds plan an "incomplete" entity and suggests that the perspectival storyboards "bring a plan to life (like nudging a man who is going to sleep in church)", and help architects and urban designers to "discover that the slightest change in alignment will have a disproportionately powerful effect in the third dimension".⁷²

⁷¹ Cullen, *The Concise Townscape*, 10.

⁷² Ibid., 17.

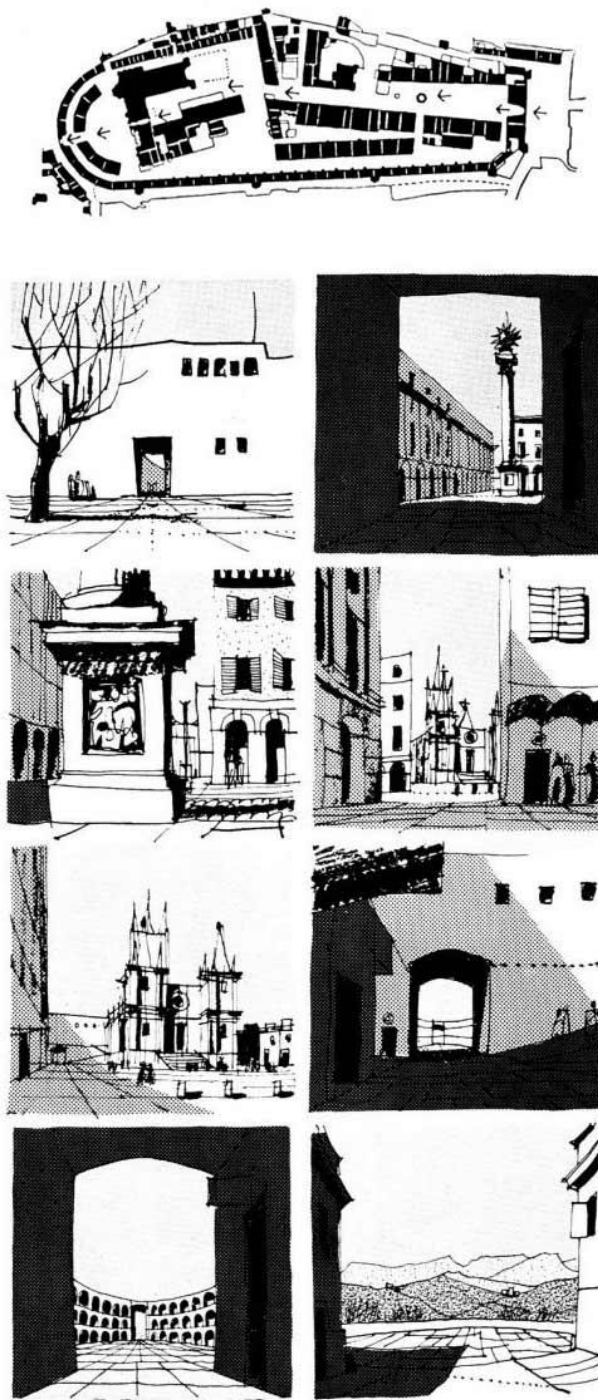


Figure 6. Plans and views from *The Concise Townscape* (1961).

2.1.2.1.3 Cinematic Examples

In film theory and practice, plans and views (storyboards) of scenes are used alongside each other in a complementary way (Figure 7). The storyboard, screen shots of a film, or the film itself, are explained through a floor plan and the floor plan is tested three-dimensionally by the storyboards. In both film theory and practice, the storyboards coupled with plans, function in the same vein as the perspectival views drawn by Gordon Cullen. For example, in the case of Bazin as mentioned earlier, the complex floor plan of *The Crime of Monsieur Lange* is drawn, but Bazin constantly asks readers to refer to the film. Bazin uses the plan to give information about space, camera positions and movement paths and asks his reader to draw a parallel line between the film, as a realization of the plan in three-dimensional space, and the floor plan itself. Bazin adopts the plan to explain the complexity of movements and mise-en-scenes of the film and, concurrently, deploys the screen, by referring to the film, to elucidate the implementation of these complexities, communicated thorough the accuracy and legibility of the plan.

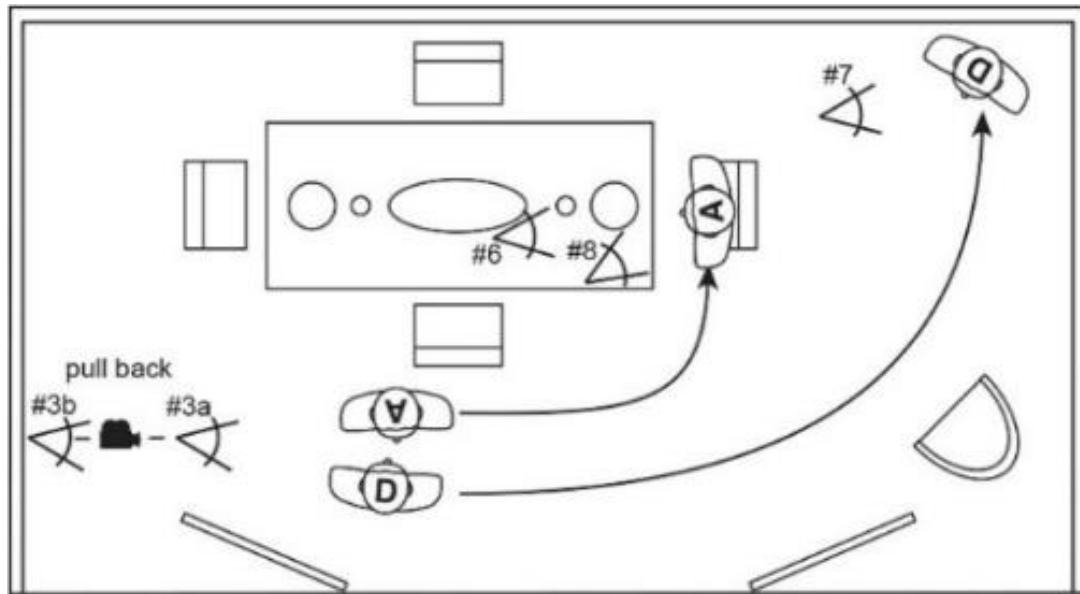


Figure 7. A cinematic plan of a Hitchcock's scene drawn by Nicholas Proferes, demonstrating how views visually respond to the movements of the camera on a plan. From *Film Directing Fundamentals: See Your Film Before Shooting* (2001).

New software, online platforms and applications, such as *Pixel Liberation Front* (used by David Fincher for *The Panic Room* (2002)), *Frame Forge 3D Studio* and *Zebra Development*, are assisting filmmakers to draw their cinematic floor plans with a considerable level of precision. The applications, by inserting technical details such as the focal length of the lenses, generate accurate storyboards on the basis of the digitally drawn floor plans (Figure 8). Although the software packages, their technology-driven tools and inflexible characteristics cause new constraints, they help filmmakers plan their shooting diligently.



25-A M.S. Start of Dolly as Albert enthusiastically describes the game

Though Albert doesn't see it, we clearly can sense Maria's discomfort in the basement, and shelving which initially frames her at the beginning of the dolly should capture her sense of entrapment...

Camera Height: 1.41m

Focal Length: 39.7mm

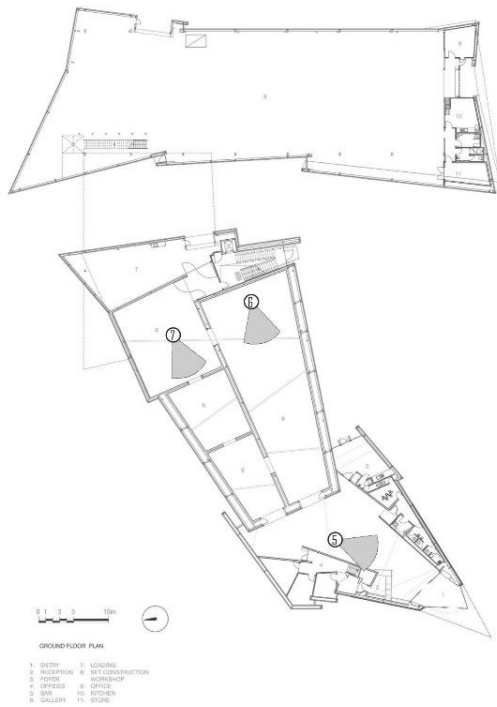
Angle of View: 54.7°

Figure 8. A screenshot from *Frame Forge 3D Studio* entailing plan and view of dolly shot with technical details such as focal length, camera height and angle of view.

2.1.2.2 Film-Architecture-Matrix: The Cinematic Plan

The film-architecture matrix proposed by this research recognizes the cinematic plan as a chief component of its analytical and design generator matrix. Drawing upon the richness of the historical background and experiences of the plan-drawing in filmmaking and architecture, the proposition of this thesis is to adopt cinematic plans and three-dimensional views in parallel and with a strong connection to each other (see Figure 9). The three-dimensional views of spaces that are used in reciprocity with plans include screenshots or drawn storyboards from the films (for analysis), storyboards, photographs and digital renders for designing a film, animation or VR.

Interior



The entrance hall features walls of pressed steel, providing a stark contrast to the exterior corton steel in terms of colour and texture. Formwise, the pressed steel looks somewhat similar, with its tall vertical panels.



The main gallery is somewhat uninspiring, just a large room with blank walls. The building features little windows to cater to the more light-sensitive exhibitions.



The secondary galleries just to the side of the main gallery are much smaller.

Figure 9. Analysis for an architectural film made for Design Workshop (Hamid Khalili at Melbourne School of Design), conducted by Simeon Chua, Annie Crone, Ardalan Mastoori, Frank Ma and Reece Cutarjee testing, experiences of spaces using plans (indicating a viewer's position in space) and views simulating the spectator's gaze.

If the case is the analysis of architecture in film, or examining the cinematic techniques used in a film, the cinematic plans of the spaces of the film are to be drawn. The second stage is to integrate the location and movement of the characters and cameras into the floor plan. The manner in which characters and cameras move in space radically influences the experience of a scene. As illustrated in the example (Figure 10), the cinematic plan of a scene from *Eternity and A Day* (2007) directed by Theo Angelopoulos, the configuration of the space and the way the camera is moved is illustrated (red arrow in the image). In specific cases, the range of view of the camera will be indicated as well. Then, the choreography or spatial composition of the characters will be traced on the plan (black dotted line). The cinematic plan assists users to investigate the spatial relations of actors and space. Furthermore, it allows designers and directors to see how spatial changes in plan impact the view and three-dimensional impression of the spaces captured by the camera. The cinematic plans can function as a generator of mise-en-scene and spatial order of characters, camera and the site for architectural films, animations and VR films. As a design generator, cinematic plans should be tested by photographs, storyboards, digital renders or at least diagrammatic sketches. And as an analytical tool, plans always are to be accompanied by the images of the film.

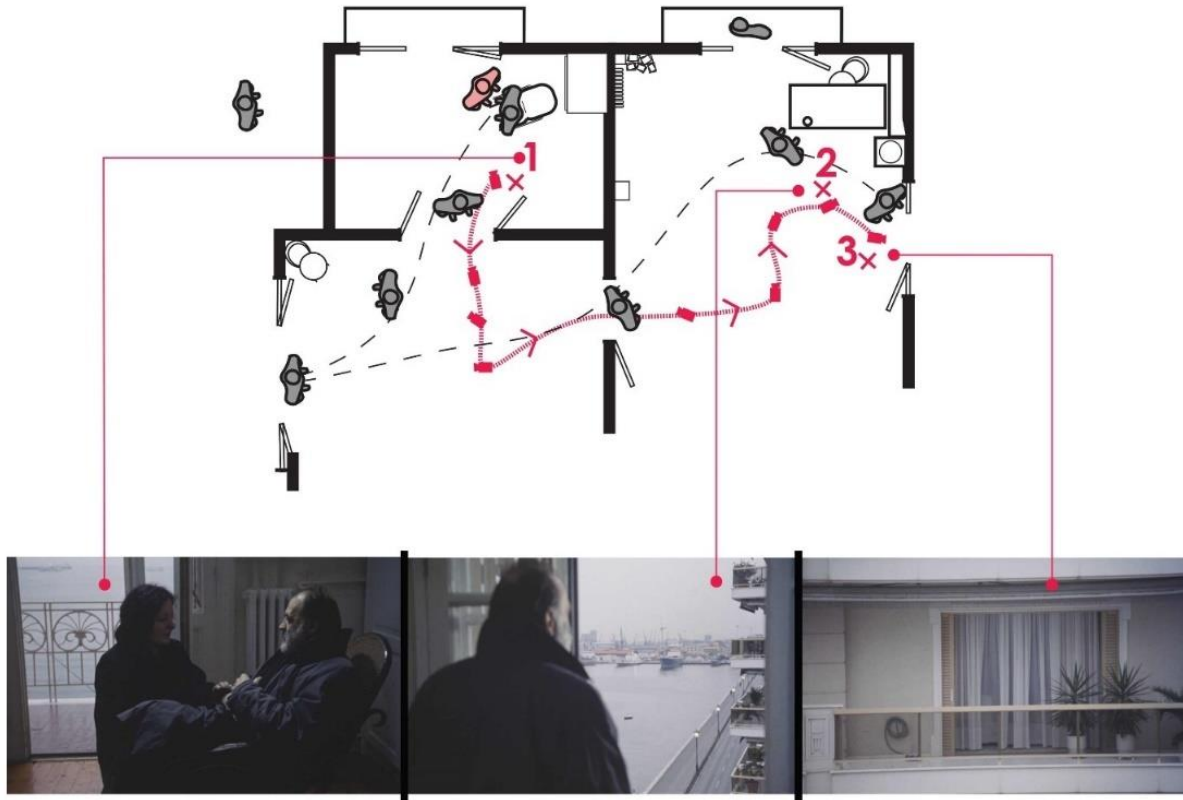


Figure 10. Cinematic plan showing characters and camera choreography alongside the screenshots from the film. Screenshots from *Eternity and a Day* (1998) by Theo Angelopoulos.

2.1.2.3 Time and Scale

The cinematic experience of watching a film, its emotions and experiences engendered by it, is largely dependent on how the temporality of the film is structured. Film quickens, slows down, halts, reverses, reorders and reorients the past and future. More importantly, cinema is capable of converting and breaking down space into slices of time by editing. Architecture, in contrast, is not purely based on the alteration of time. However, the temporality of our experience of architecture directly impacts the way we perceive physical spaces.⁷³ Various spatial strategies, in architecture, lead to different

⁷³ Architectural theorists relate space (or architecture) to time and temporality in different ways. For example, Juhani Pallasmaa, architectural theorist, believes that architecture encompasses temporal

temporal experiences of space. Architects can guide not only the direction of a movement in space but also the temporality of the movement in space. Variant spatial strategies and tactics can adjust the amount of time that users spend within a space. For instance, Roberto Gabetti, architect, urban designer and architectural educator, stated that “people tend to move faster in narrower corridors than larger ones”.⁷⁴ Gabetti believed that the vastness of a space has a direct relation with the time users spend in it.

In film, temporal strategies by which spaces of film are presented on the screen inform our spatial experience of cinema. Film, as a time-based medium, converts “performance of a specific materiality” to a “specific temporality”.⁷⁵ Cinema transforms the material world into the images that move based on a temporal regime. Film distributes the actions, movements, events and spaces into a series of temporal pieces. It could be even argued that different species of film, in different historical periods, are split from each other on the strength of their position toward the time.

The movement of slow cinema, which consists in “retarded motion[s] and prolonged moments” as represented by filmmakers such as Theo Angelopoulos, Andrei Tarkovsky, Aki Kaurismaki, Bela Tarr, Tsai Ming Liang and Nuri Bilge Ceylan is ideologically and aesthetically different from the mainstream of commercial cinema due to their unprecedented manner of timing and articulation of temporality.⁷⁶ The time and duration spent on each shot or scene, the chronological order of the actions of a narrative, the pace of camera movement in shots, and the duration of each shot influence

patterns. He criticizes the hegemony of the fast architecture of the buildings “evading and exploding time” and defends the “slow architecture” of the buildings and spaces that “contain and hold time” inviting their users to contemplate and hesitate in the “age of speed” when “time vanishes”. Juhani Pallasmaa, *The Embodied Image: Imagination and Imagery in Architecture*, (Chichester, U.K.: John Wiley & Sons LTD, 2011), 40.

⁷⁴ Roberto Gabetti, *Insegnare L'architettura. Scritti E Testimonianze* (Rome: CELID 2012), 43.

⁷⁵ Felicity Colman, *Film Theory: Creating a Cinematic Grammar* (London Wallflower, 2014), 39.

⁷⁶ Ira Jaffe, *Slow Movies: Countering the Cinema of Action* (New York: Columbia University Press, 2014), 3. The relationship between film and time will be argued in detail in the chapter of why Tarr and Angelopoulos?.

our perceptual encounter with the moving image. The mentioned factors subsequently affect how we perceive the architectural spaces in the moving image. Therefore, temporality is one of the aspects that should be carefully taken into account in the process of producing any kind of film or animation.

2.1.2.3.1 Scale

In cinema, traditionally, actors and characters are the ones who advance a narrative forward. Our perception of size and scale in cinema also depends on and is standardized based on the actors and how the scale of human bodies relate to the frame of screen and spaces captured within it. The commonly employed terms, close-up, medium shot and longshot (or wide shot) imply how close a camera is to a human body as a familiar unit and a visual yardstick. These terms of the lexicon of cinema, are not absolute and may vary in different periods and cinematic resources. To be more precise, we can construe these terms, their size and scale, as portions of a unified space that are comprehensible only in relation to one another. The “consistent spatial/temporal order” created by the scale of the shots and how they relate to one another proportionately can give a clear idea of how big the space of a shot is.⁷⁷ Steven Katz regarding the relativity and proportionality of the shot scales has remarked, “A long shot of the World Trade Centre frames all of the twin towers and a generous piece of Manhattan; a medium shot of the building would lop off some of the lower floors. Moving in for a close-up, a single window might fill the frame.”⁷⁸

Although there is a slight disagreement about the exact size of each shot scale, to have a constant unit, one of the common classifications suggested by film historian and theorist Barry Salt is followed in this dissertation. Salt sees the scale (closeness) of a shot

⁷⁷ Steven Katz, *Film Directing Shot by Shot: Visualizing from Concept to Screen* (Studio City, CA Michael Wiese Productions in conjunction with Focal Press, 1991), 1.

⁷⁸ Ibid.

as an important “filmic variable about which conscious decisions have to be made”.⁷⁹ In his *Film style and technology: history and analysis* (1983), Salt’s categorization of shot scales is the one used from the 1940s onwards and is reiterated in film theory books. He divided the shot scales into three main categories: the Close Up (CU), showing the space around a “head and shoulder” of an actor, the Medium Shot (MS), including “just below hip to above the head of upright actors” and Long Shot (LS), showing “at least a full height of body” and their sub-categories (Figure 11).⁸⁰ There are other intermediate scales in Salt’s categorizations such as ‘Big’ or ‘Extreme Close Up’ (BCU or XCU), ‘Medium Close Up’ (MCU), ‘Medium Long Shot’ (MLS) and the ‘Very’ or ‘Extreme Long Shot’ (VLS or XLS) for a more precise description of a shot that might not exactly match the scale of one of the principal three categories, CU, MS and LS.

⁷⁹ Barry Salt, *Film Style and Technology : History and Analysis* (London: Starword, 1983), 155.

⁸⁰ Salt, *Film Style and Technology*, 155.

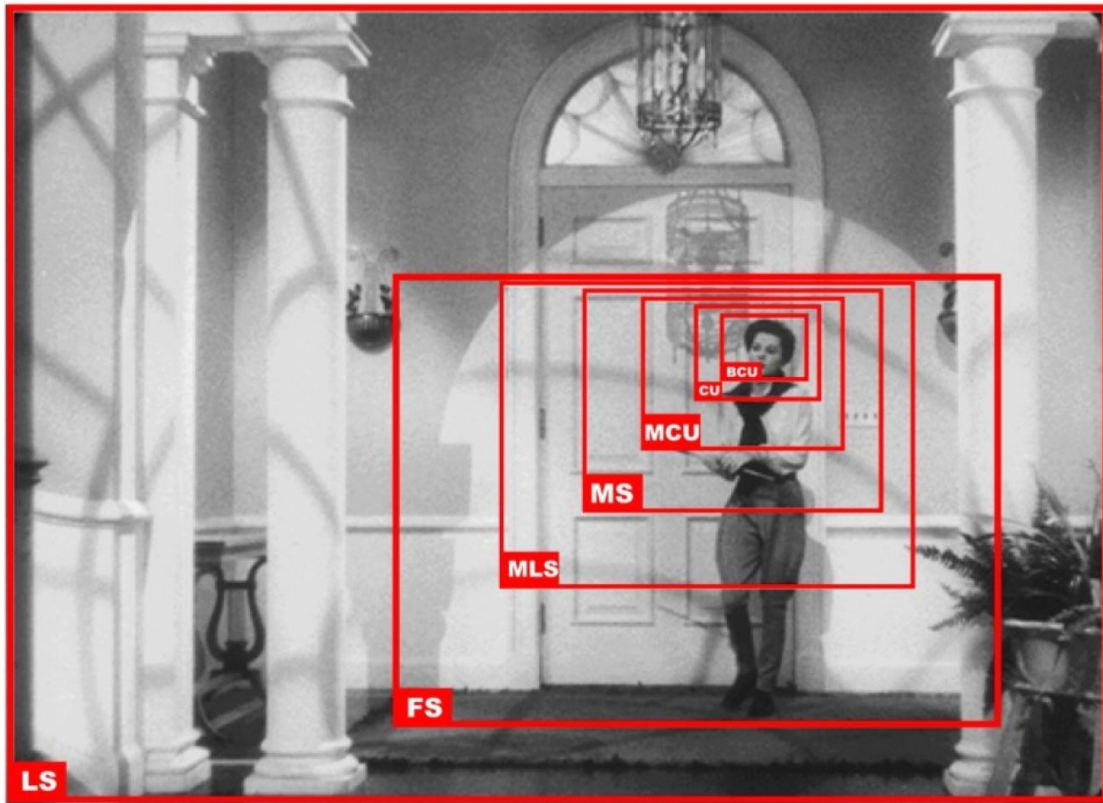


Figure 11. Shot scales. *Film style and technology: history and analysis* (1983). Edited by author.

Each shot scale entails a specific function, semantic capacity and emotional impact. Wider shots can be interpreted as the most architectural, usually with an observable backdrop, letting spectators see clearly the surrounding environment. Wider shots often emphasize context, spaces and the interactions of human figures with spaces. Closer shots, conversely, accentuate intimate emotions and inner feelings, isolating notable pieces of information and “individual details such as faces, hands, feet, small objects, important character’s reactions, a significant item”, a small scale architectural detail or the texture of a wall.⁸¹ David Fincher, academy award-winning film director, stresses

⁸¹ Robert Edgar-Hunt, John Marland, and Steven Rawle, *The Language of Film*, Basics Film-Making (Lausanne, Switzerland: AVA Academia, 2010), 125.

the criticality of the shot scales in film and states: “every time you go to a close-up, your audience knows this is important, so, you have to be very cautious and careful about when you choose to do it”.⁸²

Although the functional implications of a specific shot scale are almost the same in various films and film styles, there are alternate and creative appropriations of the shot scales experimented by some film directors. It has been argued that, for example, directors such as Michelangelo Antonioni, Theo Angelopoulos and Chantal Akerman utilize long shots, in the same vein as close-ups, to convey emotions, feelings and hidden layers of their characters’ personality. Benefiting from the expressiveness of architecture, urban spaces and landscapes, Angelopoulos’ long shots, “constitute projections of inner spaces” and Antonioni believed that “architectural spaces” and “landscapes” are “like a character”. In many cases, Antonioni treated a “very long shot like close-ups”, and would not leap on a close-up when his audience was able to understand his characters “without going closer”.⁸³

Antonioni, who used to be involved in the practice of architectural drafting before becoming a filmmaker, provided an insightful analogy about scale in architecture and film that sheds a discerning light on the value and importance of scale in both fields.⁸⁴ He made a rigorous comparison between cinematic scales (close-up, medium shot and long shot) and three spatial scales that he designates as “sub-human, human, architectural” scale. He claimed to create an effective cinematic image of a space all of the three scales need to be crafted carefully. For Antonioni, “a crack on the wall” as a

⁸² Tony Zhou, "David Fincher - and the Other Way Is Wrong," *Every Frame A Painting*, accessed October 15, 2020, <https://www.youtube.com/watch?v=QPAlq5MCUA&t=204s>.

⁸³ Stavros Alifragkis, "Constructing the Urban Cinematic Landscape," 37. Michelangelo Antonioni, *The Architecture of Vision: Writings and Interviews on Cinema*, ed. Carlo Di Carlo, Giorgio Tinazzi, and Marga Cottino-Jones (Chicago: University of Chicago Press, 2007), 339.

⁸⁴ Michelangelo Antonioni, *The Architecture of Vision*, 246.

“sub-human scale element” filmed in a close-up can be as important as the entire set of for the narrative of the film.⁸⁵

Antonioni explained that in an interior shot “when we see the entire interior spaces” we are articulating in the extent of *architectural-scale* (long shot). As we go closer and look at “a man sitting on a chair in that space” we are maneuvering within the realm of *human-scale* (medium shot). When we show an “extreme close-up of the dusty and worn-out chair frame” we are taking our beholder to the territory of *sub-human* scale of the space. The same is imaginable for an exterior shot of a man in a street with “the street in an *architectural-scale* shot, medium shot of the man walking in the street as a *human - scale* shot and the close-up of his steps on the pathway” as *sub-human* scale shot.⁸⁶

Antonioni’s explanation cogently clarifies how fundamental it is to make a thoughtful decision about the scale of the shots for filming spaces. As it is impossible to design an architectural space without taking into account the details (close-ups) and how users occupy and use spaces (medium shots or human scale). It is, accordingly, quite questionable to produce an architectural film without pondering the issue of scale and how it is going to be reflected.

2.1.2.3.2 Temporality and Shot Scale

Time and scale are two agencies, working catalytically with one another and inform a homogenous system making a shot functional/non-functional and effective/ineffective in terms of its perceptual and psychological influence on a spectator. The time (duration) spent on a shot has a direct relationship with the scale of it. There is therefore a bond between time and scale that leads filmmakers to make many of their temporal decisions based on the scale of their shots. More precisely, in closer shots, the amount of

⁸⁵ Cited in Briseide Siciliano, "L'architetto di Scena: Ruolo E Professione dell' Architettura nel Cinema," (Master of Architecture, Politecnico di Torino, 1998), 34.

⁸⁶ Ibid.

spatial information a spectator gets is considerably less than a wide shot. In wider shots, conversely, as there are more details to be scrutinized by a beholder's eye, the prolonging of a shot can be one of the strategic options. On the other hand, since close-ups are meant to leave a forceful psychological imprint, disclosing a significant detail or a protagonist's emotions, it can cause a disturbing effect if a close up is unreasonably extended. Barry Salt's statistical cinemetric analysis shows that in different periods and styles of cinema, the frequency and the number of closer shots might be the same as wider shots but the parameters of Average Shot Length (ASL) of the medium and wider shots is higher than closer shots.⁸⁷

Crafting an effectual image of architectural spaces in film requires a skillful and smooth cine-spatial oscillation between disparate scales of a single space. Consequently, it becomes critical to generate a compelling temporal regime for enhancing the sense of place with various shots and scales of the space. It should be considered that the scale change in cinema does not always happen through cuts. Other cinematic techniques result in a change in scale too. Zooming which technically means changing the focal length of a lens, makes the image of things and spaces bigger or smaller on the screen and virtually draws an audience to a closer distance to an object. Zooming into a subject might traverse through three different scales of long shot, medium shot and close-up, causing a change in scale, and simultaneously a virtual movement forward or backward (see Figure 12). Camera movements, especially in interior shots, might coincide with a change of scale in the shot. A camera wandering in a room can start with a long shot of the room, then would gear toward a medium shot of window and finish with an extreme close-up of an object on a table.

⁸⁷ Salt, *Film Style and Technology*, 242.



Figure 12. Lenin's sculpture scene in *Ulysses' Gaze* (directed by Theo Angelopoulos). Through a zoom-in camera travels between different scales of space. As there two bodies (the actor and the sculpture) the perception of scale changes as the zoom takes place.

2.1.2.4 Film-Architecture-Matrix: the Time-Scale Diagram

Regarding the agencies of temporality and scale, it was discussed that time and scale (perception of closeness) are interconnected in cinema. Barry Salt, in his statistical research has shown that, traditionally, close-ups tend to be shorter, and an audience can endure an action for a longer period when the scale of its shot is bigger. In cinema, scenes made out of a series of temporal units (shots) potentially with different scales; even cutting (from one shot to next one) is a temporal act as it affects the duration but, at the same time, can become a change of scale if it is, for example, a cut from a wider shot to a closer one.

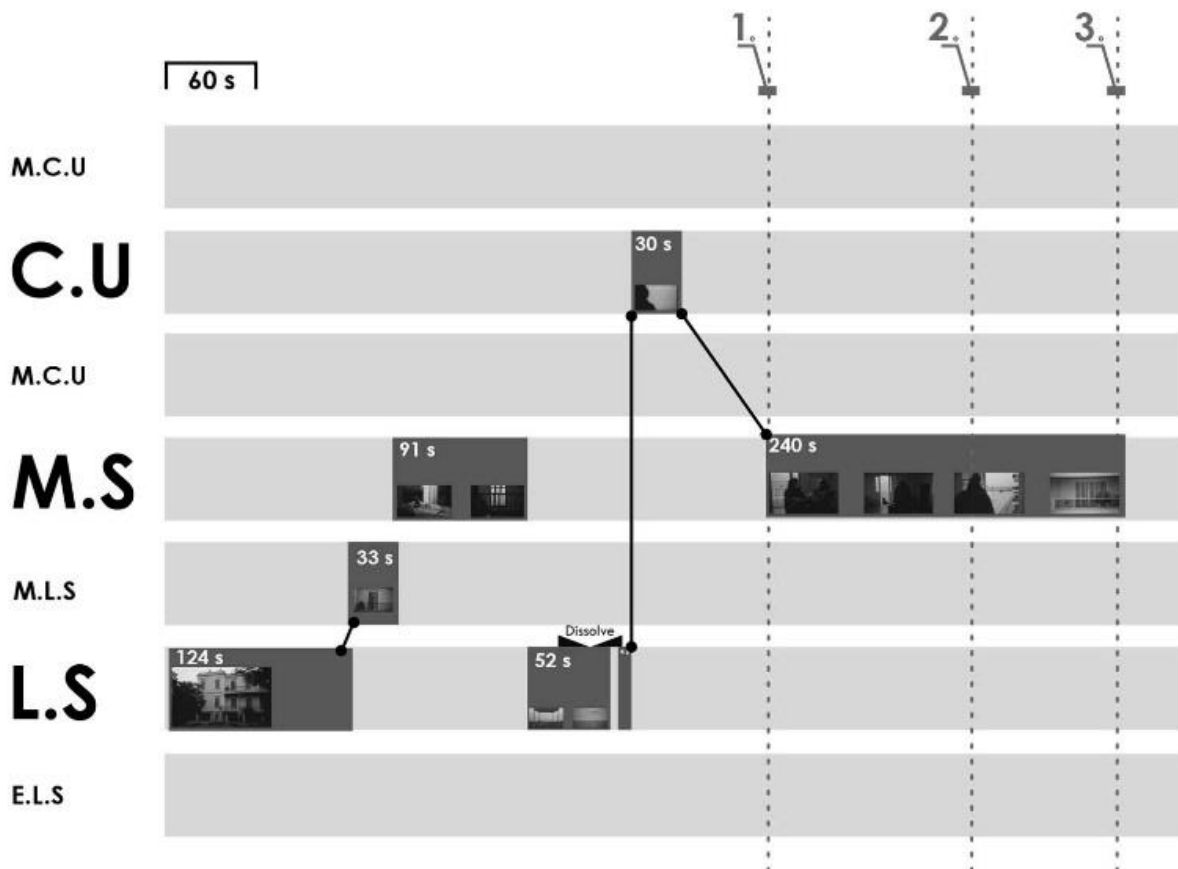


Figure 13. Time-scale diagram entailing time, shot scale, zooms and transitions.

With these issues in mind, a component of the film-architecture matrix that places the two variables of time and scale in the same equation includes a (time-scale) diagram (**Error! Reference source not found.**). The overall shape of the diagram is similar to a conventional timeline including time units on the top (adjustable depending on the length of scene/shot) and shot scales on the left side. The vertical progress of the timeline that indicates the time (or duration of each shot) corresponds to the scale of the shot (that is indicated on the left side by CU, MS and LS). For example, if a zoom-out occurs from a close-up of someone's face to its medium shot (lasting for 5 seconds), the diagram will start in the close-up's line and will continue for three seconds. When the change of scale from close-up to medium shot happens (after three seconds) it will perpetuate for 2 seconds on the line of the medium shot.

To improve the legibility of the diagram, the images of the shots can be added to the timeline. Whenever there is a cut or a change of scale, it will be shown by maintaining the diagram in another shot scale row. If there is no change in the scale of the shot, but a cut, the next shot will be followed by a small space between the two shots. When there is a transition, such as a dissolve, fade, or wipe, it will be indicated by annotations mentioning the name of the transition and its duration. In the case that the change in scale happens in a zoom or moving shot, it will be illustrated by a line drawn between the two, or more, scales (**Error! Reference source not found.**). The diagram is designed to be used alongside cinematic plans of a space, and a checklist (that will be discussed in the next section). Having the scale and time, this diagram will be laid out next to a plan of the scene. A cinematic plan entails spatial aspects of a scene such as camera staging, configuration of the scene and camera and actors' choreography while the time-scale diagram shows the temporal progression of the same scene

2.1.2.5 Film-Architecture-Matrix: Shot Dissection Template

The images of architectural spaces seen on the screen are largely impacted by how they are cinematically constructed. Film form and “visual regimes established by camera” as well as “geometry and dynamics” generated by its movements and montage influence “the nature of reception” of architecture portrayed in film.⁸⁸ Everything that is recorded in film, including architecture, can be cinematographed and edited in a way that enhances, undermines, distorts or transfigures its essence. Two films shot in the same setting might take two opposing spatial approaches. By using certain filmic strategies, a film might neglect the atmosphere and spatial qualities proffered by architectural spaces converting them into vapid backdrops and passive entities, while another one may make an active use of architectural spaces infusing their expressiveness into film.

Cinematic plans and the time-scale diagrams are the bases and chief components of the film-architecture matrix. However, there are certain intrinsic filmic tactics, overlooked by architects, who produce film and animation – and even some professional filmmakers – that can saturate the flattened images of the screen with a robust sense of spatiality. This shot dissection template, as a component of the film-architecture matrix, attempts to test the existence of the underlying features that strengthen, or at least influence, the spatiality of the moving image. The template is divided in two distinct parts. One part includes a table listing all those features to be checked and considered. In parallel with that, there are various techniques of diagramming recommended by this dissertation to be used for experimentation, analysis and film design. The constituent elements of the shot dissection template are classified into the following categories: optic, compositional notes, camera height/angle and framed space-human.

⁸⁸ Michael Tawa, *Agencies of the Frame*, 2.

2.1.2.5.1 Shot Dissection Template: The Optics and Lenses

Cinematographer and film theorist Nicholas Proferes has argued that no camera shows exactly what human eyes see from spaces and no “lens sees what the eye can see”.⁸⁹ In his *Film Directing Fundamentals: See Your Film Before Shooting* he suggests that a “modicum of familiarity” with lenses is necessary for everyone who works with images and will make the images work better.⁹⁰ The lenses generate different effects, which are based on their focal length, and have a huge impact on the perceptual quality of every image recorded by any camera. A precise categorization of the lenses depends on their technical characteristics such as the format of the camera, sensor size (or film size in analog cameras), etc. This research adheres to the most common classification of lenses that includes wide-angle lenses “(16-50 mm)”, normal lenses “(around 50 mm)”, and telephoto lenses “(50-500 mm)”.⁹¹ The lenses, on the most basic level, will change the closeness and the scale of a shot but the notion of closeness and size does not enter this section of the film-architecture matrix as it is scrutinized in the time-scale diagram.

Lenses have two main effects on images that are to be considered for architectural films and animations. Firstly, lenses change the perception of size and distance of spaces. While the normal lenses lead to results similar to what is seen by most human eyes, with a wide-angle lens, which are very common in architectural photography, “relative size and distance is exaggerated when comparing near and far objects”.⁹² A telephoto lens, on the contrary, normalizes “the relative size and distance”. In other words, a “longer” lens, for example, a telephoto lens, “compresses space” along the axis of viewing and

⁸⁹ Nicholas Proferes, *Film Directing Fundamentals: See Your Film before Shooting* (Boston: Focal Press, 2008), 48.

⁹⁰ Ibid.

⁹¹ Michael John Langford et al., *Langford's Basic Photography: The Guide for Serious Photographers* (Oxford, UK: Focal Press, 2010), 92.

⁹² Sean McHugh, "Using Telephoto Lenses," *Cambridge Colour*, accessed October 15, 2020 <http://www.cambridgeincolour.com/tutorials/telephoto-lenses.htm>.

makes background and foreground closer to each other.⁹³ Conversely, a wide-angle lens causes an optical depth, that is not real but an illusion, making distances appear longer and, consequently, movements seems to be faster with wide-angle lenses and slower in telephoto lenses. In wide-angle lenses, forms, geometries, spaces and actions are more exaggerated whereas these aspects are more subtle with a telephoto lenses (see Figure 14-Figure 15).

⁹³ Ibid.



16 mm



28 mm



50 mm



135 mm



300 mm



500 mm

Figure 14. The effect of lenses by Michael Langford. *Langford's Basic Photography : The Guide for Serious Photographers* (2010).



Figure 15. The effect of the lenses on the optical depth of shots. *Langford's Basic Photography: The Guide for Serious Photographers* (2010).

The second spatial influence caused by lenses is the fact that wider lenses have a greater depth of field, and telephoto lenses give a shallower depth of field.⁹⁴ In order to achieve certain spatial effects with different lenses, photographer and educator Michael Langford, suggests the following:

Use a *steep perspective* (close viewpoint, plus wide-angle lens or shortest focal length zoom setting) whenever you want to exaggerate distance. Similarly use it to create a dynamic angle shot looking up at a building and exaggerating its height. Use *flattened perspective* (distant viewpoint, plus telephoto lens or longest focal length zoom setting) to compress space, to make a series of items one behind the other appear 'stacked up', adding a claustrophobic effect to a traffic jam or a crowd.⁹⁵

⁹⁴ Langford et al, *Langford's Basic Photography*. (Italics in original)

⁹⁵ Ibid., 97.



Figure 16. Two screenshots from *Turin Horse* (directed by Bela Tarr) show how the change of focus points can draw the attention from one layer of the space to another

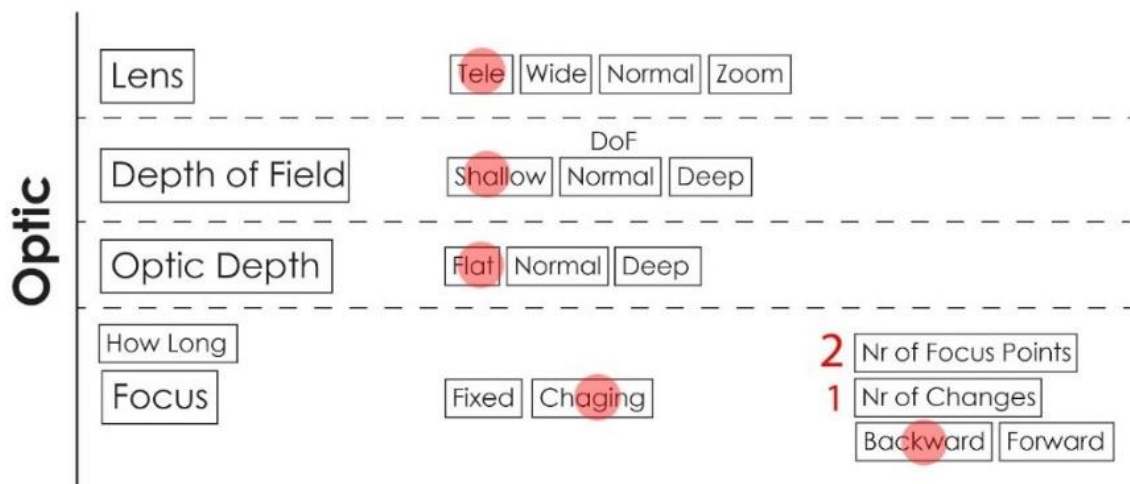


Figure 17. An example of the optic checklist in the shot dissection table of the film-architecture matrix.

Another parameter included the shot dissection template is the number of focus points in an image. When there is a shallow depth of field in a shot, the camera allows a cinematographer to change the focus from one object or form one part of a scene in foreground to another part of a scene in the background or middle-ground. By drawing the spectator's attention from one part of the screen to another, it makes them, virtually and visually, travel from one layer of the image/space to another (**Error! Reference source not found.**). The number of focus points, the length of the depth of field, the number of changes between focus points and their direction (backward-forward) will be annotated in the shot dissection template (**Error! Reference source not found.**)

2.1.2.5.2 Shot Dissection Template: Screen compositional notes

If we consider a specific space to be portrayed by a two-dimensional image, the perspective of the image, the angle we choose to narrate the space, the disposition of the vanishing points within the image and, at the same time, the length, the convergence or *parallèlement* of horizontal lines will inform, or heavily affect, the impression we are trying to transmit. The type of perspective by which we narrate architectural spaces, as Maureen Thomas argues, underlies the “emotional and expressive connotation” of a shot.⁹⁶ Based on Thomas’ experiments, purposeful placement of the vanishing points in an image “can create a sense of claustrophobia/openness, danger/safety” and guide the rhythm and direction of the action, image and space.

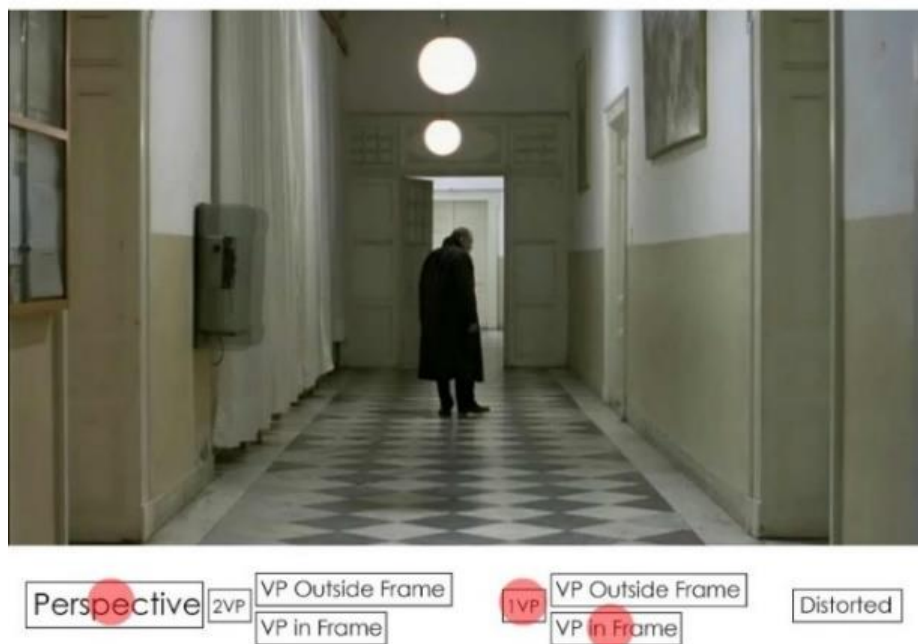


Figure 18. Perspective filled as an example for a shot of *Eternity and A Day* (Directed by Theo Angelopoulos).

⁹⁶ Maureen Thomas, "The Moving Image of the City: Expressive Space/Inhabitation/Narrativity: Intensive Studio Workshop on Continuity on Action in Space," in *Urban Cinematics : Understanding Urban Phenomena through the Moving Image*, ed. François Penz and Andong Lu (Bristol: Intellect, 2011), 294.

While one-point perspectives with a centralized, or almost centralized, vanishing point and convergent prolonged lines picture “depth”, “emotional distance” and/or endless efforts and journeys, “flat images”, containing no vanishing point within the image, with “longitudinal planes”, parallel lines and “frontal walls” can be “expressive of trapped emotions” and situations.⁹⁷ In this regard, as the perspective of the spaces depicted in a shot is regarded as an important parameter, it will be marked in the table. The perspective of a shot, the placement of its vanishing points and the amount of perspectival distortion caused by the lens will be annotated in the shot dissection template (**Error! Reference source not found.**).

2.1.2.5.3 Shot Dissection Template: Visual Permeability and Exploded Diagrams

In *The Body in Space* (2000), Steven Holl exclaims that architecture is all about depth and “foreground, background and middle-ground”.⁹⁸ In cinema, nonetheless, a camera captures the real spaces and transmutes them, with its “foreshortening effect”, to the flattened images of the screen.⁹⁹ However, establishing foreground, middle-ground and background — a sense of architecture in Holl’s words — is still possible within the incontestable confines of the frame of the screen. In every visual art, including film, meticulous artists pay special attention to how elements form a space, whether they are objects, architectural elements or human beings, arranged in front of a hypothetical point of view, mediated by the picture frame, or a real camera. A masterly arrangement of the configuration of spatial elements, informing multiple layers in space, in front of a real, or virtual, camera or a viewer infuses a sense of depth into the even surface of every screen. In one of his essays, Francois Penz experiments with the decomposition of a film clip in which he separates the layers of an image of the urban environment. He dissects

⁹⁷ Ibid.

⁹⁸ Steven Holl et al., *Steven Holl, the Body in Space* (Northvale, N.J.: Audio Plus Video, 2000), Videorecording.

⁹⁹ Francois Penz, "Towards an Urban Narrative Layers Approach to Decipher the Language of City Films," *CLCWeb: Comparative Literature and Culture*, no. 3 (2012): 9.

the construction of the layers and the depth of an image through a diagram similar to exploded diagrams (Figure 19). He infers that “unconsciously recorded” or “naïve” order of the layers of an image undermines the expressiveness of the sense of space in the images.¹⁰⁰

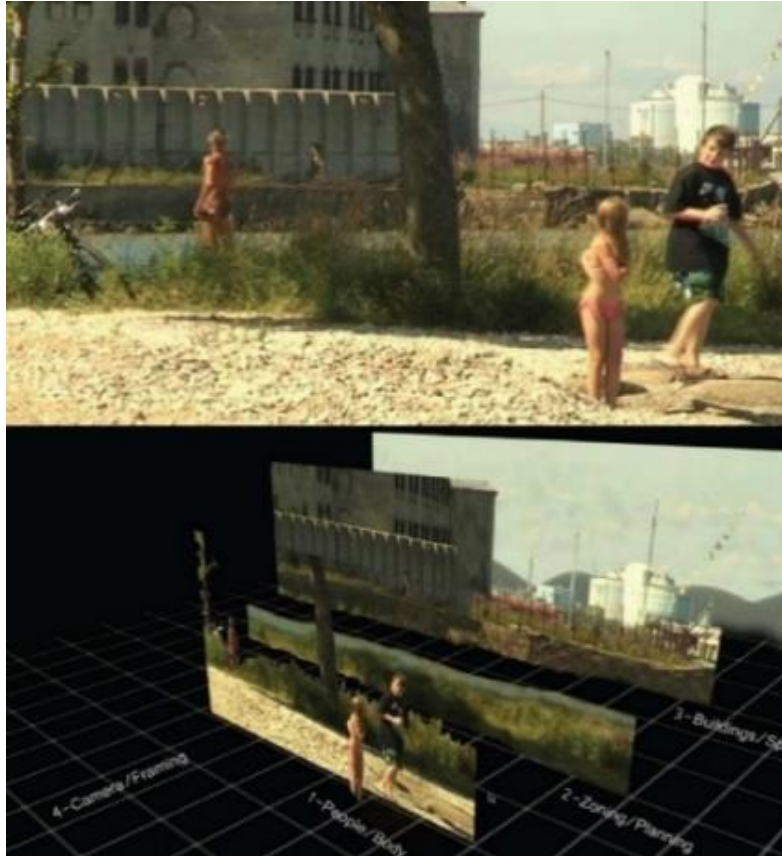


Figure 19. Exploded diagram of the constituent layers of a film clip. By Francois Penz. In "Towards an Urban Narrative Layers Approach to Decipher the Language of City Films".

There is a myriad of dexterous cases regarding effective use of the depth of space, image layers in the shots of the masters of cinema. However, one of the best examples that explains the complicated mechanism of converting the depth of real spaces into narrative and expressive two-dimensional images is Marcel Duchamp’s *Etant Donnes*

¹⁰⁰ Ibid.

that has been considered an architectural work by art and architecture theorists (Figure 20).¹⁰¹ *Etant Donnes* is an assemblage created by the Dadaist artist that features four spatial layers.



Figure 20. Marcel Duchamp, *Etant Donnes*, 1946–1966 , Philadelphia Museum of Art. © Laura Gonzalez.
<https://www.lauragonzalez.co.uk/2008/10/on-copying-reproducing-and-confronting..>

On the first layer (the door) of the of *Etant Donnes*, Duchamp bored a hole, that provides a voyeuristic gaze inside the assemblage, through which visitors are supposed to look at an image with three spatial layers. The hole in the door acts as the eye of the camera that penetrates the space toward the inner side of the scene. The small hole on the door does the same thing as the compressing process that takes place in a camera. The image (Figure 21) seen by a spectator gazing through the hole has three layers: a

¹⁰¹ See Penelope Haralambidou, *Marcel Duchamp and the Architecture of Desire*, Design Research in Architecture (Farnham: Surrey Ashgate Publishing Limited, 2013); "The Stereoscopic Veil," *ARQ: Architectural Research Quarterly* 11, no. 1 (2007). Alberto Pérez-Gómez and Stephen Parcell, *Intervals in the Philosophy of Architecture*, vol. 1, Chora (London: MQUP, 1994), 229.

wall (foreground) that has another opening that frames the gaze of the spectator, amplifying the visual permeability of the image, a female motionless body with a lantern in her hand (middle-ground), and a far landscape (background) (Figure 22).



Figure 21. The image seen by spectators of Duchamp's *Etant Donnes* from the hole in the door.¹⁰²

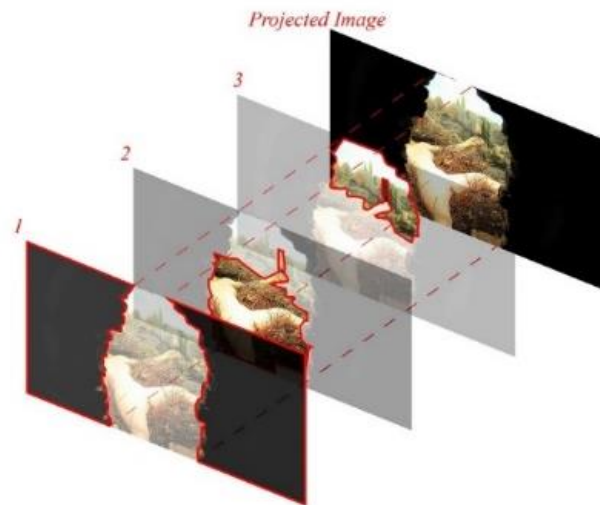


Figure 22. The image demonstrates the exploded axonometric of the layers of the image seen through the hole in the door, with the image itself projected as the last layer (by author).

¹⁰² Laura Gonzalez, "On Copying, Reproducing and Confronting," accessed October 15, 2020, www.lauragonzalez.co.uk/2008/10/on-copying-reproducing-and-confronting.

This research uses the tool of space layering, exemplified in *Etant Donnes*, that could be used for designing architectural shots, or for analyzing potential architectural shots in films. To analyze the shots of other filmmakers, whenever there is a significant change in terms of the level of far-ness and closeness in the depth of image, spatial layers should be traced and highlighted on a separate level. All the traced layers, with the original image projected on the last layer, form an exploded-like diagram exposing all the spatial layers condensed on the screen (Figure 23). For designing an architectural shot, encompassing diverse spatial layers, different elements contributing to the shot can be projected on the multiple layers of the diagram in front of the camera. It can be tested in the generated image in the back of the diagram by a photo, drawing or render, as the final product of the layering technique (Figure 24). The range of focus is another parameter that can be indicated in this diagram.

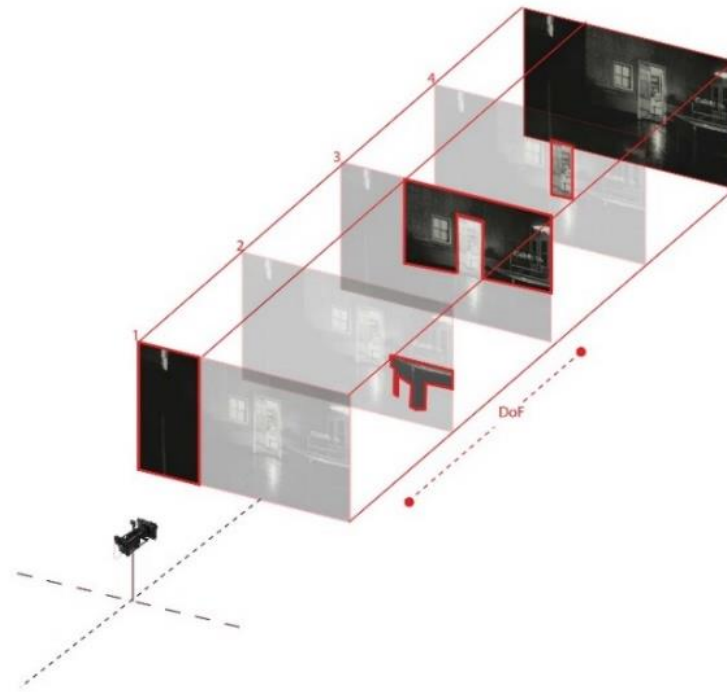


Figure 23. The diagram shows various spatial layers of a shot in *Damnation*, directed by Bela Tarr. The diagram entails camera position, spatial layers, the range of focus (depth of field-DoF). By Author.

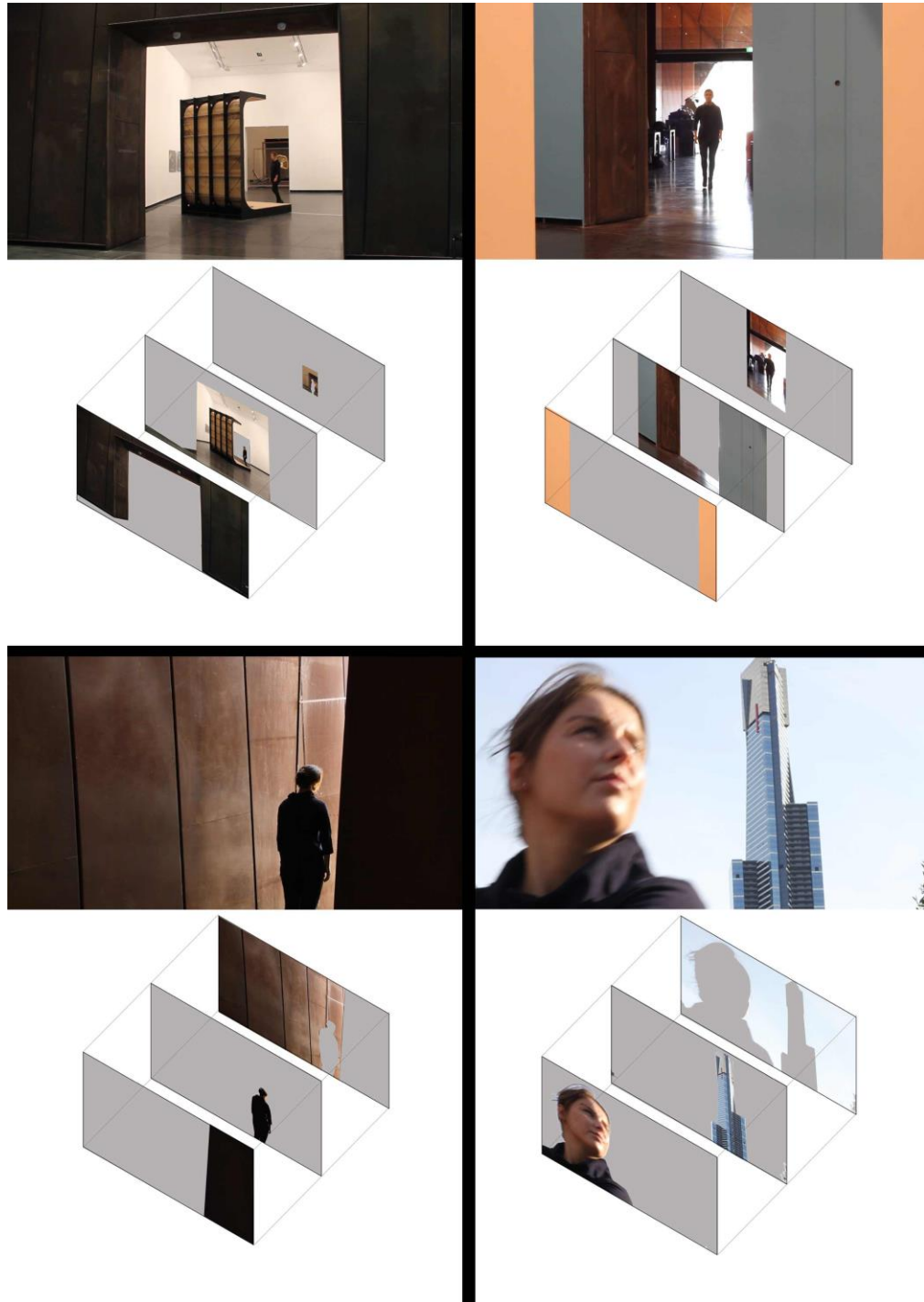


Figure 24. The technique of spatial layers, used for designing the shots of an architectural film, *Corten Effect* (2017) supervised and taught by author, Students, Simeon Chua, Frank Ma, Annie Crone, Ardalan Mastoori and Reece Cutajar experimented with various spatial layers to enhance the depth and visual permeability in the shots.

2.1.2.5.4 Shot Dissection Template: Camera Height and Angle

Camera height, angle and direction considerably influence the cinematic images of spaces and characters.¹⁰³ Andre Bazin argued that different camera angles give entirely different readings of the same space, suggesting that familiar angles and heights construct a comprehensible sense of space and that unusual angles will destroy any sense of space.¹⁰⁴ In film, the variable of camera-height is defined as “the physical height of the camera in relation to an actor, object” or space being filmed, and the angle of the camera is the angle from which the scene is being filmed (Figure 25).¹⁰⁵ Camera height (the height of the axis of the lens when horizontal) is described in a direct relation with the filmed subject and is categorized into three categories: straight-on angle (eye-level) shots; a camera is pointed directly toward what is filming, low angle; a camera that is positioned below a subject, looking up and high angle; a shot looking down at something. Regardless of the fact that a camera is subjective (simulating a character’s point of view) or objective (point of view of an omniscient narrator), disparate camera angles/heights infuse distinct semantic layers into an image. For example, high angles are often used to make the audience feel superior and low angles make a subject “larger, more looming, more significant, more powerful, and, of course, also physically higher in the film space”.¹⁰⁶ Moreover, a camera’s height and angle leave a direct visual imprint on our perception of space and this is why dealing with converging lines caused by camera angle has always been a primary issue in architectural photography. This dissertation suggests the use of diagrams in the film-architecture matrix clarifying camera angles and heights with a human body as a yardstick (Figure 26).

¹⁰³ Daniel Arijon, *Grammar of the Film Language* (London Focal Press, 1976), 62.

¹⁰⁴ André Bazin et al., *What Is Cinema?*, trans. Hugh Gray (Berkeley: University of California Press, 2005), 24-137.

¹⁰⁵ Arijon, *Grammar of the Film Language* 62; Edgar-Hunt, Marland, and Rawle, *The Language of Film*, 121.

¹⁰⁶ Adrian Schulz, *Architectural Photography: Composition, Capture, and Digital Image Processing* (Santa Barbara, CA: Rocky Nook, 2012), 91.

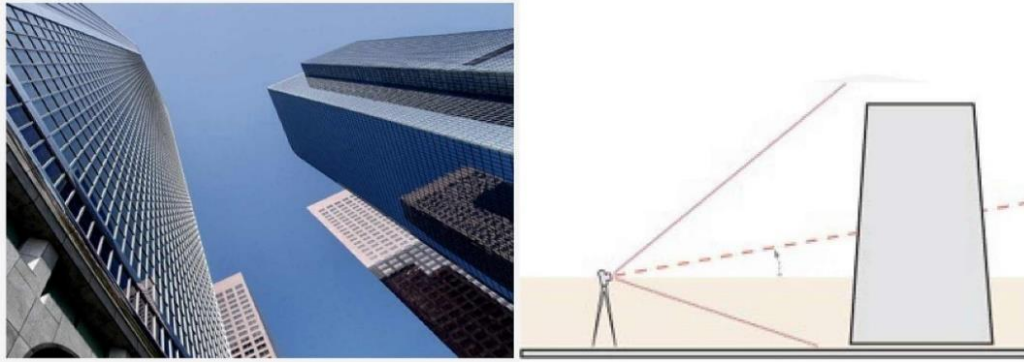


Figure 25. Adrian Schulz experiments with camera height to make the convergent lines as a constructive element of image. From *Architectural Photography: Composition, Capture, and Digital Image Processing*.

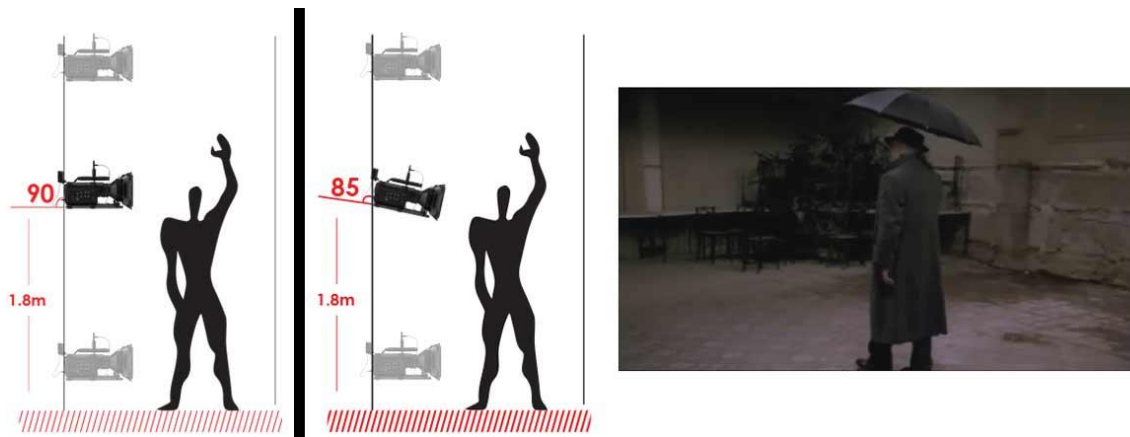


Figure 26. The diagram, on the left side shows the camera heights diagram. The image on the left depicts the diagram changed based one of the shots of *Weeping Meadow* (2004), directed by Theo Angelopoulos.

2.1.2.5.5 Shot Dissection Template: Abstract Diagramming

A skillful placement of human figures within an image can heighten an image to become a lively picture. Conversely, it could subvert the visual power of an image if it is done heedlessly. An acceptable composition of human figures in a frame requires consideration of diverse parameters underlying the quality of the image. Amalgamating human figures within images should be cautiously studied. Human figures should be treated as spatial elements and ingredients of their settings.

Framing humans, and where and how they stand in frames is often thoroughly discussed in filmmaking books (see for example Figure 27). However, in architecture sources, the lack of pedagogical material regarding the use of human figures in architectural images in a non-artificial, and well-integrated manner is felt. Where, and how, a character stands in a frame, on the center or the sides, its distance with the camera and the amount of space he/she occupies on the screen are vital factors changing the expression of an image. Therefore, this dissertation puts forward an abstract diagramming technique for canvassing and examining the framing of a human figure in space. By highlighting the framed human in space (in red for example), various patterns and compositions can be sketched (Figure 28-29).



Figure 27. Sketching for framing human figure by Roy Thompson and Christopher Bowen. From *Grammar of The Shot*.



Figure 28. By Simeon Chua (supervised by author).

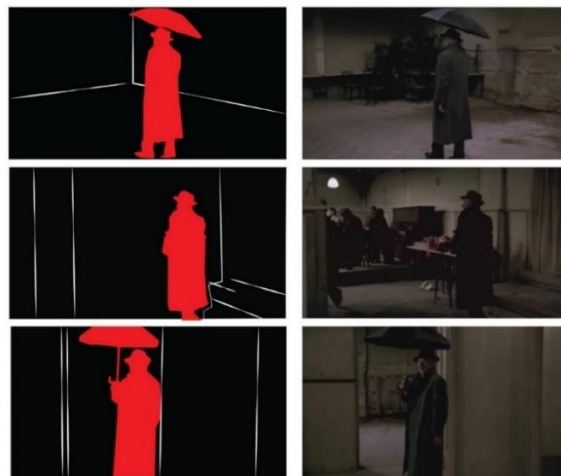


Figure 29. The use of humans in the frames of the three shots of *Weeping Meadow* (directed by Theo Angelopoulos), has been examined through the abstract diagrams as an example. By Author.

2.1.3 Synthesis of the Film-Architecture-Matrix

In this section, the individual components of the film-architecture matrix were introduced. As explained in this chapter, *cinematic plans* demonstrate the overall shape of a space, camera staging and the choreography of both actors and camera. The *time-scale diagram* dissects the temporality of a shot or scene and its constituent shot scales. And, the *shot dissection template* tackles visual and technical aspects of a shot such as lens and focus that might be glossed over during the process of examining a shot or scene or in the process of designing an architectural shot or scene.

The film-architecture matrix is designed for two purposes: analysis and design. This thesis proposes that the complexities of a shot can be analyzed through the film-architecture matrix, with its components unpacking aspects that might remain otherwise go unnoticed. Some of the components of the matrix might not be applicable to every case and some of the components may be more useful for certain shots or scenes. Therefore, in the process of analysis, some of the components of the matrix are emphasized according to the featured case studies. In ACT 3 (Chapters 4,5 and 6), where this dissertation focuses on the three species of spaces, the film-architecture matrix is utilized to analyze the shots through which the spatial species are filmed. ACT 4 discusses how the components of the matrix contributed to the process and the outcome of the architectural films made in the context of a design studio, and in the Application chapter, the film-architecture matrix is employed as the main film-design tool in an architectural filmmaking studio.

At this point, it should be accentuated that this matrix of analysis and design functions solely as a tool for synthesis. As Penz remarked cinematic image “synthesizes a wide range of systems.”¹⁰⁷ Accordingly, any of those systems, as debated in the

¹⁰⁷ Penz, "Towards an Urban Narrative Layers Approach to Decipher the Language of City Films," 2.

sections of this part, should not be underestimated. The impact of any of the matrix components is something to be taken seriously and understood in relation to other components of the matrix and they only perform fruitfully as the elements of a united system.

This film-architecture-matrix can neither offer a universal pattern for filming architecture, nor formulate a magical prescription for animation and architectural films. Yet, it can be potentially useful to establish awareness for decoding the complexities associated with the visual language of film. Moreover, the proposed matrix, by an accurate transferring of knowledge from film practice to the realm of architecture, can work as a concise user guide for architectural animation and films.

In the following pages, an example of the film-architecture matrix applied to a scene from *Trilogy: The Weeping Meadow* (2004) is reviewed. **Error! Reference source not found.** demonstrates how the components of the film-architecture matrix work together. The cinematic plan of the scene (**Error! Reference source not found.**) shows the overall form of the space where the scene takes place, indicates the camera movement of the scene by the red arrow and the movement of the character followed by the blue arrow. Three key moments of the camera movement, numbered as 1, 2 and 3, are highlighted on the plan and the range of the view of the camera is illustrated through the green rectangles.

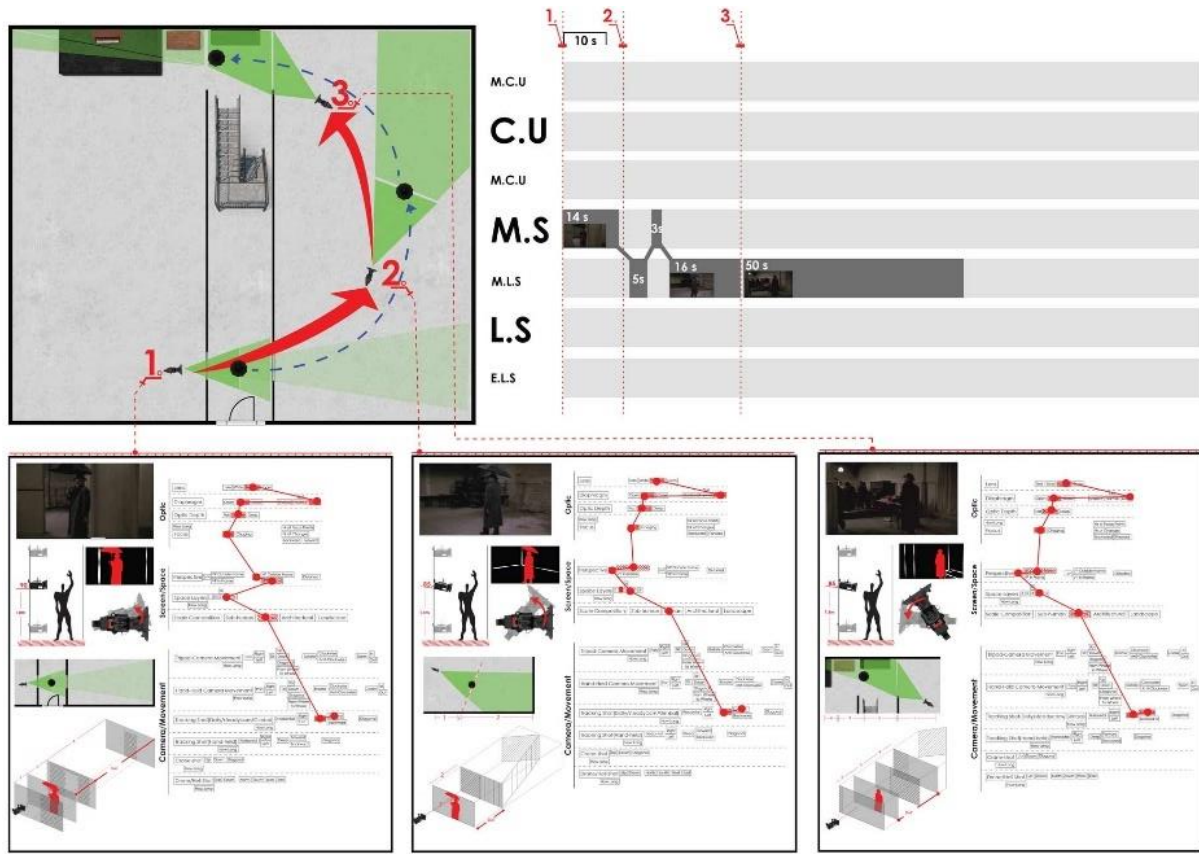


Figure 30. A synthesis of all the underlying agencies informing the film-architecture matrix. The matrix entails a cinematic plan, a time-scale diagram, and shot dissection templates. By author. The image on the top-left shows the cinematic plan of the scene, the image on the top-right is the time-scale diagram and three images on the bottom visualize the shot dissection templates.

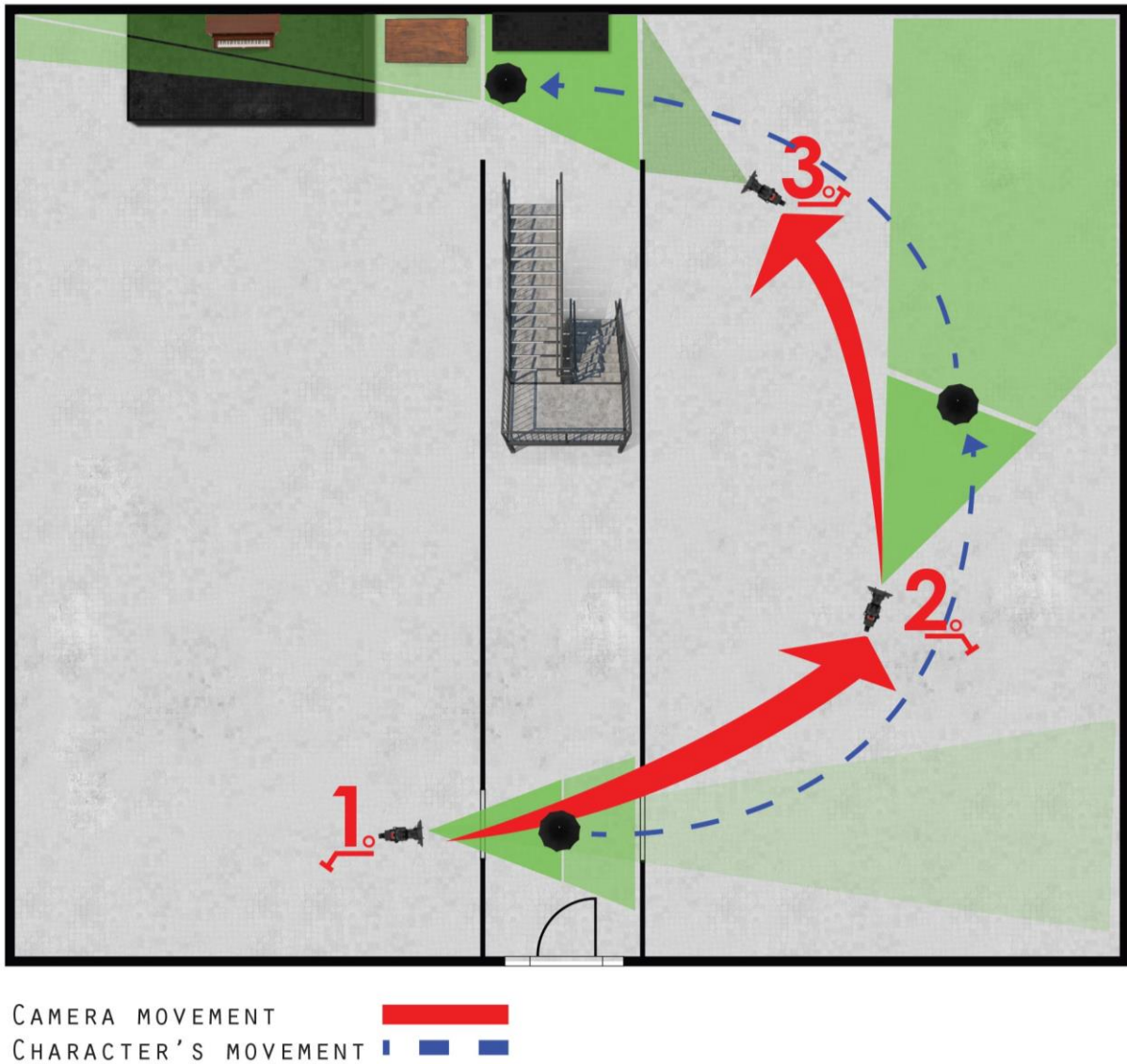


Figure 31. The cinematic plan of the scene which includes the camera movements in red and the movement of the protagonist in blue. The green triangles show the range of the vision of the camera and numbers (1, 2 and 3) are three key moments of the shot that are further analyzed in the shot dissection templates

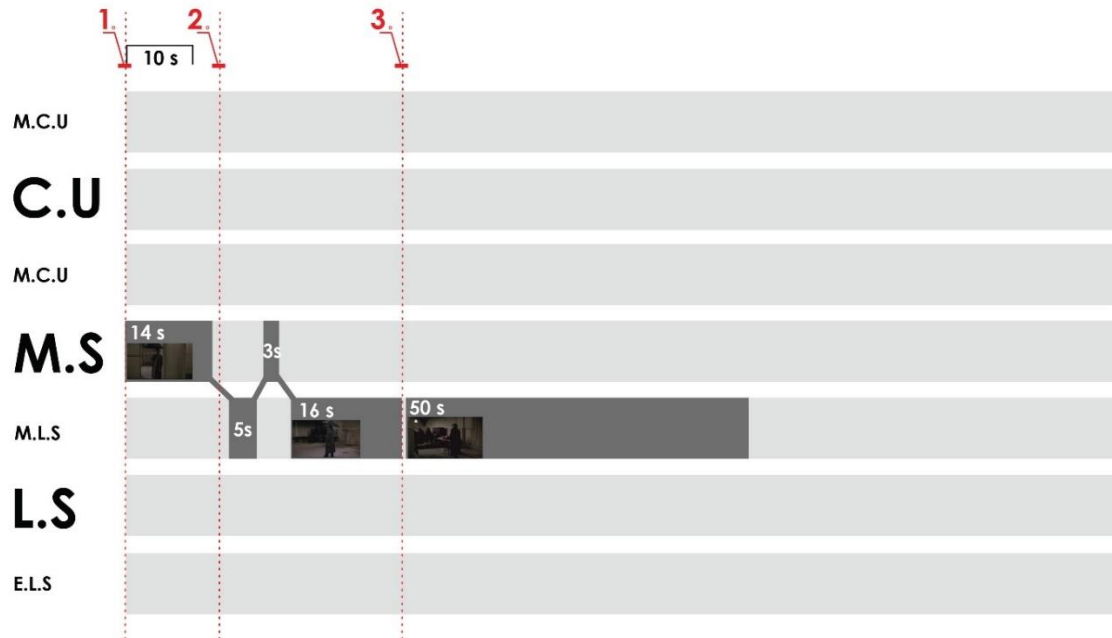


Figure 32. Time-scale diagram of the scene. On the left, the shot scales are indicated and on the right, the timeline of the scene is shown. The length of each part of the scene in white numbers and the red vertical lines correspond to the three key moments highlighted on the cinematic plan.

In the time-scale diagram of the scene (Figure 32) the scales of the shots are indicated on the left side of the diagram through the abbreviations of C.U, M.S and L.S and their sub-scales. The numbers in red, show the precise location of the moments 1, 2 and 3 that were highlighted on the cinematic plan in Figure 31 on the time-scale diagram. The amount of time that the camera continues its shooting in a specific scale is visualized in white numbers on each shot, for example, 14 seconds for the first part of the shot which is a medium shot (M.S.).

Error! Reference source not found. is dedicated to the shot dissection template of the scene. On the top left of **Error! Reference source not found.** a screenshot from the moment 3 highlighted on the cinematic plan is included. Under the screenshot an abstract diagram of the shot with human figure in red and the defining lines of the space in white is drawn. Next to the abstract diagram, the camera height/angle diagram demonstrates the height and angle of the camera in relation to the height of a standard

human figure. The diagram next to the camera height/angle diagram shows the direction of panning of the camera. A cinematic plan of the moment in the shot is included in shot dissection template too. The number of spatial layers is show on the cinematic plan which is two layers in this case. The dashed line on the cinematic plan shows where the character stands.

On the bottom of the page the exploded diagram indicates that at this moment there are two main spatial layers in the shot: one layer is the protagonist standing far from background (layer 2). The annotation 'DOF' visualizes the depth of focus (depth of field) of the shot.

The table on the right side of the shot dissection template encompasses three main categories to be annotated: optic, compositional notes and camera/movement. The optic entails the type of lens, depth of field, optic depth and focus attributes of the shot. For instance, if the focus of the shot is fixed on a specific point or shifts between different layers is one of the components of the table.

Whether the perspective of the shot is one-point, two-point or distorted and the location of the vanishing point (inside/outside the frame) as well as the number of spatial layers and layers that are in focus are segments of the compositional notes. The type of camera movement and its direction are included in the section of camera/movement. For example, as shown on the table (Figure 33) this shot is a dolly with a forward-movement and panning to both right and left. It should be noted that the components of the table were treated in a flexible manner and additional components were added to it when needed.

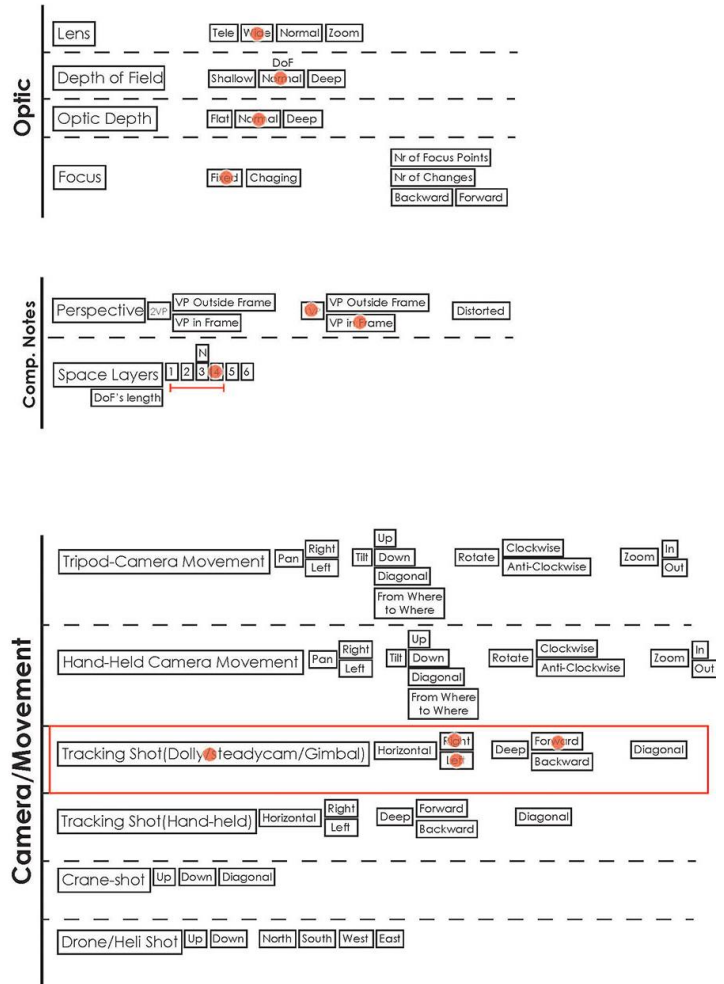
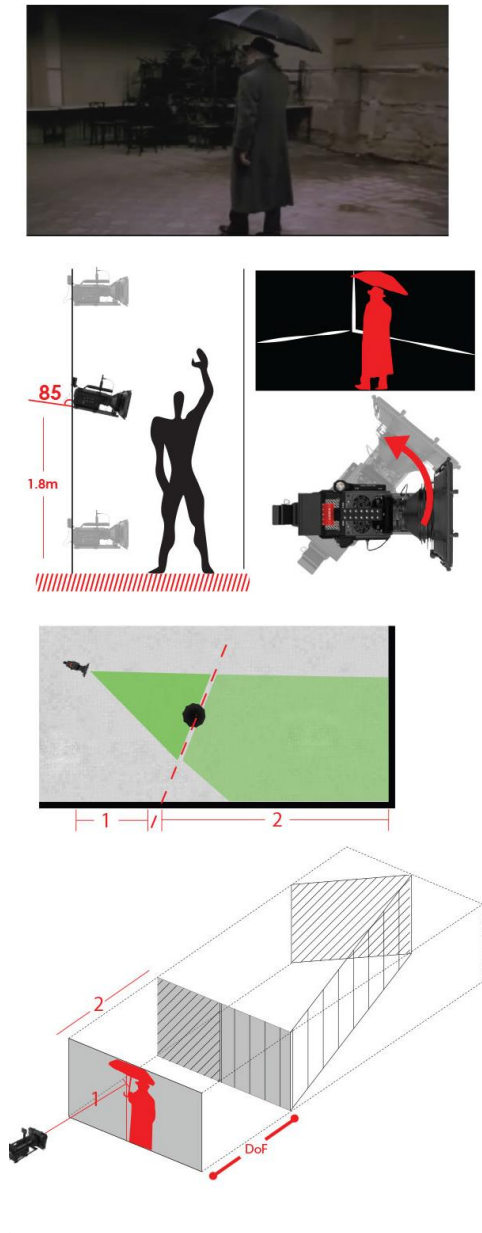


Figure 33. The image includes the camera height/angle diagram, abstract human figure diagram (in red), a schematic cinematic plan as well as the exploded layering diagram on the left. On the right side of the image, the shot dissection template is indicated which encompasses optic aspects of the shot on the top, compositional notes in the middle and the camera movement checklist on the bottom.

The next chapter of this thesis introduces the cinema of Theo Angelopoulos and Bela Tarr and explains why due to certain characteristics the films by Tarr and Angelopoulos can be rewarding precedents for the field of film and architecture.

3 ACT 2

3.1 Why Tarr and Angelopoulos?

3.1.1 Introduction

With the dawn of moving images, architects started to develop an interest in studying and utilizing film for theorizing, critiquing and representing architecture. As it was presented in Chapter 1 (Literature Review) a myriad of books and papers by architectural theorists have been published around the strong relationship between architecture and film. Simultaneously, leading architecture schools established subjects concerning the two interlocking arts, some academics dedicated their research career to studying the relationship between film and architecture, post-graduate degrees on film and architecture were devised and architects and architecture students have been involved in a significant trend toward creating architectural animations.

However, despite the advances of digital filming and editing and its availability to the public, sophisticated technologies of lighting, modeling, simulation and texturing in CGI programs being used by architecture students, architectural animations are still unable to effectively communicate spatial qualities, atmospheres, ambiance and the ethos of architectural spaces. In these architectural animations, selected points of view and perspectives are unsatisfying, their pace is usually too fast and disrupting, their camera movements are aimless and clunky; buildings and interior spaces appear like non-three-dimensional, texture-less and immaterial phantoms. It appears that despite technological advances, architects cannot break from their traditional, orthographic way of thinking successfully. What is evident here is not necessarily a lack of technology, rather, it demonstrates a lack of knowledge and an absence of an accurate understanding of cinematic methods to film architecture, which is indispensable in order to use these technologies properly and effectively.

This issue is partly related to the fact that architects have not developed the required architectural filmmaking skills but it has a theoretical side as well; this problem

is rooted in the theoretical studies conducted in the field of film and architecture. Due to the closed-loop of theoretical research in the field of film and architecture studies which includes a repetitive examination of the same frequent film directors and film types as case studies, the discourse on architectural film is caught in the circle of reproducing the same content, with similar insights, using the same case studies of films and their filmmakers.

Peter Zumthor, deliberating on the concept of atmosphere, famously stated: “I don’t know how to describe it actually, but I’m sure you know what I mean.”¹⁰⁸ Architectural films and animations, because of their inherent characteristics can function as an eloquent description for describing the un-conveyable aspect of architecture. This part of the thesis claims that there is a thoroughly theorized and well-practiced direction in cinema, neglected by the field of architecture, which is capable of communicating the architectural qualities and atmospheres of spaces and places. The sets of ideas, film techniques and strategies adopted in this sort of filmmaking can be transferred to architectural filmmaking.

The selected filmmakers are representative of this type of cinema for this study are Theo Angelopoulos (1980-2012), and Bela Tarr (1955-present). The artistic importance of Tarr and Angelopoulos has already been proven by many film theorists, prominent thinkers, film critics, renowned international film festivals and many filmmakers around the world who have been influenced by their cinema.¹⁰⁹ The task of this chapter is not to reiterate their cinematic competence, but rather attempt to demonstrate how

¹⁰⁸ Peter Zumthor, *Atmospheres: Architectural Environments, Surrounding Objects* (Basel: Birkhauser, 2006), 53.

¹⁰⁹ Tarr’s films has been screened and awarded in Cannes, Venezia and Berlin film festivals. Angelopoulos has received the best film award at Cannes, Berlinale, Venezia and Thessaloniki. Various book chapters and books have been published on their cinema (some of them are cited in the dissertation) and filmmakers such as Mohsen Makhmalbaf, Laszlo Nemes, Hu Bou, Robert Eggers, Gus Van Sant and Richard Linklater have been influenced by the style of their cinema.

their work is informed by a series of attributes suitable for narrating architecture and why their spatial awareness is an edifying example that can bring about a more effective filmic expression of architecture.¹¹⁰

In this chapter, actual spaces, architectural design, or the historical significance of the spaces in the films of Tarr and Angelopoulos are not at the core of the argument. This chapter focuses on the filmic techniques, strategies and the anatomy of the cinema of Tarr and Angelopoulos. By analyzing the underlying cinematic features of the work of Tarr and Angelopoulos, this chapter attempts to dissect why their filmmaking entails specific properties that can be adopted in architectural films and animations. In short, by tackling the basic aspects of their cinema, the chapter argues why, we, as architects, should watch the (architectural) films of Tarr and Angelopoulos.

This chapter is organized along three fundamental cinematic features of Tarr's and Angelopoulos' unique way of filmmaking. In the first section, the unusual and prolonged *temporality* of their cinema that results in prioritizing spatiality and architecture is examined. The long-takes of their contemplative cinema, the rationale behind it, its theoretical foundation, and its coherence with architecture are the subjects of the examination. The second section of the chapter looks into the notion of *movement* in their cinema and the manner in which it serves as an agency to underpin the three-dimensional narrative of spaces. And finally, the third section concerns the concept of tactility and materiality in their films and contends that Tarr's and Angelopoulos' *textured images* infuse a tactile quality into the images of spaces.

¹¹⁰ Recently, some authors in the field of architecture started to pay a significant attention to Tarr's films. Thorsten Botz-Bornstein, the philosopher who wrote several books on architecture published *Organic Cinema: Film, Architecture, and the Work of Béla Tarr* about the relationship between what organic architecture and what he calls organic cinema represented by Tarr's films. Francois Penz, in his new book *Cinematic Aided Design: An Everyday Life Approach to Architecture* uses Tarr as a case study in several cases. Architect and architectural theorist, Michael Tawa, in "Consilient Discrepancy: Porosity and Atmosphere in Cinema and Architecture," *Architecture_media_politics_society* 11, no. 3 (2017) shows a remarkable interest in Tarr's tectonic strategies.

3.1.2 Temporality

The significance of Tarr's and Angelopoulos' films to architectural studies and their way of cinematically treating physical space is rooted in Gilles Deleuze's discussions around the notion of the time-image. Although Deleuze never wrote about Tarr and Angelopoulos, their films seem to be developed delineations of Deleuze's time-image concept. The time-image cinema, otherwise referred to as slow-cinema or contemplative cinema, has not only proposed a new way of filmmaking but, from an architectural perspective, a new collision between the notion of (architectural) space and film. What Deleuze started to theorize, and was developed and practiced by some filmmakers, including Tarr and Angelopoulos, puts forward a beneficial method for narrating architectural spaces. In this type of filmmaking, the pure audiovisual experience of spaces and situations are prioritized over the storyline, the actions and dialogues of actors. Therefore, this manner of filmmaking is effective where the true experience of spaces and atmospheres associated with them is to be represented.

The films of Tarr and Angelopoulos deploy temporal strategies such as long-takes and sparsity of actions. These techniques are not simply formal devices, but components of an unprecedented system of visualizing three-dimensional spaces. The crucial fact about the cinema of Tarr and Angelopoulos is that, from a methodological standpoint, they both practice a substantially radical method of representing physical spaces and architecture which is grounded in the slow pace and extended temporality of their shots. This method of making film presents the experiences of spaces for their own sake.

Philosopher and cultural critic Jacques Ranciere finds the background of the new temporal regime in what Deleuze theorized in *Time-image* and remarks: "If there is a cinema of time-image, it exists with Tarr." Ranciere highlights the new approach that this cinematic 'style' takes toward the physical spaces and architecture. He argues that in the long takes, the "spaces sliced by time", are not serving story, narrative and action anymore. The architectural spaces, "doors, windows" and other species of spaces are

not devices for “introducing the actors”, rather they gain their own independence and function, such as “thresholds through which the exterior comes to the interior, or enclosures separating spaces”.¹¹¹

Ranciere might not be the first one who noted the link between Tarr and the Deleuzian time-image, but he is probably the first theorist who detected the bond between the slow cinema, with Tarr as its most radical representative, and the new way of filming space and articulating atmosphere in which architectural spaces become a more important subject, if not the prime subject. Ranciere underlines this unapparelled and significant encounter of film and architecture that has a relation with Deleuze’s arguments but does not analyse it in detail. The next section expands upon the relationship between the Deleuzian theory of time-image and architectural spaces of cinema.

3.1.2.1 Time-Image , Long Takes and the Architectonic Cinema

French philosopher Gilles Deleuze, through his well-known books, *Cinema 1: The Movement-image* (1986) and *Cinema 2: The Time-image* (1989), distinguished two disparate types of cinematic images: movement-image and time-image. Deleuze’s taxonomy of cinematic images stresses the fact that the essence of every image in cinema is connected, directly and radically, to the element of time. What Deleuze observes in his books, apart from its philosophical contributions to the realm of film and architecture, marked a significant historical shift in twentieth-century cinema.¹¹² Deleuze notes that movement-

¹¹¹ Jacques Rancière, "Conférence De Jacques Rancière Sur Béla Tarr", *Cinémathèque Suisse*, accessed October 15, 2020, <https://www.youtube.com/watch?v=WMwHjXx52zk>.

¹¹² The first historical period of this Deleuzian dichotomy entails three main elements: action-image (medium/medium long shots), which in Deleuze’s opinion, characterizes classical Hollywood’s film, affection image (close-up) and perception-image (long-shots). Action (movement) in its Deleuzian sense, is the basic foundation for advancing a narrative and functions by what Deleuze called “sensory-motor schema”. Gilles Deleuze, *Cinema 2: The Time-Image* (London: University of Minneapolis Press, 1989), 40. Simone Brott discusses the tendency to make pure images (rooted in Deleuzian time-image) within an

image is associated with, on the one hand, the pre-World War II montage-based Soviet Union's cinema and, on the other hand, classical Hollywood in which the concatenation of actions ('movements' as he calls them) plays a chief role. In contrast, the time-image cinema, which arose in the post-World War II era, offers a direct and unmediated experience of time as one that is no longer dependent on movement.¹¹³

Deleuze explicated that movement-image provides a spectator with spatial and diegetic information about an ongoing, present, future or past action. This "sensory-motor schema" moves forward by selection and co-ordination, never tells all and is an agent of abstraction to transmit as much information as possible in a short amount of time. In contrast, time-image cinema, the novel way of filmmaking and "rethinking the world", in Deleuze opinion, prioritized the element of time and led to an unfamiliar encounter with moving images which are not any more "presuppositions added to action", rather they "occupy all the room and take the place of action".¹¹⁴ Deleuze argued that time-image offers a pure audio-visual experience of cinematic images that strives to capture and convey impression and atmosphere which do not simply disclose a particular part of a story.¹¹⁵

Many filmmakers employ time-image techniques in their shots such as Andrei Tarkovsky, Tsai Ming-liang, Nuri Bilge Ceylan, Apichatpong Weerasethakul, Alexander Sokurov, Terrence Malic, Aki Kaurismaki and Reha Erdem who are considered key figures utilizing long-takes, slow-paced camera movements or other techniques that seem to be examples of Deleuze's time-images. There are even films

architectural thinking framework. Simone Brott, *Architecture for a Free Subjectivity : Deleuze and Guattari at the Horizon of the Real* (Farnham: Ashgate Publishing Ltd, 2013), 53.

¹¹³ See Deleuze, *Cinema 2: The Time-image*, 15-24.

¹¹⁴ Ibid. Deleuze disputes that with the dawn of post-war cinema, Italian Neorealism and French new wave, time-image was introduced.

¹¹⁵ Deleuze makes an interesting analogy and compares the desire of 'conquering of purely optical space in paintings' of impressionists and time-image cinema that tries to capture the atmosphere of spaces rather than only action. Deleuze, *Cinema 2: The Time-image*, 2.

responding to the definitions of what Deleuze called time-image, however, what makes the films of Tarr and Angelopoulos perfect models of the time-image film is their persistence in establishing this filming method. Moreover, the academic consensus acknowledges Tarr and Angelopoulos as true representatives of time-image cinema.¹¹⁶

Unusually long-takes, long duration of the film itself and long periods of *temps morte*, in which nothing is dealing with the minimal narrative of the film, condition a temporal regime which results in a mesmerizing emphasis on the notion of space. To put it simply, and from the most basic perspective, a spectator has more time to perceive the spaces of the film. Since, in the films of Tarr and Angelopoulos, there is no classical narrative, climax or conflict in its conventional sense, and, on the other side, the territory of time is remarkably extended; a beholder engages more with the spaces, materials, forms, and, more importantly, atmospheres associated with the spaces. In fact, as a result of the deliberately slow temporality of a shot, a spectator faces a strikingly expanded, detailed and subjective experience of the physical spaces.¹¹⁷

An Angelopouliosian and Tarrian camera takes more time to linger in front of a door or window, to wander in a room or to chase a character on an endless road and, as a result, to originate a stronger sense of space. This temporal tactic which results in a purely spatial outcome, transforms architectural spaces from a passive heuristic

¹¹⁶ See the book Ranciere dedicated to Tarr's films, *Béla Tarr, the Time After* [*le temps d'après*]. Jacques Rancière, *Béla Tarr, the Time After* (Minneapolis, MN: Univocal, 2013), 33-34. See Richard Rushton, "Angelopoulos and the Time-image," in *The Cinema of Theo Angelopoulos* (Edinburgh: Edinburgh University Press 2015), 239. Hmaish Ford, "Generative Apogee and Elegiac Expansion: European Film Modernism from Antonioni to Angelopoulos," in *The Cinema of Theo Angelopoulos*, ed. Angelos Koutsourakis and Mark Steven (Edinburgh: Edinburgh University Press 2015), 54.

¹¹⁷ Long-takes and dilated time in a moving image strengthens the effect of subjectivity and identification. Henri-Louis Bergson, French philosopher, whose philosophical contentions were thoroughly engaged with the notion of time, regards time and duration as a subjective and internal matter. Gilles Deleuze, drawing upon the Bergsonian concept of time and Immanuel Kant's accounts, concluded that time-image penetrates directly the surface of human thoughts and imagination and leaves an emotional and psychological imprint that Deleuze called 'affection'. Deleuze, *Cinema 2: The Time-image*, 99.

backdrop into the main element of a shot. The subjective camera gives a spectator the possibility, and literally extra-time, to explore, touch and walk within the illusionary spaces of a film and this is what gives a virtual body to a spectator to “face the powerful kinaesthetic experience of space” - what Juhani Pallasmaa regards as the deepest effect of film.¹¹⁸

This new kind of spatio-temporality in film renders images into what was called by Deleuze as “tectonic” images.¹¹⁹ Previously, an image that was merely “seen” was now transformed to an entity that needs to be carefully, slowly and unhurriedly “read”. The ultimate purpose of the act of reading tectonic images is to explore myriads of visual, spatial and atmospheric layers. Surprisingly, and similar to Deleuze, Gaston Bachelard in *The Poetics of Space* (1969), used the term ‘reading’, utilized by Deleuze for pure tectonic images of time-image cinema, as a means for understanding type of architectural spaces such as rooms, attics, and houses, stating that we “read a house”. This act provides an opportunity to participate in the spaces ‘read’ and the previously passive reader now becomes an ‘active’ participant.¹²⁰ Spatial ‘identification’ is the result of this dilated time given to the beholder for reading the images of spaces and participating in them. The extended time becomes a vehicle to take the viewer/reader into the spaces of the film and endows them with a subjective and deep spatial experience.

Authors in the field of film theory spotted the relationship between the slowness of long takes with establishing a sense of place. For instance, the film theorist Andrew

¹¹⁸ Juhani Pallasmaa, *The Architecture of Image: Existential Space in Cinema* (Helsinki: Rakennustieto, 2007), 12.

¹¹⁹ In the conclusion chapter of *Cinema 2*, observing his discussion about time-image, Deleuze introduces two new conceptions: ‘tectonic image’ and the act of ‘reading an image’. He argued that the rejection of a sensory-motor schema and action-image, the presence of any-whatever-spaces, empty spaces, along with other temporal and spatial features of time-image cinema, transformed the audio-visual image to an ‘tectonic’ and pure image that has many layers to be explored. Deleuze, *Cinema 2: The Time-image*, 257.

¹²⁰ Gaston Bachelard, *The Poetics of Space*, trans. M. Jolas (Boston: Beacon Press, 1994), 14.

Horton claims that in conventional cinema, the “fragmentation of time”, through montage and cutting, “breaks up our sense of PLACE and SPACE”. Whereas, in the films of Angelopoulos, “the pleasure of SLOWNESS helps us experience and better appreciate a sense of space and place that his characters and thus his audiences inhabit”. Horton believes that the temporal approach of Angelopoulos “transcends” actual spaces in a way that they become “CHARACTERS”.¹²¹

Tarr, in a similar way, supports this idea and elucidates the reason behind his long-takes and why his cinema is not a cinema of information and story — as he called it — but a cinema of space and atmosphere. He remarks that the new generations are only familiar with “information-cut, information-cut and information-cut” which is different from “the logic of life”. In his view, there are other valuable aspects that will be overlooked if we regard film as an information-transmission machine. There is “time, landscapes, buildings, meta-communications...” that we will miss, both in everyday life and cinema, if we adhere to “the logic of information” that is practiced by other media.¹²²

Based on Tarr’s idea about what he described as the “logic of information”, every space will have two separate entities. The first will be its geometric form and how it looks, equivalent to what Tarr calls information. Laszlo Rajk, the architect who designed the sets of Tarr’s films, describes the information about geometric space as something that “you almost know its dimension, form, size, arrangement,... something is here, something is there, and you can draw its plan”.¹²³ The information, mentioned by Rajk can be provided by a five-second shot of a room. However, the real spatial experience

¹²¹ Andrew Horton, "Theo Angelopoulos and the Cinema of Contemplation," *Modern Greek Studies* (2014): 14. (capitals by Horton)

¹²² Bela Tarr, “Bela Tarr”, Garry Pollard, accessed October 15, 2020, <https://www.youtube.com/watch?v=HPpJoTmleuc&t=55s>.

¹²³ Laszlo Rajk, unpublished interview by Hamid Khalili, 2017.

of being in a room and moving around/within in the masses, volumes and objects requires more time.

The augmented time will assist shots to articulate the second aspect related to each space, which is what many architects regard as atmosphere; the non-Euclidian or non-Cartesian characteristic of space that is not limited to, and necessarily “conveyable” by, the geometric and mathematicized representation of space.¹²⁴ If the first characteristic of space (information) is more related to how space visually looks, the second concerns how space is felt and experienced. As Thorsten Botz-Bornstein remarks, Tarr’s camera through the long takes “adopts its own viewpoint not to establish a geometrical perspective but to transcend the concept of perspective”.¹²⁵ It is possible to clarify the geometric form of space, how it looks, or, in Tarr’s sense, to give information about it in a short amount of time. But it is impossible to illustrate the real experience of spaces and atmospheres in a two-second shot.

The contemplative cinemas of Tarr and Angelopoulos, regardless of their importance in the history of cinema, are potential cases, from one angle, for studying spaces and architecture in film. From another view, by suggesting a radically different and, at the same time, aesthetically reinforced way of representing and slowly viewing architectural spaces, they can revolutionize how we communicate architecture through film. In this method of filmmaking, due to the long duration of the cinematic experience of space, the camera opens up an opportunity for viewers to face film as a spatial exploration and a haptic encounter with physical spaces which is able to convey atmosphere and not only geometric form.

¹²⁴ Refer to Zumthor’s definition of atmosphere that was mentioned before. Peter Zumthor, *Atmospheres: Architectural Environments and Surrounding Objects* (Basel: Birkhauser, 2006), 53.

¹²⁵ Botz-Bornstein, *Organic Cinema*, 188.

Architects already use various media enabling them to convey information, technical details and formal descriptions of their designs. Moving images in architectural animations and documentaries are examples of media which transmit merely information. A study into the methods and strategies employed by Tarr and Angelopoulos will reveal other facets of architectural filmmaking that can be injected into architectural motion pictures for articulating architectural atmospheres.

Stavros Alifragkis, author in the field of architecture and film theory, claims that Angelopoulos' cinema developed a "coherent" and "eloquent grammar" comprising "slow-paced tracking shots, long takes and 360-degree pans" that provide the "necessary gluing material for constructing a seamless cinematic space".¹²⁶ This, theoretically and practically, advanced architectural film syntax should be scrutinized and employed in architectural practice and academia in a period that a spectator is saturated in the fast bombardment and the superficiality of the mass production of architectural renders and images beyond which 'there is nothing to perceive'.¹²⁷

In the next section, the relationship between the notions of movement and time, as well as the fusion of dilated time and kinaesthesism that fuels the spatial experience of films by Tarr and Angelopoulos is investigated.

3.1.3 Choreographed Movement

In the cinemas of Tarr and Angelopoulos, their stylistic camera movement in space and the *kinaesthesism* conferred on moving images is a direct consequence of the prolonged duration of the shots. However, the notion of movement is, independently, a

¹²⁶ Alifragkis, "Constructing the Urban Cinematic Landscape," 1-3.

¹²⁷ Gilles Deleuze, in the preface of *Ciné journal* (1986) criticizes 'new images' of television and new medias and argues that the role of cinema is to produce images that oppose the 'new images' in a period when a spectator is saturated in the fast bombardment of the images and, as he claims, "there is nothing to perceive beyond, above and within the image". Gilles Deleuze, "Optimisme, Pessimisme Et Voyage: Lettre À Serge Daney," *Ciné journal* I, (1986).

fundamental element to be studied. Movement is the core element of cinema. Cinema is a compound of three types of motion: the motion of moving objects and characters in space, movement of the camera in space and a combination of both. Analogously, from an architectural perspective, movement is an essential and inherent feature of architecture. It is widely argued that what informs our perception of three-dimensional space is experiencing spaces in movement. The significance of this triangle of architectural space, movement and film has already been thoroughly examined by many scholars.¹²⁸ Therefore, what this section tries to argue is how a meticulous and patient choreographed camera movement in general, and specifically in the cinema of Tarr and Angelopoulos, generates a more architectural image and contributes to conveying the atmosphere of spaces.

The following sections strive to decipher how camera movements and their amalgamation with the dilated time of shots build a more haptic sense of space in the moving images.

3.1.3.1 Movement, emotion and [spatial] identification

Michael Tawa, in his essay, 'Vaporous Circumambience: Towards an Architectonics of Atmosphere' (2014) writes that the "key theme" in the word "ambience" is the "sense of going around", or literally, "to be-driven-to". Tawa's etymological examination implies that making and conveying ambience and atmosphere is not achievable without the presence of motion.¹²⁹

Similarly, discussing the connection between haptic experiences of space and movement, Giuliana Bruno conceives the notion of movement as a core principle of

¹²⁸ Bruno, *Atlas of Emotion: Journeys in Art, Architecture, and Film* can be considered one of the most significant examples. In the chapter of Corridors in ACT 3 the relationship between the perception of space and movement is discussed in detail.

¹²⁹ Michael Tawa, "Vaporous Circumambience: Towards an Architectonics of Atmosphere," *Interstices* 15 (2014), 13.

generating emotion and atmosphere in both architecture and film. She explicates the strong affinity between tangibility, being “haptic” and “mobility” and explains that the haptic refers to the sense of touch and its Greek etymology tells us that it means being “able to come into contact with”. She states that haptic is also related to “kinaesthesia” or “the ability of our bodies to sense their own movement in space”. Bruno, drawing attention to the propinquity of the roots of the terms “emotion (*emovere*)” and “motion (*movere*)” concludes that motion and moving within space evokes emotion: “motion we claim produces emotion and correlatively emotion contains a movement.”¹³⁰

In the cinematic experience of spaces, in the films of Tarr and Angelopoulos, paraphrasing Bruno’s words, the camera moving in space produces emotion and atmosphere by movement. The camera virtually evokes the spatial qualities of the space where the movement is taking place. It should be stressed, again, that what Angelopoulos’ and Tarr’s cameras do is not simply provide spatial or narrative-based information, but their camera engenders an immersive experience of space transmitting its forms, materials, feelings and aura. In effect, their films are the *kinaesthetic* experience generated by the movement of the camera that engages spectators in the spaces of the scenes and compensates for the lack of a conventional storyline.

The camera movements of Tarr and Angelopoulos, founded on the basis of the extended duration of the shots, consist of other aspects leading to the creation of a forceful haptic and *kinaesthetic* experience. One of the aspects worth mentioning is that this cinematic promenades in space boost the effect of spatial identification which at the first stage is enhanced by the long duration of a shot. It makes the shot more similar to our real experience of space. Ranciere suggests that the cinema of Tarr is the real

¹³⁰ Giuliana Bruno, *Visualizing the City*, 13. See also *Atlas of Emotion: Journeys in Art, Architecture, and Film*, 16.

definition of cinema, an experience of the spaces that is “uncut, unmanipulated and direct”.¹³¹

The tenacious uninterrupted presence of the camera in a scene resembles the uncut and perpetuating human experience of architectural spaces. This similarity is augmented further when blended with movement. This mix of a prolonged shot and camera movement makes the illusionary space of film, real and haptic for spectators and allows them to face a peripatetic, multi-scalar and continuous presence in space. The infusion of movement with the prolonged time amplifies the effect of spatial identification and gives rise to the emotional and tactile qualities of space. This continuous presence in space accompanied by the camera movements enhances what was called by film theorist Bela Balasz as the “psychological identification”. The act of moving in space, in long periods, convinces a spectator that he/she is seeing the scene from the inside, is involved within the spaces, “surrounded by the characters” and not on a made-up stage.¹³²

3.1.3.2 Moving through the Masses

The films of Tarr and Angelopoulos introduce a new synthesis of cinematic motions and this integration of the movement of characters and the movements of cameras, proposes a unique attitude toward space. Their camera movements are not tools under the control of narrative and story-telling. On the contrary, the camera movements are narrative, the narrative of space. In the dynamic choreographed long-takes, the cinematic image becomes deeper with volumes and recesses within the image becoming more tactile. As cameras move in the spaces of the scenes, something “peels off” in the image, edges of

¹³¹ Jacques Rancière, *La Fable Cinématographique* (Paris: Seuil, 2001), 18.

¹³² Béla Balázs, *Theory of the Film: Character and Growth of a New Art* (London: Dobson, 1952), 46. In the Chapter of Corridors it is argued that there are other theorists such as Michel de Certeau who suggested that this is the act of walking that gives spaces identity and turns them into what can be called a place.

the screen become invisible, activating the spaces off-screen, and edges transform to be the agents “revealing nascent facets”.¹³³

Consequently, the flattened forms of the picture start to shape their volumetric body. French philosopher Elie During indicates that the combination of dilated time and camera movement creates virtual volumes erected on the surface of the screen. While a camera moves around or within a volumetric mass, “space gently unfolds, raises and turns itself on, uncovering different sides of space and awakens voluminosity of the cinematic image around which, it seems that, we could *walk*”.¹³⁴ When the camera moves, the movement turns the image into what During calls volume-image.¹³⁵ In film, the movement opens a window from a flattened surface to a volumetric one. Therefore, a dynamic long-take is an endeavor to capture and reflect protruded and recessed parts of space from the point of view of a mobile subject walking through space, or a subject-less movement, experiencing movement by optical changes in time and space.

As Le Corbusier once highlighted, architecture is a discipline that deals primarily with volume and light.¹³⁶ Quite architecturally, in their *plan-sequences*, the approach of Tarr and Angelopoulos is to treat both interior and exterior shots as masses and volumes around, through, within, under, over or in parallel with which the camera can move and give the impression of depth and volume. The tactic of emphasizing the spatiality of the

¹³³ See Elie During, “Materiality of the Image,” *European Graduate School*, accessed October 15, 2020, <https://www.youtube.com/watch?v=Vf5J-l4DMcI>. In the lecture, Elie During explains how movement of camera in long takes adds ‘voluminosity’ to the flattened image of the screen.

¹³⁴ Elie During, “Materiality of the Image”.

¹³⁵ The desire to conquer the flatness of the image and transforming it to something that reflects voluminosity is not only related to the cinematic image. Erwin Panofsky, in *Perspective as Symbolic Form* (1927), noted that during the sixteenth century French and German painters started to treat space and perspective as blocks of volume and mass. It was different from the southern approach in Italy that was based on the perspective of planes in the picture. Erwin Panofsky, *Perspective as Symbolic Form* (Cambridge, Mass.: Zone Books, 1991), 152.

¹³⁶ Le Corbusier famously stated that “architecture is the masterly, correct and magnificent play of volumes in light”. Le Corbusier, *Toward a New Architecture*, trans. John Rodker (Oxford: Butterworth Architecture, 1989), 29.

scene by creating masses and volumes makes the cinematic images more three-dimensional and more suitable to be used for communicating architecture.

This attempt to establish a sort of “perpetual mobility” in constant interaction with three-dimensional spaces does not convert the three-dimensionality to a flattened image projected on the screen. Rather, the movement of the camera in the long-takes, sometimes imperceptibly, subverts the flatness of the screen and grants it volume, mass, and architecture.¹³⁷ Therefore, a dynamic long-take is an endeavor to capture and reflect protruded, recessed volumes as well as voids and solid parts of space from the point of view of a mobile camera. Tarr and Angelopoulos’ movements can be categorized into two principal categories: moving *through*, *around* and *over* masses, volumes and voids. And, *looking* through (while moving through).

3.1.3.3 Moving through/around/over

In their films both Tarr and Angelopoulos have unusual long takes in which the camera moves through, around and over physical spaces and objects. In the case of moving through, their camera passes through various thresholds, frames, corridors, laneways and roads in direct and tortuous ways (Figure 34). All of the objects through which the camera passes have the capacity of framing the camera’s movement. However, sometimes, they are immaterial frames suggesting an inherent and invisible frame for movement, such as roads. In any case, regardless of what frames the movement is material or immaterial, this sort of shot gives a sense of moving through a volume.

¹³⁷ Stavros Alifragkis, "Constructing the Urban Cinematic Landscape," 60.

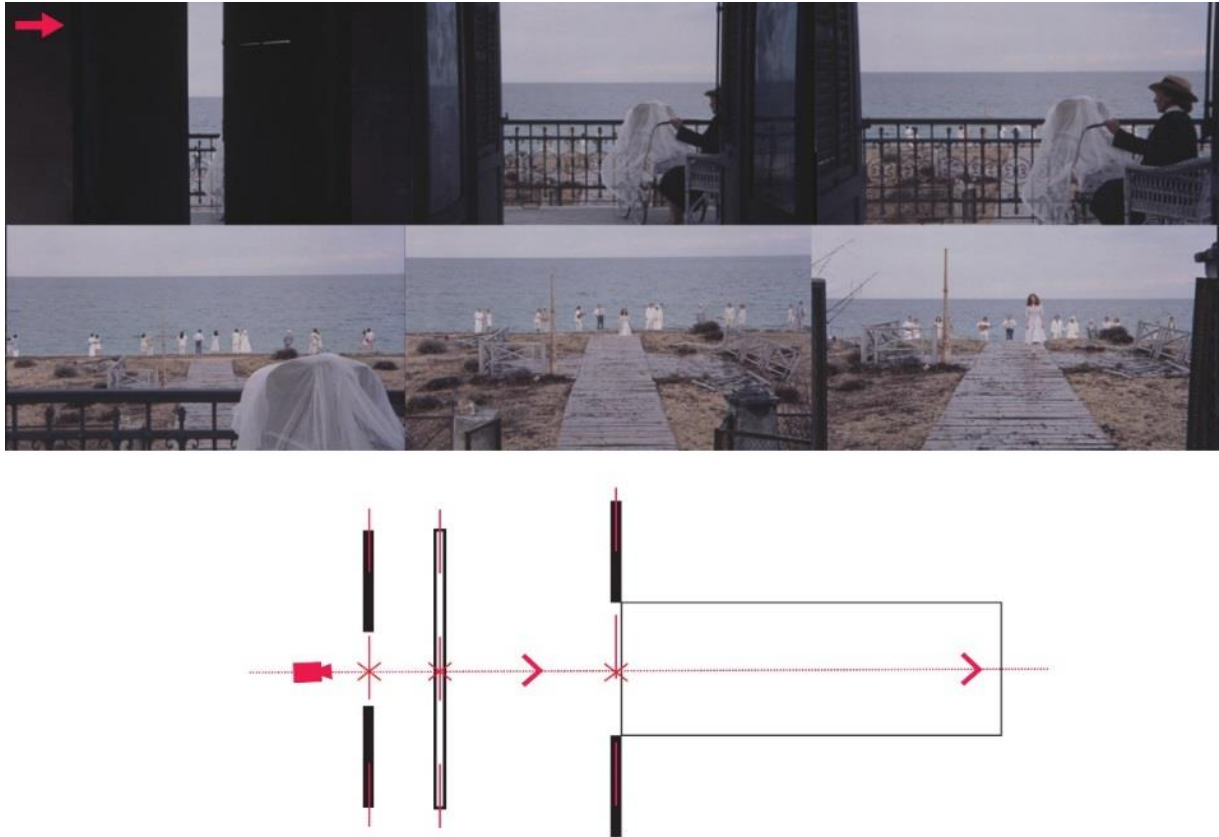


Figure 34. Screenshot from *Eternity and A Day*. The camera moves directly *through*, and *over*, various thresholds, volumes and masses creating a more three-dimensional experience.

The oeuvres of Tarr and Angelopoulos are replete with scenes where the characters and the camera move following tortuous patterns around spaces, volumes, masses and objects. There are two ways of seeing the volume and shape of physical objects in three-dimensions: moving around the object and watching it, as we do with sculptures in museums and galleries, or turning the object around in front of a fixed observer. Tarr and Angelopoulos practice the former. Their characters and camera walk along convoluted laneways going *around* the corner and edges of the objects, buildings and

interiors (Figure 35).¹³⁸ Through this movement, the camera depicts a more accurate understanding of the shape and mass of the objects, buildings, protrusions and recessed parts of interior spaces. The act of *movement-through* can be accompanied by virtual movements as well.¹³⁹

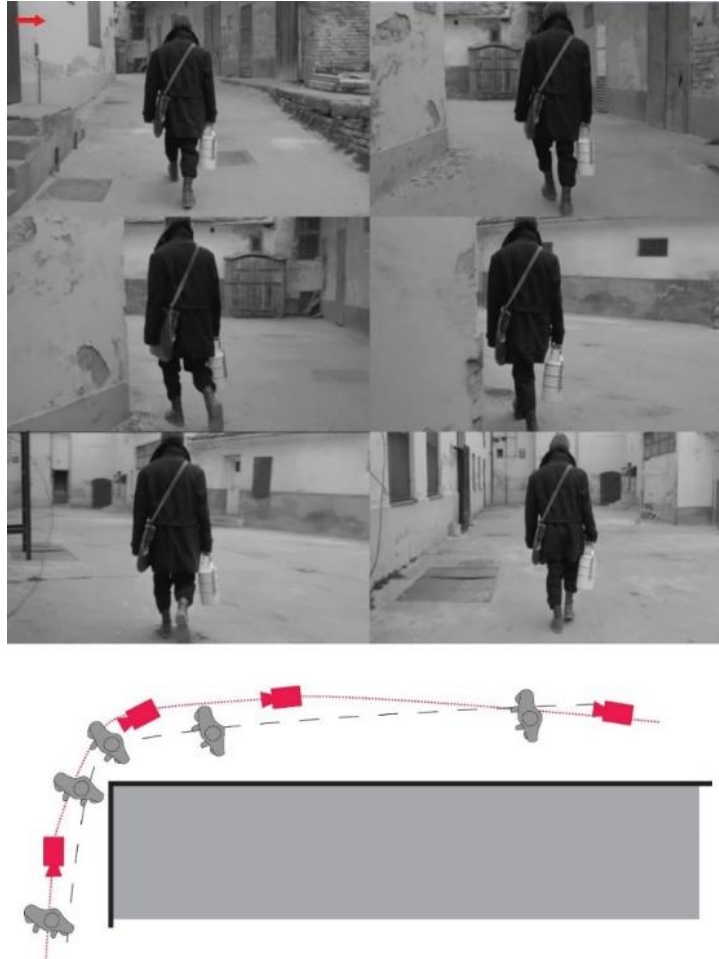


Figure 35. Screenshot. *Werckmeister Harmonies*. A two-minute shot showing a character walking in the laneways emphasizing the corners he turns around.

¹³⁸ Visit <https://www.youtube.com/watch?v=6VO1rZXH-h0>.

¹³⁹ Virtual movements are movements such as zoom or the change of the focus point, in which the camera is fixed but an audience is taken to a farther or closer part of space. In some cases, zooming is done as zoom through an opening, window, frame, open door, etc.

It should be mentioned that, in many cases, the camera movements are long takes combining the moving *around*, *through* and *over* discrete spatial elements. In addition to the moving shots through and around spaces, Tarr and Angelopoulos have many crane-shots where the camera floats *over* masses, walls, gates, buildings and streets, demonstrating their volumetric shape from a mobile high angle.

Film theorist Andras Kovacs, in *The Cinema of Bela Tarr* (2013), analyses Tarr's camera movements and identifies a certain type of camera movement that he designates as a "revealing" camera movement, where a given scene is not completely visible at the beginning. The scenes are revealed by, direct or winding, "traveling shots" and "camera movements traveling through various spaces and passing by objects and characters to arrive at a final position where the scene starts".¹⁴⁰ These revealing traveling shots are usually a combination of two or three of the types of camera movements. They introduce the space of a scene and uncover a scene's spatial volume being passed through door/window frames, corridors, and rooms. This technique underpins a voluminous impression of space and, by moving the spectator *through*, *around* or (and) *over* the volumes and voids, prepares a viewer emotionally for the main event of the scene that is going to be revealed. The same technique is regularly used by Angelopoulos when his camera passes through various openings to arrive at the main event.¹⁴¹

3.1.3.4 Looking through (while/after Moving through)

The second category of movement is where a camera moves *through* a space, a corridor or somewhere outside, toward, or in parallel with, openings looking through them. This movement can be directly toward an opening or alternatively, it can be a sliding traveling shot, usually known as a trucking shot in cinema, and in parallel with a wall

¹⁴⁰ András Kovács, *The Cinema of Bela Tarr: The Circle Closes*, Directors' Cuts (New York: Columbia University Press, 2013), 59.

¹⁴¹ For more examples of the revealing movement in Angelopoulos' films please refer to the wedding scene in *Eternity and a Day* or the scene where Alexandros buys the boy from the child traffickers.

that separates the place where the camera is looking at and the space in which camera moves. The camera takes advantage of looking at a scene through the holes and openings in walls. “We can never see the scene in its entirety, only some parts, and even then the action is sometimes covered by different parts of the wall and the door”.¹⁴² In some cases, this movement happens after a revealing shot that can be a combination of the three kinds of movement that we studied previously.¹⁴³ This sort of looking through the openings, apart from its narrative function, suggests an image of a deep and voluminous space. It distances a viewer from an action by various spatial layers and puts the camera on one side and locates the main action in the other one.

Tarr’s and Angelopoulos’ cameras, wander through a corridor, scanning furtively through an open doorframe with the camera’s view repeatedly blocked. It seems that the camera is probing for something and finally will find it after a dynamic and long movement. While the camera moves, the viewer cannot see the entire scene that is masked by the thick walls. For instance, in one of the scenes of *Trilogy: The Weeping Meadow* (2004), where Nikos is guiding Eleni and Alexis to find a room to stay in the back of an amphitheater, the camera is moving in a corridor with the camera view repeatedly masked by the walls.¹⁴⁴ (Figure 36) The spectator is looking at the characters in the rooms, on the other side of the wall, through the openings. Here the volume of the image is accentuated twice. Firstly, by looking through doors, the depth of space is articulated and secondly, by the frequent shift between walls and openings, the physicality of the wall itself is emphasized by the director’s *mise-en-scene* and moving shot.

¹⁴² *The Cinema of Bela Tarr*, 59.

¹⁴³ See <https://www.youtube.com/watch?v=GxIq30rc6Lo>.

¹⁴⁴ See <https://www.youtube.com/watch?v=mDNN2Zx3OCs>.

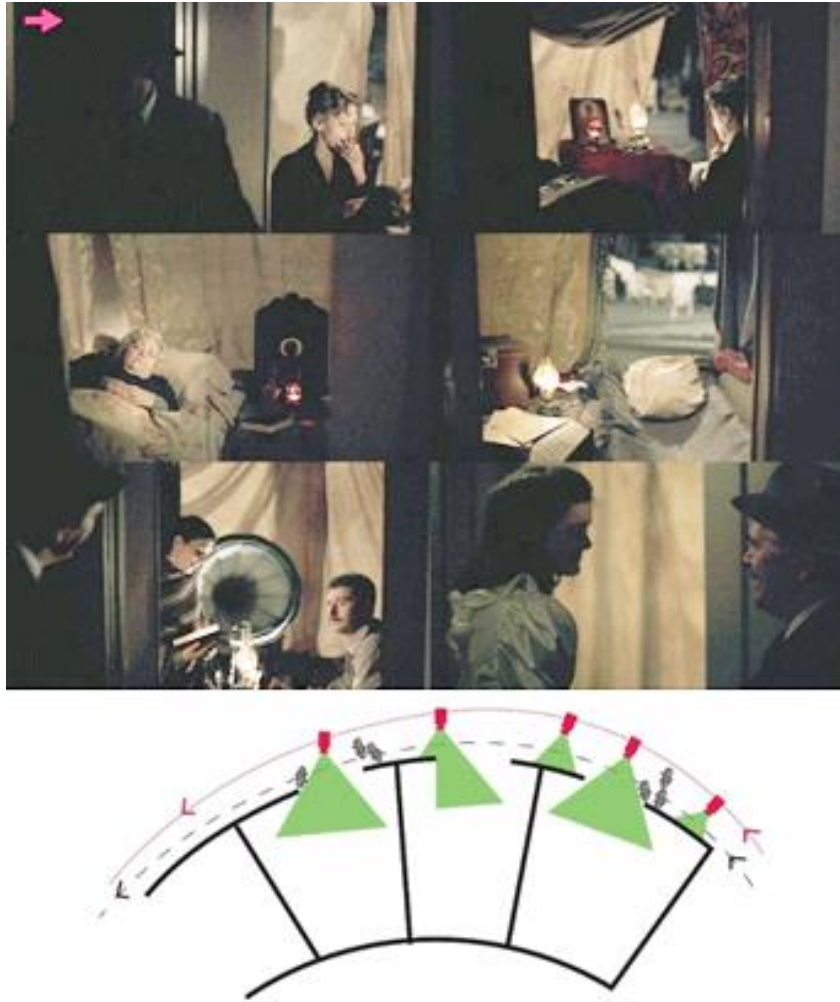


Figure 36. Screenshot. *Trilogy: The Weeping Meadow*. Angelopoulos' camera moves *through* a corridor revealing various rooms and their inhabitants through the door frames. Angelopoulos, in this shot, and in the shots similar to it, masks spectators' view's by obstructing the wall courageously and using these spatial intervals which emphasize the volume of the image sometimes takes more than 10 seconds.

The two types of movement nourish the spatial imagination of a spectator and allow one to engage more emotionally with the physical spaces of the film. Moving through, around, over and in parallel with the enfolding spaces and thresholds or digging virtual tunnels by using the motion of the camera, the conscious use of opening and holes or enclosing/obstructing walls and constituting invisible volumes by the circular camera movements or combining all of them with a dexterous play of light and

darkness, expands the realm of the framed architecture to off-screen spaces, and makes the masses and forms imaginable not as pure geometrical entities but as inhabitable and immersive spaces. The orchestrating of motion in space, brings about a continuity between framed and unframed spaces, a “collapse of frame”, in Angelopoulos’ words, where the “very existence of the frame becomes shaky.” The spatiality of film, according to Tawa, transcends the “formal and geometrical boundaries”, where the limits become indeterminate and the emphases on the “edges, lineaments and borderlines” of the frame gradually disappear.¹⁴⁵



Figure 37. Screenshot *Damnation*. After a 70 second architectonic introductory shot the camera wanders in spaces and probes for the main event of shot. Then, the camera starts to look through the window at action in the spaces behind the wall.

3.1.3.5 The New Face of Spatial Montage

Movement in space is controlled by the film director and the gaze of a spectator does not possess the freedom to wander wherever he/she wants. Nevertheless, the selective attitude toward space is akin to what happens in some architectural spaces too. David

¹⁴⁵ Alifragkis, "Constructing the Urban Cinematic Landscape," 49. Michael Tawa, "Consilient Discrepancy: Porosity and Atmosphere in Cinema and Architecture," *Architecture_MPS: Architecture_Media_Politics_Society* 11, no. 3 (2017), 3.

Leatherbarrow, in *Architecture Oriented Otherwise*, looks into the modes of spatiality and movement in modern architecture. Quoting an unpublished paper by the architect George Howe, Leatherbarrow points to the orchestrated movements in modern architecture. “We no longer approach the front door head-on, but indirectly, sometimes tortuously”, wrote Howe on Le Corbusier and Frank Lloyd Wright’s architecture. David Leatherbarrow further returns to this discussion and construes it as an aspect that injects “continuities, sequences, and connections” into architecture and consequently turns the concept of free movement *in space* into a movement *through space*.¹⁴⁶

This phenomenon, found in the works of many architects including Adolf Loos and Le Corbusier, is comparable to the meticulously choreographed movements used by Tarr and Angelopoulos. This arranged mobile spectatorship engendered through carefully guided movements, in film and architecture, determines what should be seen and what should not be seen; the designed movement also defines the manner of moving through space, following a designed path, shifting the spatial attention from one point to the other as well as the sequentiality and the extent of details a spectator faces.

In the introduction to the 1980s version of Eisenstein’s essay ‘Architecture and Montage’ (1940), Yve-Alain Bois interprets Eisenstein’s obsession with the “actual movements of beholders” body in space. Bois’s interpretation of the discussion of Eisenstein is the following: the movement of a mobile spectator in space generates a whole from the multiplicity and heterogeneity of points of view that form our perception of architecture and this is an “essential character of architecture”.¹⁴⁷

¹⁴⁶ David Leatherbarrow, *Architecture Oriented Otherwise* (New York: Princeton Architectural, 2009), 248.

¹⁴⁷ Eisenstein, Bois, and Glenny, “Architecture and Montage,” 113.

In the essay, Eisenstein defines montage as a means for narrating this multiplicity of variable points of view of the movement of a mobile spectator. In the films of Tarr and Angelopoulos, and in the works of other modernists filmmakers, the early Eisensteinian Montage, which breaks down spaces into the small slices of time, was redefined. The experience of space, instead of being split into multiple angles and scales (close-up, medium shot and long shot) by cutting, is constituted around the notion the continuity and movement through, around, within and over spaces. 'Montage and Architecture' reveals that Eisenstein's ideas evolved, at least in the case of the encounter of architecture and film, over twenty years. Eisenstein, who theorized the fast, fragmented and cutting-based montage, in 'Architecture and Montage', using the example of the Acropolis, is more inclined to imply that a moving long-take (*plan-sequence*) in which montage is more gradual and less formalist, is an appropriate way for narrating architecture.

In the essay, Eisenstein suggested that we look at architecture through a "filmmaker eye" who is shooting a *plan-sequence* and wrote: "it is hard to imagine a montage for an architectural ensemble more subtly composed, shot by shot, than the one that our legs create by walking *through* the buildings of the Acropolis."¹⁴⁸

Further, this continuous motion-based montage was elaborated in the films of many directors in the modern movement in cinema and became a reliable basis for the cinema of Tarr and Angelopoulos. In this strategy of spatial montage through a continuous movement, which was probably influenced by technological advances in film making as well, a director moves the camera uninterruptedly to juxtapose the various points of view instead of cutting to different points of view.¹⁴⁹ The camera

¹⁴⁸ Sergei Eisenstein, *Selected Works*, vol. 2 (London: BFI Publishing, 1991), 60.

¹⁴⁹ New technologies allows filmmakers to move easier and smoother and shoot in a longer time, by lighter devices.

moves, *without cutting*, from a medium-long shot of a room following a choreographed path facing variant mise-en-scènes and spatial volumes to an extreme close-up of an object on a table.

The uninterrupted movement of the camera cuts and recuts and simultaneously binds the cut pieces together and builds a multifaceted and seamless space that resembles our perception of architectural spaces in real life. Angelopoulos has remarked that in designing seamless camera trajectories of a *plan-sequence*, “no matter how complex this trajectory is”, the important purpose is to establish a “spatial balance”. Similarly, Fred Kelemen, Tarr’s director of cinematography, describes the cinematography through long-takes with moving cameras as a “real musical effort” to find the most fluent and seamless manner of moving in space.¹⁵⁰

Despite the classical montage which manipulates and edits, camera movements in long-takes tend to narrate space as it is and show more details instead of trimming off space based on the actions of the narrative. Nonetheless, the act of editing and assembling is still a key aspect of those camera movements. As Raymond Durnat suggests “alongside their unity, long takes can fragment space as incisively as bold cuts”.¹⁵¹ It can be argued that this new guise of montage within a single shot is comprised of the major Eisensteinian concepts such as the bodily movement of the spectator in space. The movement mediated through camera generates a sort of sequentiality which is a montage of a myriad of perspectival views; a montage that is not founded on the re-configuration of various cut angles of architectural spaces recorded in different locations of a site. Rather, the type of spatial montage that occurs

¹⁵⁰ Theo Angelopoulos, “Synthesis in Cinema”[interview by Stavros Aligragkis], *Scroope: Cambridge Architectural Journal* 16 no. 1 (2006), 56-65.

¹⁵¹ Raymond Durnat, “Angelopoulos: The Long Take in Voyage to Cythera: Brecht and Marx Vs. Bazin and God,” *Film Comment* 26, no. 6 (1990), 1.

in the films of Tarr and Angelopoulos are smoothly and ‘subtly composed’ — as Eisenstein put it — based on the continuation of movement in space.¹⁵²

These choreographed moving *plan-sequences* exercised by Tarr and Angelopoulos seem to be rewarding implementations of the new type of montage that Eisenstein conceives in ‘Architecture and Montage’; a montage which is not processed by the act of cutting a seamless experience into pieces and fragments, rather a continuous mobilized manner of viewing spaces in which a camera introduces multiple point of views through movement.¹⁵³

3.1.4 Textured Images

In the cinema of Tarr and Angelopoulos, apart from their differences in form and content, there is a common and distinct approach that turns their shots into skillfully fabricated textured images. In this approach, a remarkable emphasis is put on materiality and textures. Film theorist Steven Marchand has noticed the extreme “emphasis on physicality” in the films of Tarr.¹⁵⁴ The deliberate emphasis opposes the reductive aesthetics of conventional cinema and its texture-less narrative of spaces. The accentuation on textures and materials elevates the spaces of the scenes from being incorporeal visual forms to tactile matters. The level of concentration on texture and materiality, as a feature of the cinema of Tarr and Angelopoulos, is obviously

¹⁵² It should be noted that the movement in long takes is not always generated by the movement of the body of the camera in space. A movement could be a result of optic possibilities offered by the camera’s eye. Techniques such as changing focus, using depth of field and slow zooms represent a movement in space that has an impact on the spatial perception of a spectator. These movements in which the actual body of the camera does not move, drags the field of viewing of a spectator to a farther or closer subject, or, through zooming get closer to a subject. The non-physical (visual) movements are purely optical but cause a movement in both space and time, a movement without a ‘moving subject’, a virtual movement.

¹⁵³ It can be argued that this montage through movement without cutting is also close to what Andre Bazin calls as “unity of space” or “spatial unity” which, in his opinion is the ultimate task that cinema attempts to achieve. See Bazin et al., *What Is Cinema?*, 40-55.

¹⁵⁴ Steven Marchant, "Nothing Counts: Shot and Event in Werckmeister Harmonies," *New Cinemas: Journal of Contemporary Film* 7, no. 2 (2009): 143.

underpinned by the dilated time of their moving shots. As architect Alvar Aalto pointed out, “matter speaks slowly”.¹⁵⁵ The long duration of the shots and the slow-paced camera movements enable a spectator to sense the language of material and its vocabularies, textures and details. Furthermore, moving through discrete scales of a single space discloses various haptics of textures from different distances enhancing the powerful impression of grasping and touching textures and materiality.

The films of Tarr and Angelopoulos abound with the shots in which textures are pivotal elements, not only as scenographic or heuristic motifs, but as a major spatial element that influences the overall impression of a shot. Although their films mostly consist of long-shots and medium-shots, the tactile effect of the textures and materials is always consummately highlighted by the tools such as lighting and composition. What constructs the powerful sense of space in their films is not only the purely visual perspectival visualization of spaces. Their walls, enclosures, urban landscapes, laneways and, even, open and natural landscapes are densely textured and granulated.

Bachelard in *L'eau et les rêves* defined two disparate types of imagination: formal and material. For Bachelard, material imagination is necessary for a “poetic creation” and sometimes transcends formal imagination: “Eye recognizes the images of matter and hand is perfectly familiar with them.”¹⁵⁶ Based on Bachelard’s contention, architectural phenomenologists such as Steven Holl, Pallasmaa and Alberto Perez-Gomez argue that architectural images in which our tactile sense is considered leave a deeper impact on our experience of space, provoke our formal and material imagination. The accentuated images of materials such as wood, brick, stone and concrete, and their complexion, solidness, coarseness, porosity, density, imperfection, corrosion and

¹⁵⁵ Alvar Aalto, *Alvar Aalto: Synopsis - Painting, Architecture, Sculpture* (Basel: Birkhauser 1970), 267.

¹⁵⁶ Gaston Bachelard, *L'eau Et Les Rêves: Essai Sur L'imagination De La Matière* (Paris Corti, 1942), 5.

rustiness, endow architectural images with additional “psychological dimensions”, that “open up the realm of haptic” and intensify “sensory experience”.¹⁵⁷

Angelopoulos’ and Tarr’s films and their emphasis on images of natural materials infuse a sense of tactility into the flattened and ephemeral images on the screen. It seems that they believe in Valda Petric’s interpretation that the camera is “capable of unearthing the hidden significance of the material world”.¹⁵⁸ The images, with the heavy textures, on the one hand, hint at our lived experiences and the tactile moments of quotidian life and, on the other hand, render it possible to *visually* touch the “veracity of matters” bringing about a frictional engagement with the screen.¹⁵⁹ It is through the act of stubbornly accentuated textures that Tarr and Angelopoulos bridge the gap between the visual and tactical, optic and haptic. When these textures are highlighted before the eye of an audience their material essence, age and history is also represented.

In architecture, indexical “traces of use, wear and time” enrich an architectural image, and in film prioritizing the material and textural nature of the environments, by visually underscoring the textures, makes the illusionary images of the screen more tactile.¹⁶⁰ An aged surface “incorporates the dimension of time” and simultaneously expresses an impression of imperfection caused by the process of aging and erosion. The tactility of the imperfect surfaces demonstrates how the surfaces of the spaces are felt and touched (their *tactus*) as well as show how they are made (*techne*), used, even

¹⁵⁷ Steven Holl, Juhani Pallasmaa, and Alberto Pérez Gómez, *Questions of Perception: Phenomenology of Architecture* (San Francisco, CA: William Stout, 2006), 90.

¹⁵⁸ Tarkovsky uses the imagery of the materials similar way to Tarr and Angelopoulos. Petric regarding this tendency in the films Tarkovsky stated that his long takes are based on the belief that the camera is “capable of unearthing the hidden significance of the material world”. Vlada Petric, "Tarkovsky's Dream Imagery," *Film Quarterly*, no. 2 (1989), 28.

¹⁵⁹ Juhani Pallasmaa, *The Eyes of the Skin: Architecture and the Senses* (Chichester: John Wiley & Sons, 2005), 13.

¹⁶⁰ Pallasmaa, *The Embodied Image*, 47.

destroyed and decayed over a period of time.¹⁶¹ Imperfect and eroded images of surfaces stimulate “dreaming and imagination” as if the “erosion undressed the structure and its disguise in utility and reason”.¹⁶²



Figure 38. Screenshot. *The Turin Horse*. Although the shot is a dark wide shot, the texture of the walls is highlighted by the light coming from the window.

¹⁶¹ See Michael Tawa, "Vaporous Circumambience: Towards an Architectonics of Atmosphere." In the paper he discusses that the etymology of the terms, *techné* (making and poesis in Heidegger's discussions), *tactus* and *tangere* (meaning touch and feel) have the same root and the textures of surfaces points out the *techné* (how the surface is made) of the surface as well. In another book, *Theorising the Project* Tawa expands upon the Heideggerian term 'techné' and its relationship to *eidos* (form) and *poesis* (constructing) in architecture. *Theorising the Project: A Thematic Approach to Architectural Design* (Newcastle upon Tyne: Cambridge Scholars, 2011), 16. See also Christian Norberg-Schulz, *Genius Loci: Towards a Phenomenology of Architecture* (London: Academy Editions, 1980), 15.

¹⁶² Pallasmaa, *The Embodied Image*, 75.



Figure 39. Screenshot. *Trilogy: The Weeping Meadow*.

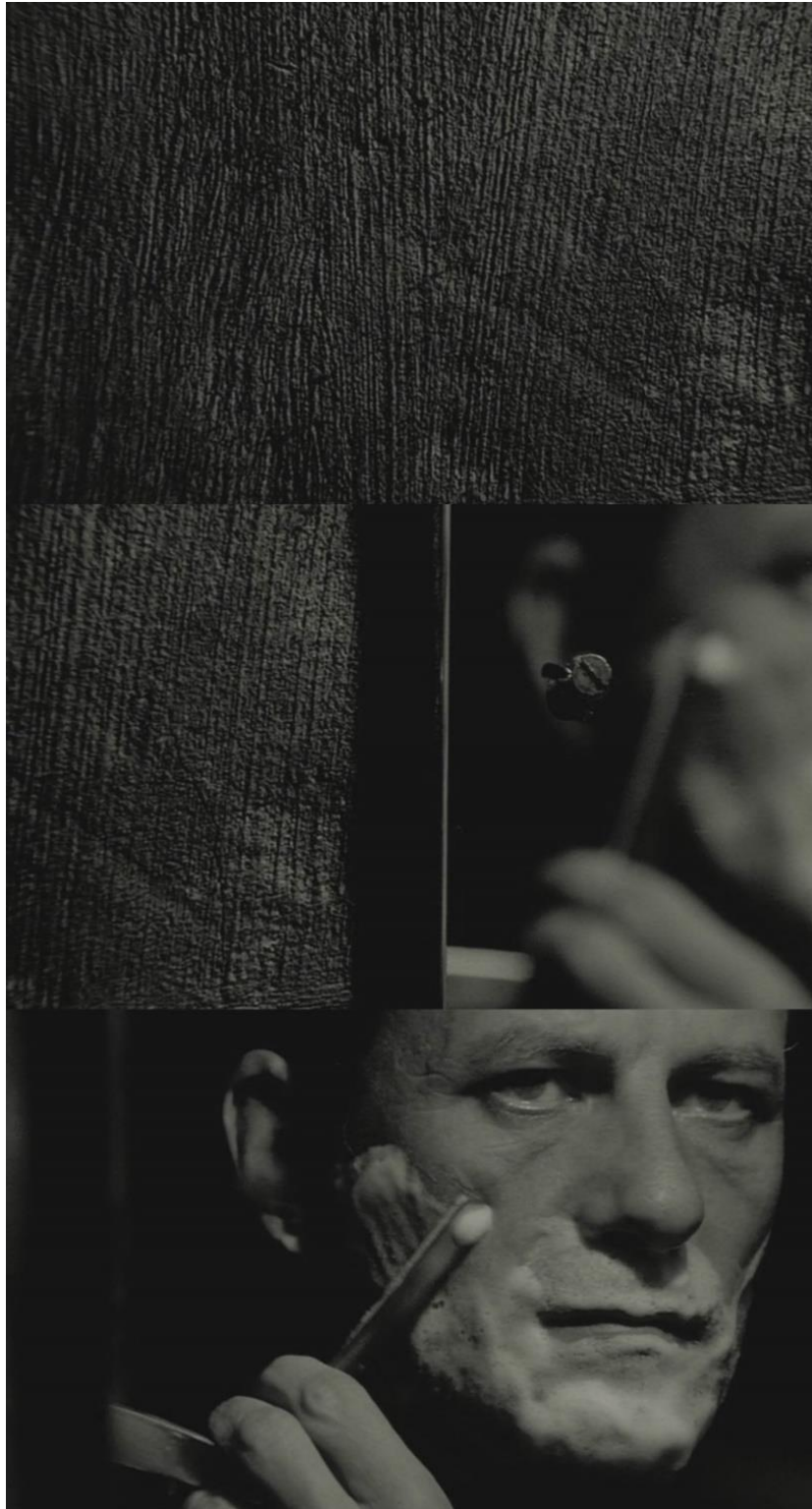


Figure 40. Screenshot *Damnation*. In the extreme close-up camera moves across a wall capturing the textures from a close distance and continues on the reflected image of the man shaving in the mirror. The coarse

material of the wall, the strident sound of the act of shaving itself and the texture of the face which counterpoints the texture of the wall, enhance the sense of tactility of the shot.

Stressing textures and tactility in moving images reminds spectators of their encounters with architecture in the real world. This kind of “cinematic materialism”, as the Slovenian philosopher Slavoj Žizek called it, is discernible in the films of other filmmakers such as Andrei Tarkovsky and Robert Bresson. Tarkovsky has remarked, “texture is always richer than anything”.¹⁶³ In Žizek’s view, the material impact of the “dense textures” and the “heavy gravity” of the terrestrial materials turns the true feeling of spaces “into flesh” and makes the spaces, and their atmospheres “corporeal”.¹⁶⁴ For Žizek, the images of heavily textured imperfected materials and the signs of imperfection (for example, oxidized, rusting or sandblasted metal) act as a Lacanian *objet petit A* (object of desire), which is an imperfection or a lack that keeps constantly its distance from the perfect image and extends the dialectic between desire and an unreachable perfect condition, to infinity.¹⁶⁵

Tarr and Angelopoulos employ a clever articulation of this architectonic technique to create more emphatic and psychologically engaging imagery. From a phenomenological point of view, adopting the tactic of emphasizing the image of materials and textures “does not diminish but rather enhances” architectural images and the interaction between beholder and architecture.¹⁶⁶ The reinforcement of the tactile encounter of a spectator and the cinema of Angelopoulos and Tarr does not stay on the surface of the act of accenting heavy and imperfect textures and materials of dilapidated

¹⁶³ Andrei Tarkovsky, *Sculpting in Time: Reflections on the Cinema* (Austin, TX: University of Texas Press, 1987), 216.

¹⁶⁴ Slavoj Žizek, *The Fright of Real Tears: Krzysztof Kieślowski between Theory and Post-Theory* (London: BFI Publishing, 2001), 102.

¹⁶⁵ For Lacan’s definition of *objet petit a*, see *The four fundamental concepts of psycho-analysis*. Jacques Lacan, *The Four Fundamental Concepts of Psycho-Analysis* (London: Hogarth Press, 1977), 268-75. See also Martin J. Murray, *Jacques Lacan: An Introduction to Complexity*, Modern European Thinkers (London: Pluto Press, 2016), 83-87.

¹⁶⁶ Holl, Pallasmaa, and Pérez Gómez, *Questions of Perception*, 92.

rooms, abandoned huts and old houses and streets in Thessaloniki, Athens or an unknown city in Eastern Europe. Texturing the spaces and images and transforming them into haptic forms is supported by the use of color and filming technical aspects as well.

Tarr's films, from *Damnation* (1988) onwards were shot in black and white. By filming in black and white, Tarr subordinates the dominance of color and constructs his spaces on the basis of an emphasis on texture, form and light.¹⁶⁷ Likewise, Angelopoulos predominantly utilized a cold, greyish and low-saturation chromatic pallet giving a higher level of priority to textures instead of colors. Tarr, in one of his interviews, has been outspoken about the significance of the textures in his films and explained the reason why he rejected using digital technologies: "I do not use digital cameras, I do not like the perfection of their images. They don't give the same sense of texture and the same grainy images as I get from a thirty-five-millimeter analog camera."¹⁶⁸ Tarr's remark encapsulates the fact that the textures of spaces and walls depicted in a film and even the noises and film grains overlaid on the very surface of the image affects the spatial experience of cinema.

As Deleuze has argued, images can be haptic. For him, the tactility and visuality are not two contradictory forces, but rather the "eye itself may fulfill this non-optical function".¹⁶⁹ Similar to Deleuze, Bruno believes that "spectating" is a haptic activity and

¹⁶⁷ This film is considered a point that Bela Tarr abandoned the neo-realist style of his early films and established his film style and started to shoot in black and white.

¹⁶⁸ Although digital cameras are lighter and easier to manage for long takes, which is a fundamental feature of Tarr's style, in several interviews he was asked about using digital technologies and he always rejected the use of digital cameras. See Bela Tarr, "An Interview with Bela Tarr: Why He Says 'the Turin Horse' Is His Final Film," [Interview by Eric Kohn], *Indiwire*, accessed October 15, 2020, <http://www.indiwire.com/2012/02/an-interview-with-bela-tarr-why-he-says-the-turin-horse-is-his-final-film-242518>.

¹⁶⁹ Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia* (London: Bloomsbury Academic, 2013), 492.

“we can feel the texture of an image”.¹⁷⁰ In her opinion, when cinematic images are “textured”, as it happens in the films of Tarr and Angelopoulos, the images create a tactile sense of depth. She observes a link between the notion of *Einfühlung* (feeling into) and textures. She claims that ‘feeling into’ (*Einfühlung*) involves a “dynamic form of resonance”, that “resonates outward and enables one to connect to the actual texture of space, and this expressivity, in turn, resonates within space and its atmospheric surfaces”.¹⁷¹

The cinema of Tarr and Angelopoulos is frequently described by film theorists as a form of “tectonic” cinema obsessed with “scrutiny” of the textures of the “ripples of woodgrain and wrinkling walls” that “shifts our attention from human action toward the touch and smells of the physical world”, a cinema that is fixated on the textures more than gestures.¹⁷²

Thorsten Botz-Bornstein suggests that this type of cinema, represented by Tarr and Angelopoulos, values “a contemplative exploration of spatial and temporal experience through a rediscovery of the material”.¹⁷³ Within the oeuvre of Tarr, there are several instances when his camera moves in a close distance in parallel with a wall, and spectators are forced to see nothing other than the detailed textures and materiality of the walls. For example, the shot in *Damnation*, where people are waiting inside the café for the rain to stop, is one of the shots in which the camera spends an unusually long period exploring the texture and materiality of the wall. In an interview with the author,

¹⁷⁰ Giuliana Bruno, *Surface: Matters of Aesthetics, Materiality, and Media* (Chicago: University of Chicago Press, 2014), 189.

¹⁷¹ *Ibid.*, 194.

¹⁷² David Bordwell, “The Sarcastic Laments of Béla Tarr,” accessed October 15, 2020, <http://www.davidbordwell.net/blog/2007/09/19/the-sarcastic-laments-of-bela-tarr>. See also David Bordwell, “Splashy and Spare, Vengeance and Regrets,” accessed October 15, 2020, <http://www.davidbordwell.net/blog/2011/03/28/splashy-and-spare-vengeance-and-regrets>.

¹⁷³ Botz-Bornstein, *Organic Cinema*, 7. Botz-Bornstein categorizes both Tarr and Angelopoulos under the title of ‘organic filmmakers’ but focuses on Tarr.

Tarr was asked about these very close shots of textures and materiality, his response was abrupt:

[C]an you ignore the textures of the brick walls when you are walking in a street? So, my camera cannot ignore them either. Texture is the lost element in the shitty contemporary cinema. We are surrounded by the beautiful small things but, unfortunately, in the films they are put very far from the camera. Camera and screen are the best thing that help us magnify, glorify and appreciate textures and their beauty... texture is what gives identity to materials and it does the same thing to images.¹⁷⁴

In the shot, the close and coarse texture of the wall occupies the same amount of time and space as human faces. The shot, which is regarded by Tarr as the “manifesto” of his cinema, fluctuates between the wall and human faces in a cyclical manner.¹⁷⁵ It appears that the walls and their materiality have gained a more important position compared to characters. While the characters are shot in medium longshot, the walls that are often imagined in the background of wide shots are promoted to the foreground of the image and filmed in close-up. The walls “receive attention in their own right through long, almost obsessive camera shots of their decrepit textures and plasters”, develop their own identity, in the same way as characters do in conventional close-ups and are allowed to speak through the haptic language of their textures.¹⁷⁶

The cinema of Tarr and Angelopoulos entails common features that can be utilized, and consequently, impact positively the quality of the films and animations produced by architects. Moreover, by opening up new horizons to the academic discourse, studying their films will grant a new vitality to the field of architecture and film. A more detailed and technical analysis of strategies by Tarr and Angelopoulos for depicting the

¹⁷⁴ Bela Tarr, interview by Hamid Khalili, 2018.

¹⁷⁵ See the scene here <https://www.youtube.com/watch?v=POoI91eAwZ0>.

¹⁷⁶ Botz-Bornstein, *Organic Cinema*, 25.

species of spaces is conducted in the next sections. This chapter is meant to function as an introductory study into an overlooked type of cinema. Tarr and Angelopoulos, as representatives of this corner of the globe of cinema that has been neglected by the studies into film and architecture, are filmmakers that are the focus of this thesis.¹⁷⁷

Meticulously smooth choreographed camera movements, the prolonged temporality of the shots and the emphasis that Tarr and Angelopoulos put on the tactility of images were identified and examined as the main features of the cinema of the two directors in this chapter. Surprisingly, the traits of the cinema of Tarr and Angelopoulos are antidotes to what ails the animations made by architects. In the Introduction chapter, it was discussed that – quite in contrast with the cinema of Tarr and Angelopoulos – camera movements in architectural animations are jerky, hasty and aimless and the spaces of the animations emerge as phantom-like, immaterial shapes through which a camera can easily pass. Hence, this cinematic form exercised by Tarr and Angelopoulos contains valuable lessons to be studied and learned.

In the following part of the dissertation, ACT 3 will include chapters on the species of spaces; windows and openings, doors and thresholds and corridors. The chapters investigate architectural features of the species of spaces, the image of the species of spaces in cinema and how Tarr and Angelopoulos approach them. The film-architecture matrix introduced in previous section is used to dissect selected cases from the cinema of Tarr and Angelopoulos

¹⁷⁷ Studying the works of Tarr and Angelopoulos is instigating an incipient series of theoretical examinations. In 2017 Michael Tawa, in his “Consilient Discrepancy” compared the visual strategies employed in Tarr’s *Werckmeister Harmonies* (2001) with the spatial strategies in the architecture of Flores & Prats. In the same year, Thorsten Botz-Bornstein, the German philosopher, who writes extensively on film, architecture and philosophy, published *Organic Cinema*. Stavros Alifragkis, architecture and film theorist, started to write a series of articles and book chapter on Angelopoulos’ films including “Constructing the Urban Cinematic Landscape”.

4 ACT 3

4.1 Thresholds and Doors

David Leatherbarrow, architectural theorist and historian, in his *Architecture Oriented Otherwise* argues that architecture and the notion of “spatiality” are determined and perceived through the act of “going in and coming out”.¹⁷⁸ This flow, the concept of entering and coming out, is reflected and facilitated by one of the most modest architectural elements, the door - “the prelude to entering” a space.¹⁷⁹ Doors, mostly opening inward, are fundamentally associated with the notion of entering. They are defined simply as functional elements “which give access to the interior of a house” setting “the stage for what is inside”.¹⁸⁰ At the most basic level, doors provide a passage from an exterior to and interior space and vice versa. If windows connect the outside and inside visually allowing the interior spaces to be affected by the outside, doors let inhabitants in and out. Using the old metaphor that compares a house with a human face, windows can be construed as the eyes of a house and doors, as they facilitate the ritual of entering, in the same way that is called in some African languages, can be labeled as “the mouth of the house”.¹⁸¹

Doors are welded to the notion of movement. In the Latin language, the word for door and gate is *porta* (and *portale*), *πόρτα* in Greek (roots of the English word ‘portal’). These words are associated with the verb *portare*, meaning bringing, taking and carrying, which implies an inherent movement. Although the duration of the movement through doors is shorter than other movement-based species of spaces, doors and gates orchestrate and frame an incessant flow between the space *behind* and *in front of* themselves. The ritual of passing through a door and entering a new space is as crucial

¹⁷⁸ Leatherbarrow, *Architecture Oriented Otherwise*, 254.

¹⁷⁹ Anette Hochberg et al., *Open/Close: Windows, Doors, Gates, Loggias, Filters, Scale* (Basel, Switzerland: Birkhauser, 2010), 98.

¹⁸⁰ Jo Cryder, *Entryways and Doorways* (Atglen, Pa: Schiffer Publishing Ltd, 2008), 4.

¹⁸¹ Jean-Philippe Lenclos and Dominique Lenclos, *Doors of the World* (New York: Norton, 2005), 7.

as a rite of passage. Arnold Van Gennep, the French ethnographer, wrote that passing through a “threshold is to unite oneself with a new world”; this is the reason why this important passage plays a role in “marriage, adoption, ordination, and funeral ceremonies”.¹⁸²

The movement through doors though, is not limited to the act of passing through frames and crossing their thresholds; doors create a “pattern of movement” and a flow “between and within” spaces.¹⁸³ In fact, doors are interstitial connections between the behind-space and the in-front space that are disconnected from each other by an enclosing element. Doors are thresholds stitching the laceration made by a wall between the two separated parts. In this sense, doors whether or not they are folding, sliding, revolving, interior or exterior, act as connections, linkages or as Juhani Pallasmaa, calls them, “mediators between two worlds” of behind and in-front.¹⁸⁴ These worlds, sometimes, are contrasting realms, such as private and public, and sometimes, are in continuity with one another informing an endless flux. In occasions, they represent various degrees of the same essence: private, more private and intimate.

Similar to windows, doors signify a double-faced entity. As Bernhard Siegert in his *Cultural Techniques: Grids, Filters, Doors, and Other Articulations of the Real* (2015) argues, doors process “the most critical disparity for architecture” and distinguish “the difference between inside and outside”.¹⁸⁵ While doors are tied to the concept of connection, linkage and openness, they represent closedness and separation putting “outside into a special relationship in which the outside first becomes properly outside and the inside first becomes properly inside.”¹⁸⁶ In the same way as Siegert, Georg

¹⁸² Arnold van Gennep, *The Rites of Passage* (London: Routledge, 1977), 20.

¹⁸³ Koolhaas et al., *Elements*, 11.

¹⁸⁴ Pallasmaa, *The Architecture of Image*, 32.

¹⁸⁵ Bernhard Siegert, *Cultural Techniques: Grids, Filters, Doors, and Other Articulations of the Real*, trans. Geoffrey Winthrop-Young (New York: Fordham University Press, 2015), 175.

¹⁸⁶ *Ibid.*, 8.

Simmel, philosopher, in his essay 'Bridge and Door' commented on doors' paradoxical nature and how they parallelize and amalgamate the contradictory acts of detaching/linking, closing/opening and leaving/entering. In Simmel's view, doors indicate "in a more decisive manner how separating and connecting are only two sides of precisely the same act".¹⁸⁷ Doors never carry a single meaning. They open as they obstruct and provide continuity and discontinuity through the same structure. Doors invite to enter as they guide people to leave and disconnect in the same fashion they connect.

Door's shape, their size, placement on a wall and the visual attention they attract is the outset of the narrative of entering a space. The first step is, always, seeing and noticing the door. The visual role of doors turns them into "Important compositional elements". Doors' visual features and how they "punctuate and divide exterior wall surfaces" affects how people perceive walls and facades.¹⁸⁸ Aside from a door's position on a wall, all the components of this seemingly simple structure including, frame, jamb, door leaf (panel), doorknob/handle, fittings, door lintel, keyhole, door knocker, latch and doorstep, with their disparate size, scale and degree of involvement, are entangled in the process of entering. Diverse audial, tactile, spatial and visual qualities are involved in the experience of interacting with a door. The sound made by a door, the texture of its handle, the shape and size of its frame, and depth of its thresholds all contribute to how a door is experienced.

In his volume *Elements* (2014), a series of books dedicated to architectural components, the Rem Koolhaas has gathered works examining how the act of opening a door involves a sequence of five main categories and eighteen sub-categories of

¹⁸⁷ Georg Simmel, "Bridge and Door," *Simmel on Culture: Selected Writings*, Theory, Culture & Society, (1994), ed. David Frisby and Mike Featherstone (London: Sage Publications, 1977), 172.

¹⁸⁸ Koolhaas et al., *Elements*, 511.

decisions. The major categories contributing to the simple task of opening a door are: “detecting the door”, “approaching the door”, “evaluating the situation and making a decision”, “interacting with door and people” and “leaving the door”.¹⁸⁹ Each of these categories perform remarkably in the narrative of entering.¹⁹⁰ If we just change the first piece of the narrative, by imaging a door that is not meant to be easily noticeable and detectable for the public, the entering process will have a completely different narrative. Moreover, each of the mentioned categories has an enormous dramatic and design potential that can be appreciated by filmmakers and designers.

Doors and their frames are designed to be large and tall enough to let a person stand in the frame and pass through. Door components involve various ergonomic decisions to provide a suitable physical response to the whole and/or a specific part of the human body. When doors are wider, taller or shorter than usual they are assigned to convey a manifest or implicit message serving a particular function. Enormous and tall gateways, *iwans*, *torana*, entryways of temples, castles and palaces, city gates, and similar thresholds, take part in the monumentality of the architecture they belong to and, at the same time, perform as a prelude preparing people for the importance of the place they enter.¹⁹¹

In traditional Persian architecture of the eighteenth century, doors of the houses of upper-class families were shorter than the standard height of a human being and were sunken in a lower area in the ground. The short door frames force people entering the front yard of the house to bow their heads and bend their bodies as a gesture of respect

¹⁸⁹ Ibid.

¹⁹⁰ Francois Penz in *Cinematic Aided Design*, mentions the analysis conducted in *Elements* and draws a parallel between the actions involved opening a door and Bruce Block’s dramaturgical dissection of various steps of filming a door.

¹⁹¹ *Torana* are the gateways of Hindu and Buddhist Temples. See *The Torana in Indian and Southeast Asian Architecture*. Parul Pandya Dhar, *The Torana in Indian and Southeast Asian Architecture* (New Delhi: D.K. Printworld, 2010), 14-26.

for the residents of the building.¹⁹² There are various examples from different cultures, styles and periods that bear witness to how the dimensions of a door as an element that is proportioned to a human body and how this affects the entering/leaving act that is a fundamental notion to architecture.

4.1.1 The Unconscious Interaction and Its Gradual Death

Doors are architectural elements we touch more than others. A survey conducted by Amerigo Moranelli focusing on the citizens of Bologna, Milan, Turin, Florence and Rome, reports that every person living in an urban environment touches a door at least thirteen times per day.¹⁹³ We push, pull, knock and hold the doors of the rooms, bathroom, flats, buildings, offices, schools, cars, public transport, etc. We are physically familiar with the doors and interact with them in an unconscious manner. This frequent and physical familiarity makes doors powerful elements with an immediate and robust psychological and aesthetic impact. Pallasmaa argues in favor of this physical interaction with these architectural elements that are “encountered most concretely and directly with the body”. He believes this physical encounter with doors transcends them from being a simple architectural element to a “primarily architectural image”.¹⁹⁴ He remarks:

It is pleasurable to press a door handle shining from the thousands of hands that have entered the door before us; the clean shimmer of ageless wear has turned into an image of welcome and hospitality. The door handle is the handshake of the building. The tactile sense connects us with time and tradition; through impressions of touch, we shake the hands of countless generations.¹⁹⁵

¹⁹² See Mina Ramezan and Javad Neyestani, "The Sings of Modernity and Tradition in the Entryways of Qajar Houses," *Architecture and Urban Design (Honarhaye Ziba)*, 42 (2011), 4.

¹⁹³ Amerigo Moranelli, "Il Sistema Porta Nell'ambiente Domestico: Recupero E Valorizzazione Dei Caratteri Simbolici Ed Espressivi Attraverso La Serialità Differenziata," (Master of Architecture, Politecnico di Torino, 2006), 91-102.

¹⁹⁴ Pallasmaa, *The Architecture of Image*, 33.

¹⁹⁵ Ibid.

In terms of tactile and physical engagement, no architectural element is comparable to the door. This direct physical contact mediated through our bodies makes the tactile properties of doors and their elements such as textures and sizes crucial. Therefore, the material and texture of a door and its elements is a noteworthy feature affecting its overall shape and function. Aside from the haptic interaction with doors, how doors engage other senses such as sight and hearing is equivalently significant. Door frames act as visual frames harnessing the visual contact between outside and inside. Door frames frame the way in which spaces can be or should be seen. Furthermore, the introduction of people to the inside and the act of accenting the presence of everyone standing in the frame is an attribute of door frames.

However, the traits of doors are not confined within the realm of visibility and tactility. For Siegert, doors exemplify a perfect regulating “architectural media”.¹⁹⁶ Doors “distribute” information or, as Siegert put it, “information- theoretical knowledge”, but what makes doors fundamental to human culture is the fact that they are able to produce an “information gap”. As one of the most primitive types of media, a door “processes” and canalizes both aural and visual information.¹⁹⁷ Various examples can be provided for how a door processes information. For example, a classical door reduces the aural information transmitted to spaces behind the door while the door of a live-room in a sound recording studio totally obstructs the passage of any type of sound. Doors often do not display what is on the other side, translucent doors limit what can be seen but transparent doors operate as revealing screens and facilitate a visual passage but impede a physical and aural one. The cultural strength of doors is that they can filter distinct sorts of information to different extents.

¹⁹⁶ Siegert, *Cultural Techniques*, 175.

¹⁹⁷ Siegert, *Cultural Techniques*, 201-03.

The philosopher and writer Robert Musil, in the section on ‘Doors and Portals’ in his *Posthumous Papers of a Living Author*, praises doors as physical, visual and audial barriers and criticizes the omnipresent emphasis on permeability in modern architecture:

Up until the middle of the last century, you could listen in with your ear pressed against it, and what secrets you could sometimes hear! The count had disowned his stepdaughter, and the hero, who was supposed to marry her, heard just in time that they planned to poison him. Let anybody try such a feat in a contemporary house!¹⁹⁸

Theodor Adorno takes a similar position to Musil’s and even goes further by extending his argument to the territory of cultural experiences. In the period of an aestheticized transparency and the celebration of accessibility in the form of open plans and fluid space, Adorno detects an ominous, gradual demise. He identifies the process of dematerialization of thresholds and the gradual extinction of doors, doorsteps, latches, doors-knobs and all the “core experiences” and narratives around them, arguing that this process, in the end, transforms doors into apparatuses that “make gestures precise and brutal”.¹⁹⁹ Adorno believed that “under the law of pure functionality” we have lost the cultural ability to “close a door quietly, discreetly and yet firmly”.²⁰⁰

With the emergence of electronic and automatic doors, gates and thresholds, the significant and direct contact with doors is limited to “mere operation” and people passing through are degraded to mere recognizable biological entities identifiable by the bio-sensors and various scanners of the opening/closing machines. These machines do not tolerate “surplus, either in freedom of conduct or in the autonomy of things, which would survive as the core experience, because it is not consumed by the moment of

¹⁹⁸ Robert Musil, *Posthumous Papers of a Living Author* (Hygiene, Colo: Eridanos Press, 1987), 18.

¹⁹⁹ Theodor W. Adorno, *Minima Moralia: Reflections from Damaged Life*, trans. E. F. N. Jephcott, Radical Thinkers (London Verso, 2005), 40.

²⁰⁰ Ibid.

action”.²⁰¹ Tending to “snap shut by themselves”, these automatic thresholds impose the “bad manner of not looking behind” and minimize an interaction that entails a myriad of multi-faceted cultural, historical and psychological layers. It is symptomatic of neglecting a cultural experience that is tied to the preliminary concept of architecture; entering and leaving an enclosure. People who have diagnosed this phenomenon, however, are not always experts in the field of architecture or critical theory.

Various artists and filmmakers have detected the fast decline of material thresholds, their disappearance along with the automation of doors and attributed these changes to notions of surveillance, control and dehumanization.²⁰² Angelopoulos is one of the filmmakers who demonstrated his sensitivity to the transformation of thresholds to the devices of control and surveillance in his last film, *The Dust of Time* (2009). In this film, passage controllers such as revolving doors and automatic barrier gates have a strong presence in the film. Angelopoulos’ critique of these passage control devices peaks in a scene where he pictures the demeaning and embarrassing experience of passing through x-ray gates observed and examined by police (Figure 44). While going through the scanners at a security gate, the big screens display the scanned naked bodies of people turning to the left or right in a mode of consternation.

²⁰¹ Ibid.

²⁰² See Jacques Tati’s *Playtime* (1967). The comedy potential of film is focused on the notion of transparency in architecture. Monsieur Hulot, played by Tati himself, accidentally breaks a transparent door. After that, doorkeeper pretends that he is opening the door using the doorknob though the transparent door is not there. Although the door is non-existent in the scene, Tati, by utilizing the doorknob for opening the nothing, tries to immortalize the act of opening a door. As another example, Elio Petri’s *The 10th Victim* (1965) that portrays a society controlled by machines does not have even one scene showing someone entering or leaving through a classical door.

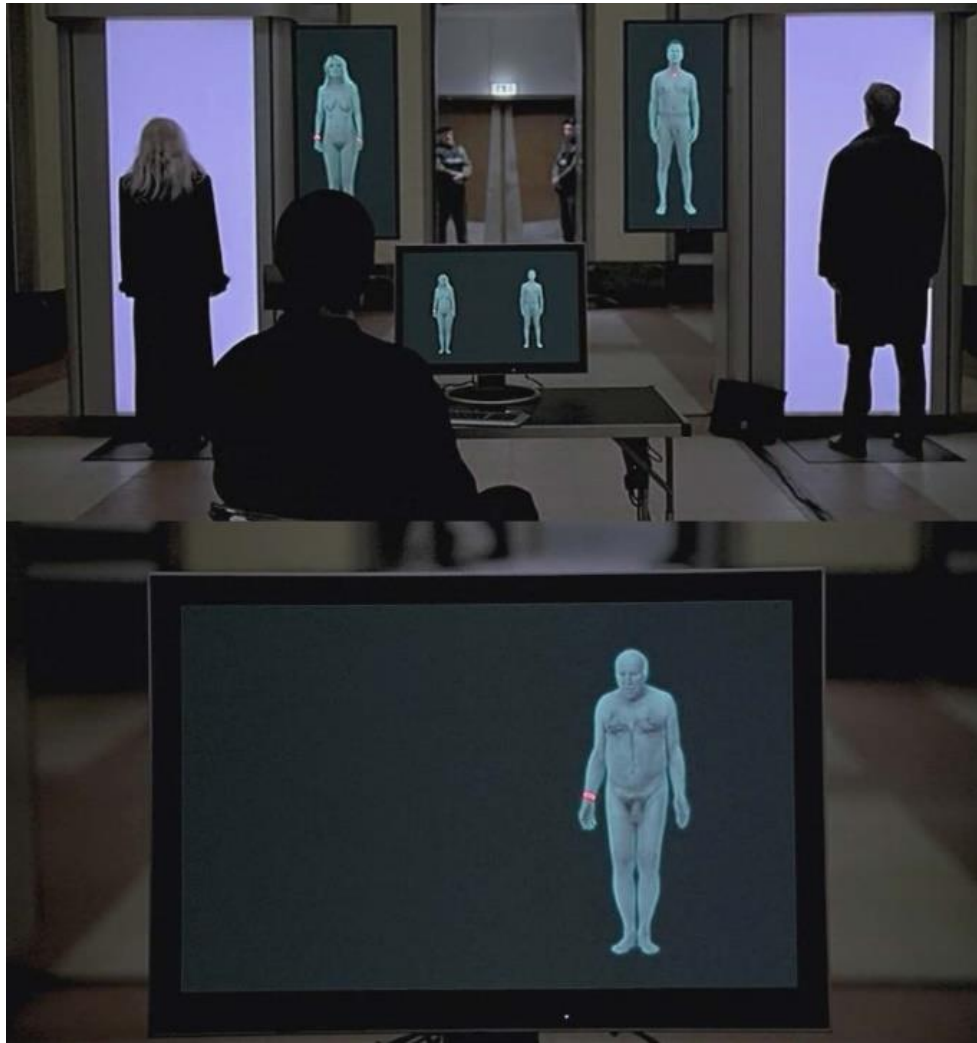


Figure 41. Screenshot. *The Dust of Time*.

Unlike Angelopoulos, in Tarr's film, we cannot find content that directly criticized the extinction of traditional doors and thresholds. However, the cinematic techniques he adopts and the remarkable value he gives to doors and thresholds, confirms that for him, too, doors are crucial elements. The next section of this chapter discusses the role of doors in cinema and demonstrates how Tarr uses doors differently in his film and his position toward the authentic act of passage through physical thresholds is explained.

4.1.2 Doors and/in Film

As in everyday life, doors in films are generally devices for entering and, consequently, exiting a place. In classical films, doors show a character entering a scene where he/she is going to participate in the event behind the door. Conversely, characters are shown exiting through doors when there is not anything significant inside to be depicted on the screen. Doors lead from one action to another action, from one place to another and from this event to the next. The oscillation between actions and spaces in cinema is rendered possible through editing and doors. In cinema, a door serves the editing and cutting between disparate action, spaces and events, as it does in architecture. A door and its associated action (passing through the door) works as an editing opportunity through which spaces, actions and events can be cut and stitched to each other. Once again, as it is in real architecture, in film, the movement of passing through a door is a passage from one space to another. This short passage is, in fact, an immediate transition between two spaces with disparate qualities. This spatial cut which happens in the act of passing through a door is substantially different from the gradual and subtle transition that occurs in corridors. If we assume that dissolve or fade in/out are the cinematic equivalent of corridors, doors are precise cinematic equivalents of bold cuts.

In classical cinema, a door offers a place for a cut to the other side of the wall or another scene.²⁰³ Richard Koeck suggests that the ability of producing “spatial distinction[s]” is essential to cinema and film editing and doors facilitate the creation of spatial distinction.²⁰⁴ As a character goes through a door and passes from one space to another, a cut on the action of opening/closing the door demarcates the two spaces. This quick passage, from one side to the other, is rarely followed by a camera. In addition, the act of passing through a door is compacted and reduced to the cut that matches the

²⁰³ See Francois Penz, "Film, Space, Architecture (Part2/3)," AA School of Architecture, accessed October 15, 2020, <https://www.youtube.com/watch?v=pjL51GibT5A>.

²⁰⁴ Koeck and Roberts, *The City and the Moving Image*, 93.

action of opening/closing a door. The doors, being coupled with the notions of transition, passage and cut in cinema, are always one of the permanent lessons of film editing and cinema. Since directors cannot make an actor perform the exact identical actions and gestures, they resort to material joints such as doors to weld shots together and create a smooth continuity.²⁰⁵

In this regard, the immediate connection offered by doors seems to be a great source for establishing continuity between indoor and outdoor shots, or every shot requiring a passage between two spaces. In film theory and practice, doors, their components, the main event around the door and its sub-events, are adopted as “visual recognition”.²⁰⁶ It means that doors and the action of opening prepare a situation for a visual cut. It is usually a cut between the two spaces separated by a door, sometimes with close-ups of door components in the middle. For example, in the first shot, a character approaches a door; we see the character turning the doorknob and the next shot shows the character is entering a room, filmed from the other side of the wall. In the mentioned example, the camera will be set in two separate places to shoot this event.

Cinema abounds with various examples of cutting between outside and inside or cutting between doors elements: doorknobs, latches, knockers and doorbells, for the purpose of creating continuity between the shots of spaces and actions.²⁰⁷ There are even scenes that cut the opening of a door in one place to a door being opened in an

²⁰⁵ Roy and Bowen Thompson, Christopher, *Grammar of the Shot*, 140.

²⁰⁶ Katz, *Film Directing Shot by Shot*, 2. In *The Visual Story: Seeing the Structure of Film, TV, and New Media*, Block breaks down the event of opening a door seven subevents. Bruce A. Block, *The Visual Story: Seeing the Structure of Film, Tv, and New Media* (Boston : Focal Press, c2001., 2001), 211.

²⁰⁷ See more examples in Noël Burch, *Theory of Film Practice*, Princeton Legacy Library (Princeton, New Jersey: Princeton University Press, 1981), 5; Penz, *Cinematic Aided Design*, 161; Katz, *Film Directing Shot by Shot*, 2.

unexpected place.²⁰⁸ Nevertheless, the cinematic function of doors does not remain at the level of a sheer tool for a cut in the cinema of Tarr and Angelopoulos.

Penz, in *Cinematic Aided Design* (2017), examines diverse examples of the use of doors in cinema and construes that the doors imply “a movement”, that are “linked to Deleuzian notion of movement-image” rather than time-image. Penz’s idea can be perfectly applied to the context of classical and mainstream cinema.²⁰⁹ Nevertheless, within the oeuvres of many filmmakers, there are examples that demonstrate the function of doors in cinema is changing in parallel with the transformation that affected the nature of the doors in everyday life. In the work of filmmakers such as Tarr, doors are transfigured to the elements that we can look at/through and linger in front of them for a longer time or we can pass through their frames without the interruption of a cut.

Apart from functioning as gluing devices, doors can regulate and influence the visual and symbolic aspects of a shot. The presence of a door, its vertical vigor, its placement, the viewpoint from which the door is filmed, and the way it carves and divides the surfaces of the image has a huge impact on the visual message and aesthetics of a shot. In fact, through different cinematic strategies for filming a surface (a wall or a façade) with a door, a filmmaker is able to convey different visual and symbolic messages (Figure 42). Doors located in longitudinal surfaces reinforce the depth of a shot and doors in frontal planes enhance the visual permeability connecting the first layer of space to the next. A door is usually proportional to the human body and its strong geometric form reads from bottom to the top in the same vein as a human character, making the visual importance of a door as prominent as the protagonists. Therefore, it

²⁰⁸ In the animation *Monsters, Inc.* (2001) directed by Pete Docter, doors in the monsters’ land open to the children’s room. The same happens in *Alice in Wonderland* (2010), directed by Tim Burton.

²⁰⁹ Penz, *Cinematic Aided Design*, 160.

can be inferred that the visual-spatial arrangement of doors and characters is critical to the entire visuality of a shot/scene.



Figure 42. Screenshot. *Satantango*. The visual-spatial relationship between doors and characters reveal the mental condition of characters. In various scenes in *Damnation* and *Satantango* we see characters (and the camera) hesitate with a distance with doors for a considerable period. In this way, a significant relationship between a door and a character, as two vertical elements, is visually developed and presented to an audience.

Similar to windows, doors can also function as a screen, a frame within a frame, that reveals the event behind the door frame. However, with doors, there is always the chance that a protagonist can destroy the mere screen and pass through it. Doors can visually orient and disorient a shot/scene as well. For example, the orientation of the shots of a scene should be based on the direction of the first shot that shows a character entering through a door otherwise it disorients spectators. The way in which doors are framed affects how spectators perceive a space. For instance, a door that is not vertically straight can imply the impression of insecurity and imbalance. As Roy Thompson and

Christopher Bowen suggest, a canted-angle shot of a door causes a “sense of uneasiness and slight disorientation in the audience.”²¹⁰

Doors can make a remarkable contribution to the way viewers experience and become engaged in the physical spaces of a scene. Whenever there is a door frame in the scene, it impacts the perceptual experience of space at least in two major senses. Firstly, doorframes and closed and ajar doors can control and regulate the amount of spatial and narrative information that an audience receives. By deliberately framing and masking certain parts of a scene, a director can crop unnecessary aspects and accentuate the events and spaces that should be noticed more than others. It is also possible to evoke the curiosity, suspense, and the imagination of the spectators by hiding an event/action completely or partially behind the walls of an open door or by an ajar/closed door. Some directors demonstrate the event behind an ajar or closed door simply through the use of light emanating from a narrow space between the door and the ground, or by the voices heard through a closed door. Bachelard observes a significant relationship between doors, “curiosity” and temptation for “an unknown that is not even imagined”.²¹¹

Following Bachelard’s thought, it can be construed that doors are associated with the discussed notions simply because they have the capacity to reveal the concealed unknown and unimagined event or space. Therefore, doors can evoke temptation, curiosity, mystery and even terror. Steven King alludes to the depth of this dramatic capability of the doors and accounts: “nothing is so frightening as a closed door. The audience holds its breath along with the protagonist as she/he (more often she) approaches the door.”²¹² Alfred Hitchcock, similar to King, believed doors are devices

²¹⁰ A Dutch angle, canted angle or oblique shot is a shot in which the frame is imbalanced and tilted. See Thompson, *Grammar of The Shot*, 59.

²¹¹ Bachelard, *The Poetics of Space*, 224.

²¹² Stephen King, *Stephen King's Danse Macabre* (New York : Everest House, c1981., 1981), 25.

for fashioning suspense, surprise and fear. For him, the very first lesson of dramaturgy is the “Man Comes Through a Door, How?”²¹³ Classical cinema, in an inescapable way, relies on the role of problem-solving/creating of the doors in the plot for generating suspense and tension. Doors, in many cases, are the departure point of the climax and condition the arrival of the protagonists. A closed door, by prolonging the suspense, prepares the audience for the climax and, as the door opens, the spectator is visually involved in the event.

Indeed, a door can enhance or reduce the involvement and participation of spectators in a scene. Film historians Thomas Elsaesser and Adam Baker stated that the frames of doors inform “complex relations of distance and proximity between film and viewer.”²¹⁴ Staying behind a door or witnessing an action through a door frame distances the audience from where the action is taking place. This act of estrangement and distancing an audience from an event by looking at the actions from another room through a door frame acts as a psychological gap between the audience and the main event/space of the scene. It seems that the spectator observes the scene from the outside (Figure 43). On the contrary, a camera that passes through door frames and records the event from the inside (and not through a door frame) makes the beholder feel located in the space of the scene and, consequently, more actively involved in the scene, spaces, and the feelings and emotions of characters.

²¹³ David Freeman and Alfred Hitchcock, *The Last Days of Alfred Hitchcock: A Memoir Featuring the Screenplay of "Alfred Hitchcock's the Short Night"* (Woodstock, N.Y.: Overlook Press, 1999), 49.

²¹⁴ Thomas Elsaesser and Adam Barker, *Early Cinema: Space, Frame, Narrative* (London: BFI Publishing, 1990), 18.



Figure 43. Screenshot. *Damnation*. The only information an audience gets is through the door and the rest of the frame is occupied by the building. Moreover, the camera simulates the point of view of an observer and not someone directly involved in the scene.

The manner in which doors visually divide surfaces is another type of agency that affects not only the visual weight of distinct parts of the screen but also the visual message of the shot. In film, doors demarcate in two main directions. First, regardless of the fact that the walls are parallel with the picture plane or not, or how a door separates the parts of a wall/façade can be meaningful. Second, how a door detaches and connects two spaces within the depth of an image is another construable and cinematically practical factor. In Jean-Luc Godard's *Contempt* (1963), Paul Javal (played by Michel Piccoli) and Camile Javal (Brigitte Bardot) are never framed within the same space in their modern apartment. While we see one of the characters in a room, the other one is viewed through the door frame of the other room. In the fluctuations of the actors between the rooms when they are in the same space, there is always a door that penetrates the surface between them that is indicative of their problematic relationship (Figure 44).²¹⁵

²¹⁵ Richard Martin, "Jean-Luc Godard as Architect," *BFI*, accessed October 15, 2020, <https://www.youtube.com/watch?v=Zf9BXTinifM>. In the video-essay, Richard Martin, film theorist, presents a deep analysis of the scene.



Figure 44. Screenshot. *Contempt*. The characters are always detached from each other and pictured through the open doors.

Therefore, as Gerorge Simmel put it “a door speaks”.²¹⁶ The visual clues provided by the doors uncover the relationships between the characters as well as the relationship between the characters and spaces they occupy. Doors in films can be material representations of emotional barriers and complexes. Garden and landscape designer Gilles Clement in *Les Portes* (1998) claims that the culture and mentality of a place be comprehended from the character of their doors, gates and how they are “open, closed or half-open”.²¹⁷ Analogously, the ontological views of filmmakers and their characters can be observed through doors portrayed in films. Marco Dalla Gassa, film scholar, in his essay ‘Inaccessible doors of Kiarostami’ examines the often closed or half-open doors in the films of Abbas Kiarostami. Dalla Gassa argues that the unreachability and limiting nature of doors that Kiarostami’s characters encounter represent “an endless and fruitless search and, at the same time, it reminds the paradoxical necessity of the research itself.”

²¹⁶ Simmel, "Bridge and Door," 172.

²¹⁷ Gilles Clément, *Les Portes* (Paris: 11 & 24, 1998), 4.

Kiarostami's doors, according to Dalla Gassa, are "imperfect media".²¹⁸ The dramatic capacity of the doors of Kiarostami relies on the fact that they do not fulfill their original function. Dalla Gassa traces the unusual use of the doors in Kiarostami's films back to the director's cultural provenances. He concludes that the presence of stubbornly closed doors in Kiarostami's films is rooted in the inaccessible thresholds of Sufism and Persian mystic poetry of Hafiz, Bidel, Saeb and other Persian pre-modern texts (Figure 45). The image of doors, the way protagonists and characters approach and interact with the thresholds, the manner in which a director's camera encounters and frames doors, discloses various layers of cultural, ideological and geographical reading.



Figure 45. Doors are important elements for Kiarostami. His interest in doors was not limited to their cinematic images. Kiarostami took many photos of diverse types of doors in Iran and exhibited them at Aga Khan Museum. *Doors and Memories*. 2014. The exhibition consists of Kiarostami's photographs of the closed doors printed at their real size. © Aga Khan Museum. New York. <https://www.agakhanpark.org/events/aga-khan-museum-calendar/2016/1/12/curators-tour-abbas-kiarostami-doors-without-keys-with-amirali-alibhai>.

²¹⁸ Mario Dalla Grassa, "The Inaccessible Doors of Abbas Kiarostami," *In Media Res*, accessed October 15, 2020, <https://www.youtube.com/watch?v=jVY8vYhD0wI>.

Doors are always present in the lessons of eminent psychoanalysts such as Sigmund Freud, Jacques Lacan and Carl Jung. Lacan even identifies doors as “real symbols...symbols *par excellence*”.²¹⁹ The history of cinema is crammed with scenes where doors perform not for doing their usual architectural duty but as a metaphor for; transmitting a metaphorical meaning, signifying mental states, or for an idea or complex relations. Vittorio De Sica, the Neorealist film director, is one of the artists who paid distinct attention to the metaphoric and symbolic potential of the doors and thresholds.²²⁰

²¹⁹ Jacques Lacan, *The Seminar of Jacques Lacan*, trans. Sylvana Tomaselli (Cambridge: Cambridge University Press, 1988), 304.

²²⁰ See Vittorio De Sica: *Contemporary Perspectives* where different authors highlight the role of the doors in De Sica’s cinema. Howard Curle and Stephen Snyder, *Vittorio De Sica: Contemporary Perspectives* (Toronto: University of Toronto Press, 2000), 115, 20, 214, 43, 45, 51, 52.



Figure 46. Screenshot. *Miracle in Milan* by Vittorio De Sica.

In his film *Miracle in Milan* (1951), De Sica shows concern for the poor and neglected stratum of society in postwar Italy; illustrating the lives of squatters in a

shantytown near Milan. In one of the scenes, the protagonist (Toto) is playing with his friend (the orphan boy), in the squatter area. While Toto and the orphan boy are playing, they come across a slanted door in the middle of nowhere in the shantytown.²²¹ Toto invites the child to join him, encouraging him to play. They run around the door, chasing each other, passing through the door, concealing themselves behind the wall-less door. At this moment, a strong wind picks up fiercely and starts destroying the shantytown.

Then Toto and the child use the door shield themselves against the strong wind. As there is no wall around this door as it does not act as a threshold or as a connecting or a separating device (Figure 46). De Sica benefited from its symbolic power. The wall-lessness of the worn-out, stand-alone door metaphorically alludes to squatters' homelessness. Simultaneously, as the final remaining artefact of a seized or destroyed home, the door is the only refuge for the two characters.

The visual and symbolic expressiveness of doors has been employed by many filmmakers in diverse conditions. As discussed in the examples, from the doors of Kiarostami, to the doors of Godard, De Sica and Tarr, doors speak visually and loudly. On occasion, what the doors of cinema express are clear and sometimes doors reveal deeper layers of a narrative. What is needed to be noted here is the way doors are treated and filmed in cinema enhances or decreases their dramatic and atmospheric potential. The following section looks into the manner in which doors are cinematically represented in the films of Tarr and Angelopoulos.

²²¹ See the scene here <https://vimeo.com/462561265>.

4.1.3 Tarr and Angelopoulos

In his book *Cinematic Aided Design*, Penz praises the strategic emphasis Bela Tarr places on doors and calls Tarr “a film-maker of the threshold”.²²² The significance of doors in the films of Tarr is not only dependent on the fact that these elements are important to the narrative or the fact his camera and characters spend, for long periods of time, in front of a door. In Tarr’s as well as Angelopoulos’ films, the role of doors and thresholds is notable because the approach of these directors in filming thresholds contradicts the role of doors in classical cinema. Tarr himself has stressed that his goal is to save architectural elements such as doors from their “inferior and pretentious” role in cinema and “show what they really do”.²²³

Although Tarr’s methods of filmmaking, and his strategies for depicting thresholds are more radical than Angelopoulos, there are obvious connections and similarities that reveal their approach regarding doors and thresholds stems from a similar type of thinking about architecture. Aside from his fixation with physical thresholds and doors, Angelopoulos has placed his stories around threshold spaces, “spaces in-between”, “hyper-toposes”, and liminal places.²²⁴ Some of these unique cinematic strategies and the spatial experiences that Tarr and Angelopoulos employed for the encounter with the thresholds will be examined in the next section.

4.1.3.1 The Authentic Passage

As mentioned in the previous sections, in filmmaking grammar, a door and the act of entering and passing from one space to another is customarily equivalent to a cut, a cut on movement, a cut on the action of opening/closing a door. In classical filmmaking, a

²²² Penz, 169.

²²³ Tarr.

²²⁴ Irini Stathi, *Gazes in the World of Theo Angelopoulos* (Thessaloniki: Thessaloniki Film Festival, 2001), 174. Alifragkis, "The Mythical Landscape, a Comparative Analysis of the Formation of the Landscape in Theo Angelopoulos' Voyage to Cythera and Andrei Tarkovsky's Stalker," 40.

camera shows a character opening a door then cuts to the inside, to the moment the door is opened. In other words, the act of opening/closing a door cues for a fast cut to another scene. This cut gives a filmmaker an opportunity to stage the camera on the other side of a door. Simultaneously, it condenses, quickens and even cuts off the experience of passage. In cinema, cameras rarely follow a character or simulate the point of view of a subject who is passing through a door from outside to inside or vice versa. This tendency that neglecting doors, as genuine spaces, prevails in commercial cinema. The prioritizing the narrative-based information behind a door is paralleled with hastily skipping over thresholds to expose an action to the impatient contemporary audience

Tarr and Angelopoulos, however, do not follow the common tactic of omitting the act of passing through doors, thresholds and doorframes. Their cinema revitalizes “the authentic architectural experience” of “passing through a door” for the audience.²²⁵ In the last five films made by Tarr, there is no cut on the action of closing or opening a door for providing passage, implying a significant message that is worth underscoring.²²⁶

Tarr’s cinema recognizes the importance of what Pallasmaa terms as the “authentic architectural experience” of passing through doors and finds it necessary to encompass it as part of the spatial experience of his films. When a passage through a door is needed, Tarr’s camera does not reduce it to a cut that represents a succinctly summarized moment. His camera passes through the

²²⁵ Juhani Pallasmaa, "From Frame to Framing," *Oz / College of Architecture & Design Kansas State University* 22 (2000): 6.

²²⁶ It should be also underscored that Tarr’s last five films (started by *Damnation* (1988) and ended by *The Turin Horse*(2011)) are considered as the second period of his cinema through which he develops his unique and personal style of filmmaking. In the last five films, in the cases that Tarr concludes the scene by closing a door and then cuts to the next scene, his camera lingers in front of the door for a long period (nineteen seconds for example).

thresholds, transporting spectators from one side of the wall to the other side. Tarr, describing the power of this spatial experience in his films, stated:

The censorship of the film market forces you to turn a blind eye to things and life experiences for the sake of telling a quick entertaining story... But I cannot censure everything by cuts just to give the information faster. They want us to compete with the quickness of other media, Instagram, Youtube and so on... I like to take my spectator to walk from the outside that is stormy to the protected environment of the inside and make him feel how it changes: feelings, sound, light, everything. I want my audience to feel that strange feeling of going through gates. It is very impressive especially when it is accompanied by good sound effects. And, of course, we cannot show it with a cut. The cut cannot show it, it curtails the experience and throws it away... as I said before, the story for me is not only in the space behind the door. For me, this passage and how you enter is also [part of the] story and has its own story.²²⁷

The Hungarian architect and set designer Laszlo Rajk for Tarr's *Turin Horse* and *The Man from London*, acknowledges Tarr's opinion and maintains that passing through a gate, door or threshold is one of the "most tangible" spatial experiences in cinema. He suggests that this impression of transition through a threshold is not "purely visual" and spectators can feel it even where the spaces and background are not focused and, accordingly, not "clearly visible".²²⁸

²²⁷ Tarr.

²²⁸ In the interview, Laszlo Rajk referred to his set design for *Son of Saul* (2015). *Son of Saul* is a film with long takes and shots with shallow depth of field that is made by Tarr's assistant director Laszlo Nemes. In the film, as a result of the close-ups and shallow depth of field, spaces and the backgrounds are mostly out of focus. Rajk remarks: "after watching the characters passing through doors in *Son of Saul*, I realized that you can feel the size and other characteristics of a doors and thresholds even you when you cannot see them. You can feel if it is a big gate or a narrow entryway." Rajk.

In Tarr's opinion, the tangible experience of passing through a door in cinema will not happen if its inseparable components are split. In his view, all the moments of passing are vital to engendering the impression and a sense of passage. The moment when a camera is approaching the door, when it is "very close to the door frame, when it steps at the door frame and a spectator sees and feels the door frame over his/her head and on the right/left side of himself/herself" and the moment they leave the threshold and enters a new space, are equally crucial to create the sense of passage for the audience.²²⁹

The Turin Horse, which is regarded as the pinnacle of Tarr's oeuvre, is basically a dialectic between inside and outside. The interior of the small house, protected by the stone walls, is gradually becoming the tomb of the father and daughter. On the exterior of the house wall, the incessant storm forces characters to choose between the two options of either leaving the place or dying there. In the battle between inside and outside, doors have a vital position. Tarr depicts the transition between the interior spaces and the stormy outdoor shots, in two major ways. When he introduces an important event or a significant emotional moment, his camera takes his audience, by passing through doors, to the core of the event in the outside or other spaces. In other situations, his camera distances the audience from what is taking place outside by filming it from the window or through door frames.

When there is a critical event that a spectator should be engaged in, Tarr transfers his camera, and accordingly his spectator, to inside the event; thereby directly involving them into the spaces of the scene. Tarr not only entangles his audience in the event and space behind a wall, but he also makes a spectator experience the *passage* from one space to the next as well. In fact, he considers

²²⁹ Bela Tarr, interview by Hamid Khalili, 2018.

this passage as part of the film the characters and spectators experience together. For example, there is a scene where the father and daughter realize that the well supplying their daily water has become dry (**Error! Reference source not found.**Figure 50).²³⁰ There are two spaces associated with this scene. First, the outside where the well is located, and the father and daughter should go outside to see that the well is dry. Second, inside the cottage, they inhabit the interior space along with this promising assumption that the well still has water and they can survive on it. In this scene showing the indoor/outdoor dichotomy, Tarr mingles these two major parts of the event, inside and outside, in a meaningful way.

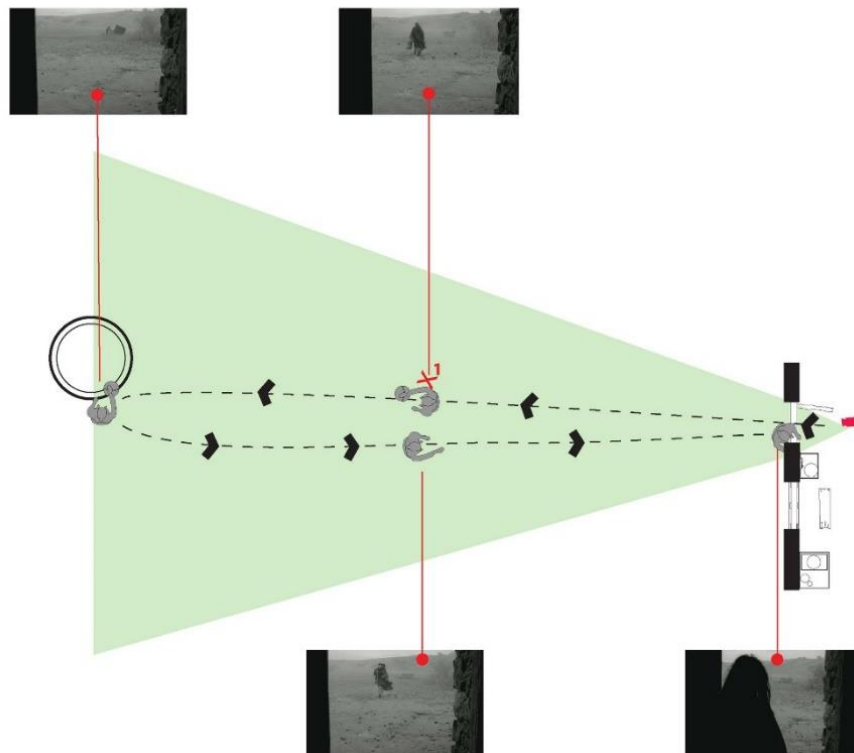


Figure 47. Cinematic plan of the well-scene in *Turin Horse*. The plan visualizes the first part of the shot where the camera stays behind the door and does not follow the daughter to the well.

²³⁰ See <https://www.youtube.com/watch?v=tYPINU92OIg>.

The daughter opens the door (see the cinematic plan of the scene in **Error! Reference source not found.**). The sound of the strong wind invades the protected interiors, and the daughter goes toward the well with a bucket in her hand. It is the only moment that Tarr's camera stands behind the door and does not pursue the characters who are passing through a door (**Error! Reference source not found.**). The camera hesitates behind the door and frames some parts of the wall and the door frame to guarantee that the audience is watching the event from the inside of the cottage with a secured distance from the event. It will be surprising to the audience as it is the first time that the camera does not follow the characters and remains inside. The daughter throws her bucket into the well, which the spectator observes from a far distance, in a long-shot. When she realizes that there is no water, she runs toward the door. The spectators do not know what has happened yet and the frigid acting of the actress intensifies the heaviness of the scene. The daughter arrives at the door, quite close to the camera in a silhouette close-up with the well in the background. The daughter calls his father: "Come here! Come quick! The Well."(**Error! Reference source not found.**).

At this point in the film, the audience discovers what has taken place and is confronted with it. Suspense builds as the spectator wants to see what happened to the well, but Tarr makes his audience wait for a few seconds at the door frame until the father arrives. The father enters the frame after a while and goes toward the well (see the cinematic plan of the scene in Figure 49). At this moment, Tarr does not cut to the other part of the wall. Tarr's camera follows the father as he leaves the door frame, the pitch of the wind increases, and the camera becomes shaky (Figure 50). This passage, paralleled with the sound effects, enhances the shattering effect of the shot. The horrifying fact that the well is dry is reinforced by the audiovisual and spatial passage from one space to the next (where the devastating event is placed). The passage is a key part of this encounter and amplifies its effect (highlighted through the yellow circle in Figure 49). The father and daughter see the well and come back to the house. Once again, the camera tracks them as they pass through the door and enter the cottage (highlighted through the orange circle in Figure 49). The daughter shuts the door and the sound of the wind almost stops. At this point, the interior space has a different character. It does not express a sense of protection against the apocalyptic storm anymore; it becomes a place of anxiety and consternation accompanied by a deathly silence.

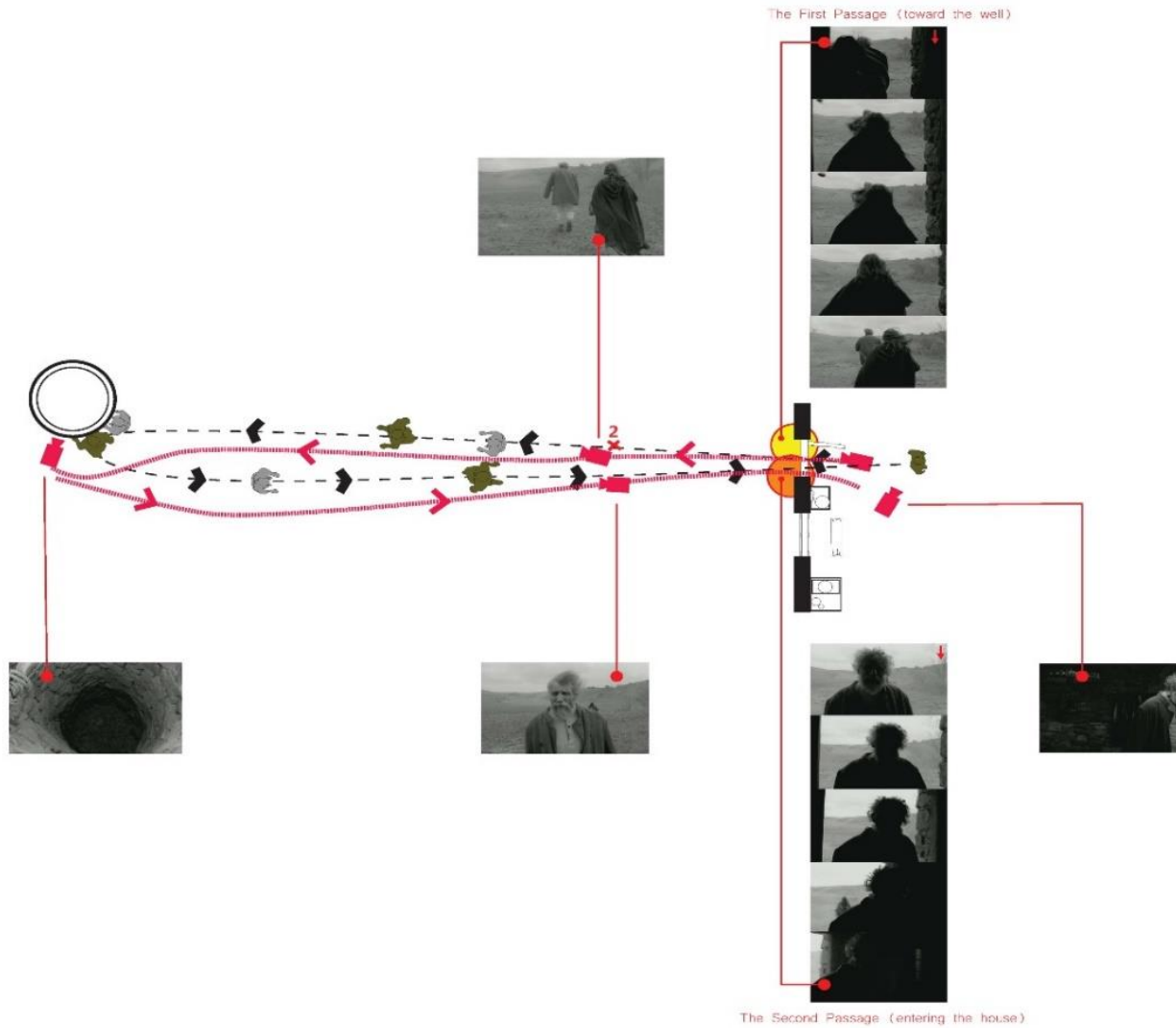


Figure 49. Cinematic plan of the second part of the well-scene where the camera follows the characters towards the well and on the way back. The two passages that the camera takes are highlighted through the yellow circle (to the outside) and the orange circle (to the inside) on the plan.

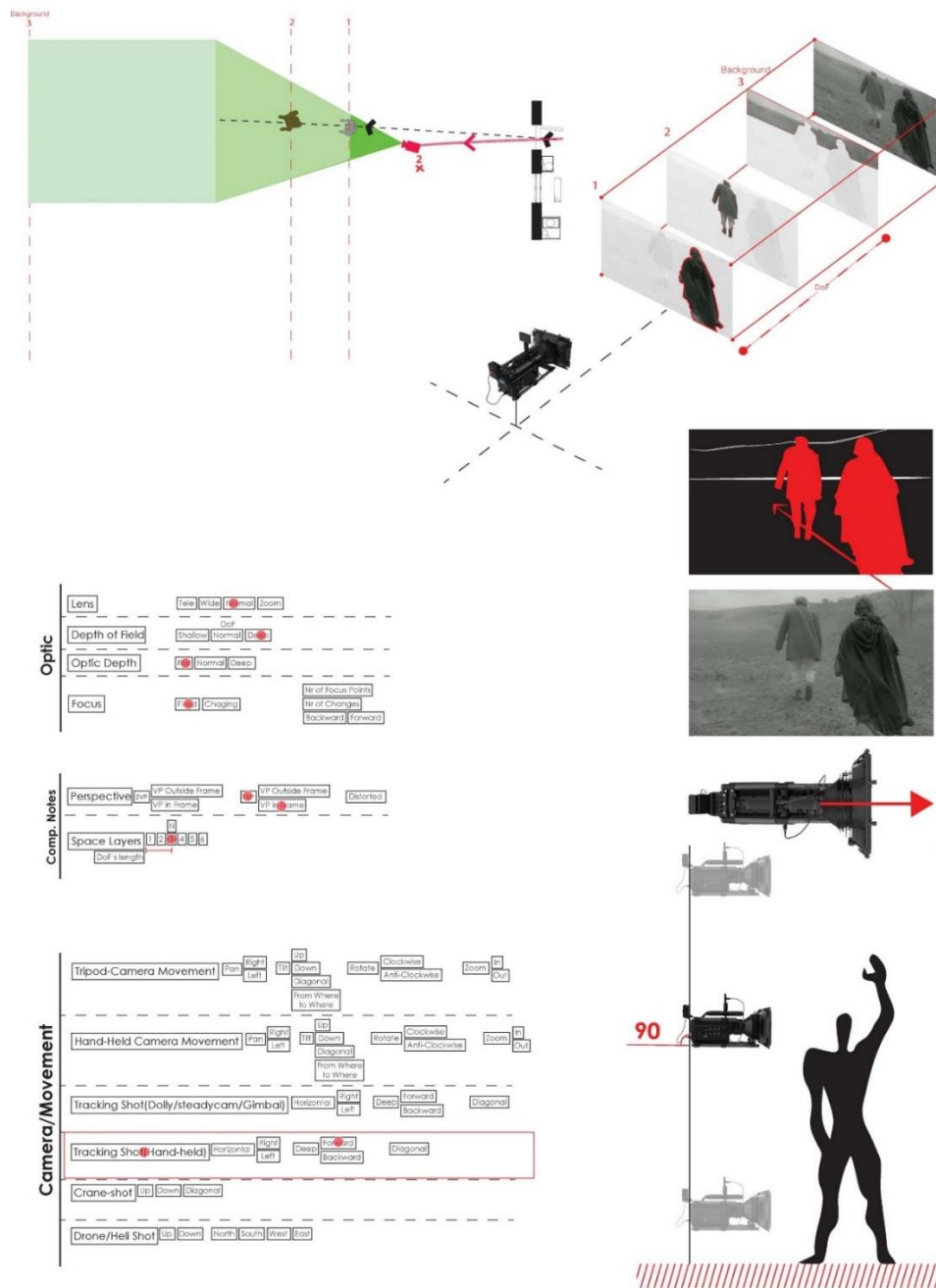


Figure 50. Analysis of the scene through the film architecture-matrix. The exploded diagram (on the top right) of the shot shows that the shot has three spatial layers which draw the eyes of an audience toward the background and the depth of the shot. As demonstrated in the camera-height diagram (bottom right) the camera remains at the height of a human figure as if the camera is someone following the characters. The abstract diagram in the middle displays that the whole visual dynamism of the shots is organized toward the well. The optic and the compositional checklist (bottom left) remains the same as the previous moment of the shot and keeps everything in focus through a normal lens. The optic depth of the shot is almost flat as the lens is not a wide-angle one.

Angelopoulos' approach regarding doors and thresholds shares commonalities with Tarr, although his spatial strategies and methods are not as radical. Nonetheless, Angelopoulos, at least in his last three films, is willing to replace the cut that happens on the action of passing through a door with camera movements following the characters or introducing spaces.²³¹ He cuts rarely on the actions related to opening/closing the doors and usually cuts where the shots lead to another scene taking place somewhere.²³² Angelopoulos' camera pursues choreographed movements heading out toward the spaces by passing through various doorframes and gates. By doing this, he engages his spectators not only in the space of the event and the space that we will encounter in the next twenty seconds behind a door, but also in the *transition* between these two spaces. In many of Angelopoulos' scenes, a door, instead of being a reductive cut, is uplifted to an instrument of an authentic transition.

This strategy is traceable in various Angelopoulos' films. For instance, in *Eternity and a Day* (1998), the director's camera, in all the cases, for except two, passes through the doors with or without actors where a passage should be provided. In the scene where the character Alexandros visits his daughter in her apartment. The scene is supposed to have a significant emotional effect on spectators. In building the emotional effect, Angelopoulos considers the entering passage to the apartment as part of the unsettling experience of Alexandros when he hears that his childhood house is sold. Alexandros waits behind the door. The daughter opens the door. As Alexandre enters the apartment, the camera follows them, and Alexandros hugs his daughter. The

²³¹ *The Dust of Time* (2008), *Eternity and a Day* (1998) and *The Weeping Meadow* (2004).

²³² For example, just three times in *Eternity and a Day*.

camera keeps moving steadily toward the living room where the conversation between Alexandros and his daughter ensues (Figure 51).²³³



Figure 51. Screenshot. *Eternity and A Day*.

²³³ Watch the scene <https://www.youtube.com/watch?v=ij1ClRni4C0>.

4.1.3.2 Durable Doors

In addition to the explicit attention Tarr pays to the notion of passage through doors, his films are replete with the relatively long-lasting shots in front of closed doors. There are shots in which his camera stays in front of closed doors, without filming a specific action, for more than ten seconds, as if the camera is hypnotized by the door. In cinema, when a door gets closed and after the act of closing, there must be another scene to cut to. An editor places a cut, or a transition such as a dissolve or fade, that swiftly transfers the door shot to the next scene. Contrary to this unwritten film grammar technique often followed by editors and directors, Tarr's camera hesitates in front of a door that has been closed. Tarr himself explains the role of the durable door shots in his films:

A door is an invitation. It invites you to enter. But what happens when you cannot enter? When the door is closed, and you cannot enter, you start to contemplate. You start to imagine what is behind the door. Your imagination enters the room where you cannot enter. The door becomes a door to illusion. Jean Tardieu has a poem; "there is a wall, what is behind it?" I think the doors also function this way. The shut doors become walls and invite us to imagine what is behind ...staying in front of the door is also an empty moment that you give to your audience to breath... to think about what happened before and what will happen after... the door itself is also very interesting, the material used in it, its shape, if it is new or old... it tells a lot of stories by itself.²³⁴

In Bela Tarr's *The Man from London*, the most important scenes of the film take place behind the closed doors of a hut.²³⁵ The camera stays in front of the door and the only information an audience receives is the image of the door and the

²³⁴ Tarr.

²³⁵ Watch the scenes on <https://www.youtube.com/watch?v=64hhTkd9yNo&t=297s>.

sounds being transmitted through the door. The spectators face the door in two scenes. The first time is when Maloin (played by Miroslav Krobot) kills Brown (János Derzsi) and finds Brown's corpse in the hut. The camera follows Maloin to the hut in a tortuous movement. As Maloin unlocks the hut the camera goes very close showing an extreme close-up of the locker. We see Maloin standing at the door, with the door ajar, calling Brown. Maloin enters the hut and the camera turns around the door using the door as a pivot for its circular movement and finds a point where the door can be framed from the frontal view. The camera lingers in front of the door for one minute and twenty seconds.²³⁶

During this period, we only see the door and hear the sea. Tarr's spectators are invited to contemplate, imagine and ponder what is going on behind the closed door. This shot, to the author's knowledge, is the longest in the whole history of cinema that its sole protagonist is at a door. While the camera is waiting in front of the door, it shakes subtly, enhancing the suspense and the imagination about the unseen and unknown. Tarr, adopting the door, disrupts the intrusive voyeuristic gaze of the spectators. Moreover, stimulating their imagination and obstructing their view of the event, he introduces an extremely active off-screen space that is only reachable through the potential of the closed door. After one minute and two seconds, Maloin emerges and closes the door as he is breathing with difficulty. The camera travels back to the extreme close-up of the locker, Maloin locks the door. The camera, slightly shaking, continues to record the close-up of the locker for twenty-two seconds.

The second time we see the door in the film is when Maloin confesses to having killed Brown. He takes Morrison (the inspector) and Brown's wife to the hut. Again, the

²³⁶ See the scenes here <https://www.youtube.com/watch?v=WqRLZjJZXuc> and <https://www.youtube.com/watch?v=9m3iSuiLEoE>. In a video-essay supervised by the author of this thesis, Albertus Magnus Yudhistira and Ryan Roderick analyzed the door scene. See <https://www.youtube.com/watch?v=xYh99xBS3Ys>.

camera follows a winding way, tracking Maloin, Morrison and Brown's wife, to the hut. The camera gives the same close-up of the locker. Maloin opens the locker, Brown's wife enters the hut and stands at a farther distance from Maloin and the door. This time, the camera films the door from another angle while spectators are doomed to wait for discovering what will happen. For the next fifty seconds, Tarr makes the spectator wait, viewing a shot framing the door from the lateral view with the motionless Maloin in front. After Morrison and Maloin's wife exit the hut, the camera returns back to its initial position on the locker's close-up, then pursues Maloin in a close-up.

A closed door has huge dramatic potential. It makes an audience impatiently wait for the moment when the door opens. In the case of Tarr, the lingering moments do not necessarily lead to a moment of disclosure; these waiting intervals make an audience imagine while staring at the door surface. These instances trigger an audience's imagination about what is happening behind the door. An audience is forced to accept the strength and impenetrability of the doors, which in this case functions as a visual barrier that bars one from entering. The durable doors of Tarr are successful because they give rise to potential instead of actual. It is by waiting behind a close door that an audience is given a task, the task to contemplate as opposed to visually (or physically) enter a place. Although Bela Tarr himself considers the long periods of lingering behind the closed doors as moments of "breathing" and taking a break from a narrative, these can be construed as breathing a moment of involvement too. An open door that fully discloses the action and space behind takes all the responsibility whereas an impenetrable surface of a closed door gives an audience a task, the task of contemplating about what is concealed by the door.

4.1.4 Conclusion

In this chapter, it was demonstrated that doors and thresholds in mainstream cinema are used as editing devices cluing a cinematic cut or transition between spaces and actions. Open as well as closed doors in films operate, as Siegert discussed, as media. By

regulating the audio-visual information perceived through doors, open doors frame what an audience is supposed to watch and hear and ajar and shut doors mask information to control the engagement of an audience within the space of film and simultaneously activate the off-screen space and, subsequently, the viewers' imagination. Doors, as obstacles between a character and an imminent scene, are powerful instruments to generate suspense and make a spectator anticipate.

Aside from what doors and thresholds, as architectural devices, offer to the world of cinema, how the spatial experience of doors is illustrated in film is a significant study area. It was discussed that the physical passage through a door or threshold is an authentic architectural experience that is often neglected in films. The passage through thresholds in the conventional methods of filmmaking and film editing is usually equivalent to a cut and is rarely filmed by a camera in its entirety. In the second half of the chapter, the experience of passing through thresholds and doors in the cinema of Tarr and Angelopoulos was examined. It was shown that Tarr and Angelopoulos, advertently, do not truncate and reduce doors to a cut, rather, through a specific filming strategy with the camera passing through thresholds, the physical and audiovisual experience is accentuated. This chapter argued that a different position toward the notion of time and movement in the films of Tarr and Angelopoulos resulted in an unprecedented cinematic depiction of an architectural element and its associated experiences. The moving cameras of Tarr and Angelopoulos and the prolonged timing of their shots, in the case of doors and thresholds, allow for emphasizing a spatial experience that will be glossed over in the conventional methods of storytelling.

The interview with Tarr, interestingly, highlighted that these filmic decisions are not chosen arbitrarily but they are deliberate aesthetic and ideological decisions

stemming from a systematic way of thinking about architecture and filming it.²³⁷ While these filming strategies have the potential to be transferred to the field of architectural filmmaking, the more crucial lesson to be learned is that these filmic strategies need to be designed, and at times invented, in a direct relation with two aspects. Firstly, a filming approach toward an architectural element should stem from the features of the specific species of space. And, secondly, it should be designed by developing an awareness about how the architectural element is filmed in other contemporary and historical cases of cinema.

²³⁷ See the section 'The Authentic Passage' where Tarr defends the idea that this passage through doors and the audiovisual transition is part of our experience of both inside and outside. In fact, how an inside transitions to an outside is welded to the identity of these opposing notions.

4.2 Windows and Openings

Architecture is the capacity of enveloping and enclosing an untamed and unconstructed space meaningfully. The enfolding essence of a building protects its inhabitants from social and unpredictable changes in weather. However, what makes built enclosures liveable is the possibility of creating openings, holes and apertures in the walls. While the enclosing components are designed to shield residents of a house against natural and climatic threats such as sun, water, and heat, the openings are supposed to catch light, air and breeze for the interior spaces.

In *The Experience of Landscape* (1975), the geographer Jay Appleton argued that human beings have a bio-historical tendency to find the settings suitable to live which reflect the sense of refuge; being protected without being seen, and, more importantly, prospect; having a view on the outside world.²³⁸ Appleton's 'prospect and refuge' theory explains the primordial and prehistorical tendency of humans that justifies the act of blending solid masses and openings, the very foundation of architecture. The obstructing characteristic of the enclosing architectural components, solid walls, impenetrable ceilings and floors provides a compelling response to the basic need of being protected. In effect, as the walls separate, windows integrate and "serve as a means of disclosure for communicating between outside and inside".²³⁹ As architect Rob Krier, suggested "to the same extent that a room is created by its wall, it is enlivened by light" coming in through its windows.²⁴⁰ Openings give the residents of a house the possibility to know, observe, control and communicate with the location of the house as well as satisfy the crucial need of viewing outside. Openings are originated for the sake of viewing outside but indispensably display inside too. And, it was the act of "being

²³⁸ Jay Appleton, *The Experience of Landscape* (Chichester, New York: Wiley, 1996), 37-50.

²³⁹ Hochberg et al., *Open/Close: Windows, Doors, Gates, Loggias, Filters, Scale*, 8.

²⁴⁰ Rob Krier, *Architectural Composition* (London: Edition Axel Menges, 2010), 102.

seen” that resulted in the invention of window bars, curtains, screens and other “protective” and “filtering” components.²⁴¹

Windows are fundamental elements that influence the overall impression of a building. They are central to our perceived image of the exterior of a building, and the interior spaces are arranged on the basis of the interaction between them and solid masses. It is through windows and openings that a building, the amalgamation of closed and open surfaces, shapes its appearance on the façade and infuses liveability into its interior spaces. The duty of openings is not only lighting interiors, facilitating ventilation or, simply, enabling the users to view. Architect Yushiharo Tsukamoto, in his *Windowscape: Window Behaviorology* (2011), claims that windows are remarkable “behaviorological” instruments. The condition, configuration, number and scale of the windows discloses the architectural style of a building and the historical, cultural, social, climatic and even the religious behaviors of people owning the windows.²⁴²

Windows hint at the atmosphere of interior spaces and the way in which they are lived. Therefore, the “fragile eyes of the house”, as Pallasmaa called them, do not just “preselect and preview the landscape for inhabitants’ eyes”; windows are the mirrors of the soul of a building.²⁴³ Furthermore, on a larger scale, the repetition and rhythmicity of multiple windows on the walls of buildings in a street or city is a traceable thread that demonstrates diverse aspects of the real character of an urban environment. Whereas wide, abundant and inviting openings on the facades of buildings in a street are cues to a welcoming attitude, “less generous”, smaller and introverted openings are symptoms

²⁴¹ Michael Tutton et al., *Windows: History, Repair and Conservation* (Shaftesbury, Dorset: Donhead, 2007), 18. Hochberg et al., *Open/Close: Windows, Doors, Gates, Loggias, Filters, Scale*, 8.

²⁴² In *Windowscape: Window Behaviorology*, Yushiharo Tsukamoto argues that “human behaviors can be observed from how people are drawn toward windows and how they adjust the opening and closing”. Yoshiharu Tsukamoto, *Windowscape: Window Behaviourology* (Singapore: Page One, 2011), 26.

²⁴³ Juhani Pallasmaa, *Encounters 1: Architectural Essays* (Helsinki, Finland: Rakennustieto Oy, 2012), 62.

of less accessibility, a lower level of public and private interaction and an inactive surrounding/interior dialogue.²⁴⁴

4.2.1 Window as [S]pacemaker

The significance of studying windows, and the themes related to them, is not limited to their extremely formal and functional usefulness. The importance of this architectural element lies in their crucial capacity of space-making. Regardless of how high a window is and where it is located, it has an active relationship with the spaces under it. Windows activate both interior and exterior spaces, activate them in a meaningful manner, and indicate the spaces that are to be used. In fact, how a window activates a space can be as crucial a subject of study as the window itself.

Windows have played a central role in activating spaces with social or political significance. Political history abounds with the moments when kings, generals, presidents and rulers spoke to their people from a central window located high above the crowd (Figure 52). The political windows display the spectacles of the politicians and rulers and transform banal urban environments into a sort of open-air theater in which people gather to gaze at what is framed by a window. In a similar way, the windows of the Red Light district of Amsterdam activate and order the spaces under the windows for a different purpose (Figure 53). In the case of the Red Light district, the bustling and congested spaces in front of windows represent the complex relationship between commodified sex and the contemporary city. While the political windows organize the use of urban spaces for public proclamations of powerful leaders, the windows of the Red Light district function as erotic viewing machines luring customers into the buildings.

²⁴⁴ Hochberg et al., *Open/Close: Windows, Doors, Gates, Loggias, Filters, Scale*, 10.

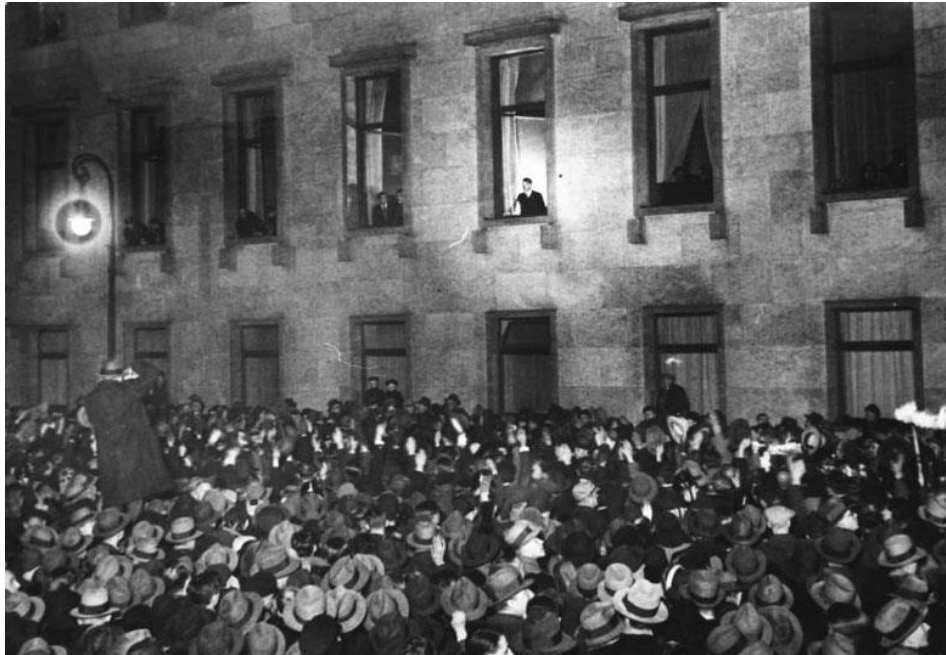


Figure 52. Adolph Hitler standing speaking to the crowd. © Robert Sennecke. 1933.



Figure 53. Amsterdam. Red light district (*De Wallen*). People looking at prostitutes at the windows. Image from <https://edition.cnn.com/travel/article/living-in-red-light-district-amsterdam-netherlands/index.html>.

The manner in which windows activate and shape spaces around themselves is an inseparable part of the history of this species of space. For example, in the observations of architectural historian, Markus Hattstein, spaces activated by the windows are as notable as the windows themselves. He describes windows of rich Roman houses as “opening[s], holes or cavities on a wall through which the house can look outside to give alms to the beggar and to throw money or food”.²⁴⁵ Such a description of a window emphasizes not only the social function of the window but also the space connected to and generated by it. Hattstein’s account renders the window-made spaces imaginable as crowded gathering points for poor people and beggars, highlighting the activated physical space by the windows as well as social relationships formed by them.

In certain countries, spaces around windows were considered and built alongside the window itself. In traditional Romanesque architecture of Eastern Europe, building walls were remarkably thick and windows were made in a cavity to accommodate at least two people (Figure 54).²⁴⁶ Similar traditions exist, for example, in the design of bay-windows or bow-windows, in the architecture of other places and other styles. For locating a window in a wall, firstly, a space had to be cut into the wall. Thus, the act of creating a window was associated with making a space for the window. In fact, a window was not treated as a minor, thin and flat element that simply assembles on the wall after the whole room is designed, rather as a space, with a space around it and with the consideration of the space it generates.

In contemporary architecture, in contrast, the attitudes toward fenestration turned the space-making quality of windows into a neglected aspect. Michael Tutton, architect and historian, criticizes the “campaign focused on obtaining the maximum amount of

²⁴⁵ Markus Hattstein, "Windows," in *Architectural Details*, ed. Markus Sebastian Braun (Berlin: Braun, 2008), 9.

²⁴⁶ Tsukamoto, *Windowscape*, 35.

sunlight” which has reduced the window to a “standard device to admit a measurable quantity of air and light” and calls for considering other possibilities offered by windows.²⁴⁷ Similar to Tutton, Krier laments the treatment of modern windows and argues that the “window is not merely a hole in the wall, it defines a real space” and the design of interior space should take into account the position of a window and the effect of the penetrating light the window lets in.²⁴⁸

Nonetheless, a window, whether in the designated cavities similar to the ones of traditional Romanesque or on a thin flat wall, works as a guiding clue for organizing a space. The location of a window on a wall, its form and the quality of light and air injected into a space by it, affects the arrangement and spatial configuration of the room. Opening and closing windows on the walls impose an invisible spatial guide on the arrangement of a room. Windows dictate how a room and its interior objects, furniture and layout should be ordered.

²⁴⁷ Tutton et al., *Windows: History, Repair and Conservation*, 47.

²⁴⁸ Krier, *Architectural Composition*, 102-05.



Figure 54. Zagreb, Croatia. The cavity (space) created for the window that entails two benches inviting the residents to stay. ©Yoshiharo Tsukamoto.

4.2.2 Windows of Cinema

Windows are space makers in cinema and play vital roles in the narratives and spaces of cinema. In every cinematic shot that entails a window within the camera frame, there are certain features that should be taken into account. Firstly, the spot and the space generated in front of the window that includes a set of objects and character(s) is what influences the image of the window in a scene. Spatial configuration, juxtaposition, distances, directions and the relation of elements to each other leave its own imprint on the cinematic image of a window. Secondly, the subject of viewing (who is looking at/through a window) is what should be identified. Who a viewer is (camera's eye, spectator or actor) and where the viewer is (outside, inside, close to the window or far from the window) are critical aspects to be considered. Another important feature related to windows and their image in film is the content of a window – the image a window shows. Whether from the outside or inside, what windows demonstrate is a key aspect that determines a window's character. From a functional point of view, windows simply mingle inside and outside, but, windows entail multiple semantic and metaphoric facets. They can amalgamate the inner world and the outer world, the reality and the dream, actuality and the future, everyday life and memory and protected interiors and a threatening environment. The following section discusses some of the dramatic and narrative capacities of windows.

4.2.2.1 Dramatic and Narrative Potential of Windows

Angelopoulos benefits from windows and their metaphoric potentials in his films. In many scenes, his windows reveal the atmosphere of a house. The use of windows in his films, at times, provide a sneaky gaze into a café or a bar or gives the lovers a frame that makes their furtive communication and stealthy relationship possible. But, houses, for Angelopoulos, are summarized in and represented through their windows. In *Trilogy: The Weeping Meadow* (2004), Angelopoulos puts immense emphasis on the windows of Spyros' house which is located in the middle of the village. The house represents the

image of a lost home for Eleni (the main character of the film). During the film, she revisits the house three times and every time the mental state of the inhabitants of the house and the spirit of the family that used to live there is communicated through the image and condition of the windows of the house (Figure 55).



Figure 55. Screenshot. *Trilogy: The Weeping Meadow*. The image shows the house in the middle of the village. The house always attracts spectators' attention in the symmetric shots through its big windows and the conspicuous central *porte-fenêtre*. In this scene, for example, through the action of closing the curtains, Angelopoulos demonstrates how the family is trying to avoid the gaze of the people of the village and their judgment. In fact, the dramatic relationship between the house inhabitants and the residents of the village is depicted through the image and condition of the windows.

In the scenes that the house is submerged by a flood, its windows are densely engaged in representing the image of the house and perform as a mental and physical barrier to the local area. For example, the house dwellers close the curtains when they want to detach themselves from the community.²⁴⁹ After Spyros' death, when Eleni and

²⁴⁹ Watch the scene here <https://www.youtube.com/watch?v=upeNF6xKRGI>.

her partner return to the village for Spyros' funeral, the central *porte-fenêtre* of the house becomes broken by the villagers who do not accept the intricate relationship between Eleni and her partner and see them as causing Spyros' death. In order to illustrate the image of the convoluted relationships, Angelopoulos' camera draws back from the central balcony window of the house, demonstrating Alexis standing in front of the broken half-open window and portrays the fragility of the relationship between Alexis and Eleni (Figure 56).²⁵⁰

The following day, the same *porte-fenêtre* functions as an important means of egress to escape the flood (Figure 57). We visit the same window in the last scene as well. While Eleni is paddling toward the sunken charred house, once again, the zoom-in shot at the center of Angelopoulos' long-take is the broken frame of the window. The enormous opening on the façade of the house with its window, invites Eleni inside (Figure 58).²⁵¹ Once inside, the camera narrates the entire action through the frame of the window which does not exist anymore. Eleni enters the house through the same window, using the same ladder as was used when left the house. This cinematic strategy to picture the house, drawing the attention to the window and how it relates to the characters and the surrounding, is a recursive motif in *Trilogy: The Weeping Meadow*. It describes a house that is at the center of intrigue. The zooming in and out from this window provides spectators with an immediate visual message about the house and the people that are in contact with it. The window as a recursive visual and dramatic device reflects the spirit of the building and the characters associated with it.

²⁵⁰ Watch the scene here <https://www.youtube.com/watch?v=7Y3O37NU5kk>.

²⁵¹ Watch the scene here <https://www.youtube.com/watch?v=c1nL8HBGccY>.



Figure 56. Screenshot. *Trilogy: The Weeping Meadow*.



Figure 57. Screenshot. *Trilogy: The Weeping Meadow*.



Figure 58. Screenshot. *Trilogy: The Weeping Meadow*.

4.2.2.2 Summarizing Window-shot

In the window-shots of *The Turin Horse*, Tarr's last film, a type of camera movement is discernible which was practiced in his previous films such as *Satantango* and *The Man from London* too. Some of the shots are not window-shots per se, but Tarr adopts the central window of the cottage in *The Turin Horse* to synthesize the experience and the message of the shot, and perhaps the film. Tarr's camera movements are destined to conclude on the window reflecting the apocalyptic nature outside that is tied to the darkness of the interior hell where the only way to survive is living on the semi-rotten potatoes. This sort of shot follows other action and acts as a conclusion to that action. The camera tracks the characters that are involved in various actions in the scene, then follows them as they sit in front of the window. Sometimes, the camera departs from the action of one character and continues with the action of the other one sitting on the stool; the fixed place in the window spot. These camera movements that end on the familiar frame of a character contemplating in front of the window, looking at the storm, transmit the explicit message that everything is contingent on the storm and the only place where the storm is observable is from the inside and through the window.

Tarr's characters spend several minutes in front of the window staring at the devastating storm, the leaves and dust floating in the air, and the bare branches of the tree standing on the remote hill at the very end of the image. The characters' motionless and frigid posture, sitting on a footstool, and their petrified gaze, reflects their ultimate hope that the storm might end. These scenes also implicitly divulge that the endless tempest will bury them in their own house. This recurrent image of the window is an index that transforms the window into something more than a trivial architectural element that offers a glimpse of outside. It is a tool of measurement which not only drives the narrative, it allows the viewer to gauge the amount of danger and risk the situation is to the characters. The father and his daughter are cemented to their stool, which is an unvarying part of the spot in front of the window as if they are doomed to

watch what is happening behind the screen of the window, and, Tarr's camera, as usual, enjoys capturing them they are gazing out through the window.

In one of the scenes, the camera wanders in the room while the daughter is preparing potatoes. When she sits on the stool in an immobile way, the journey of the camera begins. Tarr depicts the daughter from a lateral view and here is the outset of the circular camera journey which reaches a point that reminds us of the same spatial arrangement as was seen in the opening shot of the *Damnation*, the blend of the three experience of viewing in one shot: the opaque landscape at the very background, the window exactly in front of the daughter as a frame, and the daughter sitting on the stool as a viewer watching through the frame of the window. Moreover, the adjacency of the storm behind the window and the very tactile character of the carefully textured stone wall points out the proximity of the perilous, incipient event. Finally, the camera movement ends at a fixed position maintaining the same symmetric composition for one minute.

The same use of a window happens in the scene when the daughter sits on the table and is having potatoes. As she goes towards the sink to wash the plates, the camera follows her and at a specific moment stops tracking her action, drawing the attention of the spectator to the father on the stool and in front of the window, creating the same visual composition as was depicted in the last discussed shot (Figure 59). These shots function as a sort of cinematic punctuation in the film. The director narrates a series of actions in a scene, then, the camera ends up in front of the window with one of the characters. This pattern assists Tarr to summarize a scene and at the end of all of these scenes, he returns to the main problem that the characters are facing, the tempest viewed through the window (Figure 60). The window shots perform as the ending of the scenes, conveying that the everlasting battle between the inside and outside or nature and the built still does exist.

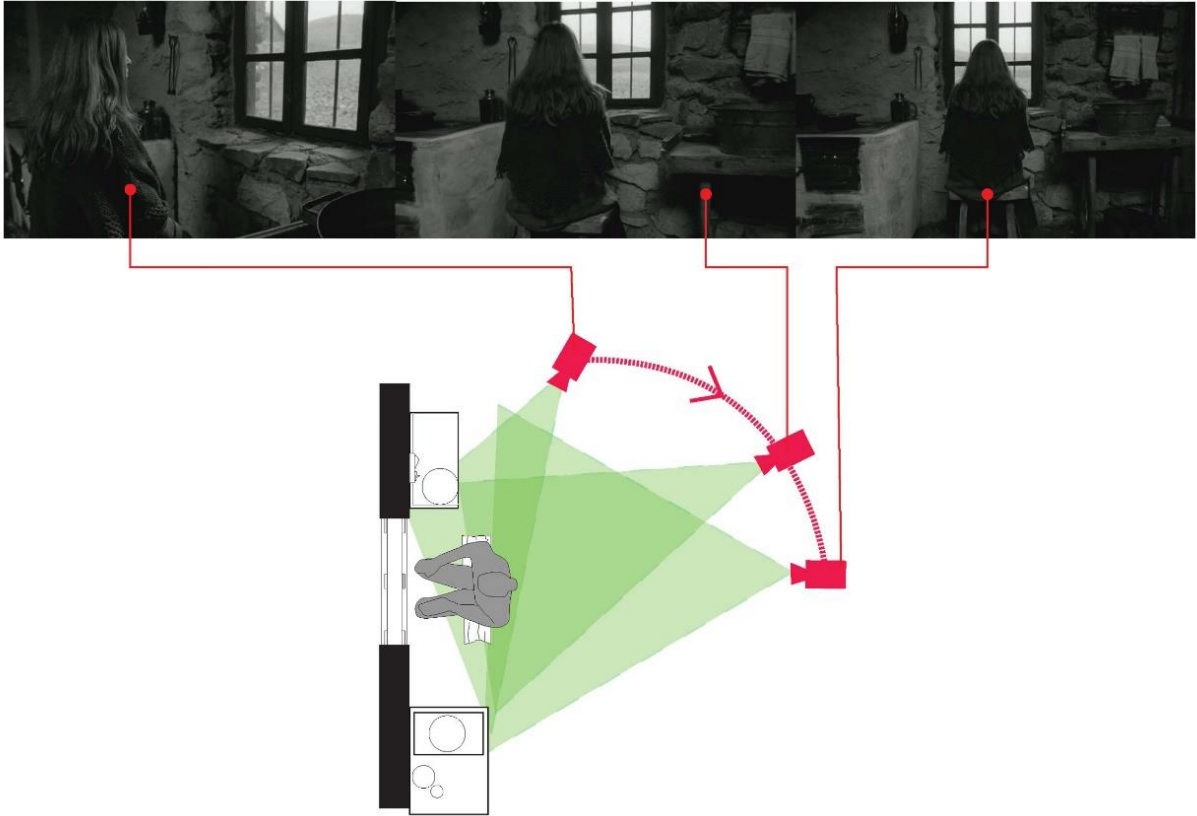


Figure 59. The the cinematic plan of the shot.



Figure 60. Screenshot. *The Turin Horse*. Two other examples showing the characters in front of the window with the same *mise-en-scene*.

4.2.2.3 Windows, Dream, Memory and Imagination

Windows offer extremely utilitarian opportunities to buildings and their users. In parallel with their purely functional features, windows undertake another crucial task; the introduction of the *image* of outside to interior spaces. Krier wrote that windows frame a “certain part of our environment and makes it into a kind of picture, but one which is changing constantly, very much in contrast to the motionless painting on the wall”.²⁵² A window contaminates the interior spaces with the moving images of the outside and combines two different types of experiences. Krier describes the experience of approaching a window as “we are no longer inside, not yet outside, behind us lies the protecting room and in front of us the exterior world”.²⁵³ As Krier explains, the combination of the framed image of distanced outside and the interior spaces occupied by a viewer gazing through a window generates a unique psychological and experiential encounter.

Tsukamoto, in *WindowScape: window behaviourology* suggests that the duality of experiences associated with a window “provides us with a moving sense of imagination” and produces an “immersive and poetic” spatial experience.²⁵⁴ In addition to Tsukamoto and Krier other theorists have noted that the amalgamations and simultaneity of experiences provided by windows have the potential to facilitate an unusual reconciliation of two contradictory conditions, imaginary and real.²⁵⁵

²⁵² Krier, *Architectural Composition*, 105. Krier continues his analogy and argues that a painting “is an artistic substitution for what might be seen through a window”.

²⁵³ Ibid.

²⁵⁴ Tsukamoto, *Windowscape*, 21.

²⁵⁵ See Helmut Weihsmann, “Let Architecture ‘Play’ Itself: A Case Study”, *The City and the Moving Image*, ed. Richard Koeck and Les Roberts, 240. Weihsmann claims that “wall openings and other devices of theatrical perspective would create real and imaginary borders between the house and the landscape”.

French philosopher Ellie During argues any act of framing, including the one happening in windows, bridges the two contradictory elements of real and virtual.²⁵⁶ The framing that occurs in windows presents distant, externalized and untouchable landscapes to interior spaces. These landscapes resemble the images of dreams and memory in the sense that they are only an image, out of a viewer's accessibility and touch. The images that are viewed through windows are considered distant as they represent landscapes that are segregated from interior spaces occupied by a viewer, through enclosing walls.

Images viewed through window frames are not merely real things that are present inside, on the contrary, through the mediation of the frame they re-present something else which is externalized. The integration of the mundane setting of domestic interiors and distant (virtual in During's word) images and landscapes framed by a window ties the experience of the gazing through a window to the virtual world of imagination, dream and memory.

The fact that windows, through the visualization of the images of unreachable landscapes, provoke the imagination and contemplation of viewers is underscored by other scholars such as Stephen Parcell. He discusses the vistas and the framed horizons in modern architecture and sees a direct connection between these particular architectural elements and users' ability to concentrate and contemplate. He suggests that in two important villas by Le Corbusier, the horizon wall in the *de Beistegui* penthouse and the window at the very top of the ramp in *Villa Savoye*, there is a "rhetorical trajectory" between the spaces in front of the windows and distant landscapes where "one can contemplate but not reach".²⁵⁷ For Parcell, the poetic affinity

²⁵⁶ Elie During, "Materiality of the Image," European Graduate School, accessed October 15, 2020, <https://www.youtube.com/watch?v=Vf5J-l4DMcI>.

²⁵⁷ Stephen Parcell, "The Momentary Modern Magic of the Panorama," in *Chora: Intervals in the Philosophy of Architecture* ed. Alberto Pérez-Gómez and Stephen Parcell (London: MQUP, 1994), 172-174.

between the distant landscapes and the actual space occupied by a viewer is a unique spatial experience provided by window frames.²⁵⁸

In the encounter with the compound of actual/virtual, distant/present, and touchable/untouchable, the imagination of a viewer is triggered by the act of looking through a frame; the act of masking, cropping, framing and the sheer physical presence of the edges of the window frames is the first thing that activates the imagination of viewers. Merleau-Ponty, in *Phenomenology of Perception*, asserted that our vision, and our mind, are not limited to “edges” and limits of any kind. In Merleau-Ponty’s opinion, it is incorrect to believe that our vision “furnishes stable points”. He shows that we see “as far as our hold on things extends, far beyond the zone of clear vision, and even behind us.”²⁵⁹

Merleau-Ponty argues that we even see what is not expressly seen by us.²⁶⁰ Thus, it is crucial to be mindful of the fact that in the act of masking and framing, what is masked and excluded by the edges of a frame is not totally excluded from our vision. Quite the opposite, what is behind solid walls is strongly involved in the image framed by a window. There is a continuity, or more precisely, reciprocity between the framed and unframed since our vision perceives what is framed and our imagination pursues what is concealed and unframed.

During has explained why the metaphor of window was used by the French filmmaker and cinema theorist, Andre Bazin. During points to the use of the French

²⁵⁸ Elena Dellapiana makes similar comments regarding the window at the very end of the Casa Malaparte, allegedly, designed by Adalberto Libera. She accounts that the window in Casa Malaparte provides a vista that is “surreal”, resembles the “landscapes in a dream” and contradicts the rationalist style of the interior. Elena Dellapiana, “Una Casa Per Te,” *Il Giornale dell' Design* 7 no. 3 (2007), 17-18.

²⁵⁹ Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. Donald A. Landes (Abingdon, Oxon: Routledge, 2014), 227.

²⁶⁰ Merleau-Ponty uses the example of a gramophone playing next door and explains that even the gramophone will be counted in our vision. *Ibid.*

words *masque* and *cache* employed by Bazin and discusses that the use of the word *masque* (mask), and not *cadre* (frame), was a meticulous choice by Bazin. In any frame, including the cinematic screen, Bazin's window on the world, its edges, the shape of the frame and the act of masking and cutting, are as important as what the frame directly reveals. In addition, During argues that the act of masking reinforces the "immersive quality of a frame".²⁶¹

Bernhard Siegert points out the importance of the edges of frames and their relationship with human engagement with a frame itself. In *Cultural Techniques: Grids, Filters, Doors, and Other Articulations of the Real* (2015), Siegert gives examples of two miniatures and elucidates how the edges of frames are transformed into "ledges" to immerse a spectator more effectively into the image. He contends that the edges of a frame operate as "ledges" of a window and absorb the spectator deeply in the content of a frame in the same vein that someone sitting on the ledge of a window becomes part of the experience of the window. Siegert describes the window frames drawn in a miniature, as an element that "invites devotional contemplation" producing a "homogenous continuum between the real space", occupied by a spectator and the "envisioned" and virtual space behind the window's frame.²⁶²

Another agency supporting the hallucinatory effect of windows is the continuity between the spaces of the inside and the distant, or not far but deliberately externalized, images of the outside which forms, as Merleau-Ponty described it, an "infinite,

²⁶¹ Andre Bazin has described cinema as a window onto the world or reality. By using the metaphor of window, Bazin's intention, like other realists, is to imply that cinema should reflect the realities of the world. Bazin et al., *What Is Cinema?*, 30. Elie During, *Im/Possible Films* (Paris: Métis Presses, 2016), 39. Elie During, "Materiality of the Image," European Graduate School, accessed October 15, 2020, <https://www.youtube.com/watch?v=Vf5J-l4DMcI>.

²⁶² The miniatures mentioned by Siegert are the followings: *Christ Being Nailed to the Cross* (c. 1475-80) and *Madonna of Chancellor Rolin*. In both miniatures there is a window frame that causes more engagement with the landscape depicted in the window. Siegert, *Cultural Techniques*, 187.

unchanging and homogeneous space” in between.²⁶³ On the one side, being enclosed in the building does not permit the residents to traverse the distance between what is located in the outside and framed by the window and, on the other side, the presence of those estranged externalized images of the outside as part of the interior spaces entices the imagination of a viewer to fly toward the intangible and untouchable images of the absent, but visible, world.

The following section looks into how Angelopoulos uses the windows vehicles for gluing reality to dream and memory.

4.2.2.3.1 Angelopoulos and The Windows of Dream and Memory

The windows of Angelopoulos do not open only on the reality that exists outside, detached from the interior. The visual permeability of his windows penetrates the surface of reality towards dreams and memories. In several scenes in the oeuvre of Angelopoulos, a window stimulates and conjures daydreaming; in his films, a window is a place where the dream starts and ends. In *Landscape in The Mist* (1988), the dream-like scene of snow that congeals time and people’s activities in the street is first revealed through a window at the very end of the depth of the frame (Figure 61).

A humble balcony window, in *Eternity and a Day*, can bridge the boundless distance between unreachable memories and the miserable and regretful reality. For Angelopoulos, the window is an architectural element that allows him to move the storyline from a cramped post-modern apartment in Thessaloniki to the glamorous

²⁶³ Erwin Panofsky, *Perspective as Symbolic Form* (Cambridge, Mass.: Zone Books, 1991), 18. Using Merleau-Ponty’s discussions, the spatial effect of the windows can be interpreted as a kind of hallucination, as the “phenomenal body is in a constant relationship” with the environment where he/she is present and, when his/her body is divorced by, in the case of the window, looking at the distant images, the hallucinatory effect of “pseudo-presence” takes place. Merleau-Ponty, *Phenomenology of Perception*, 340. Merleau-Ponty mentions few examples regarding schizophrenics and other patient suffering from illusions that their mental issue is associated with and triggered by windows. See Merleau-Ponty, *Phenomenology of Perception* (1945), 340, 334.

memories of the sold beach-house (Alexandros' childhood house). The beginning of the narrative is a memory-scene that portrays a house with half-open windows and *porte-fenêtres* (Figure 62). The camera travels toward one of the windows on the screen. The sound effect discloses that the house is very close to the sea. The entire zoom takes forty-two seconds and when the camera stays on the window someone whistles.²⁶⁴

²⁶⁴ See the scene here <https://vimeo.com/458529489>.



Figure 61. Screenshot from *Landscape in The Mist*. In the image on the top, at the very end of the frame, there is a window that first reveals the snow. Then, it leads to the dream-like snow scene.



Figure 62. The opening shot of *Eternity and A Day*.

We see a boy going toward the beach sneakily descending the staircase. The next shot shows three boys running toward the sea. The camera zooms on the boy swimming in the sea. The last shot dissolves to another shot from the sea and as the camera zooms back, drawing back from a window, we see Alexandros and his maid in his Thessaloniki apartment. Here we realize that the first scene was a memory that began with a shot of the first window and is connected to reality by zooming back from the second window (the window of the apartment of Alexandros). After a short conversation that takes place between Alexandros and his maid, in a two-minute tracking shot, Alexandros arrives at another window listening to a piece of music which is playing in a room outside, in another flat. In the second room, the camera gives a general view of the room, travels towards the window through a smooth and gradual dolly movement. The camera finally zooms to the window where the music is being played. When the camera starts its zoom toward the second window, Alexandros is in the frame but the focus point has changed from him to the window on the other side of the street (Figure 63-Figure 66).²⁶⁵

²⁶⁵ See the scene here <https://vimeo.com/458529489>.

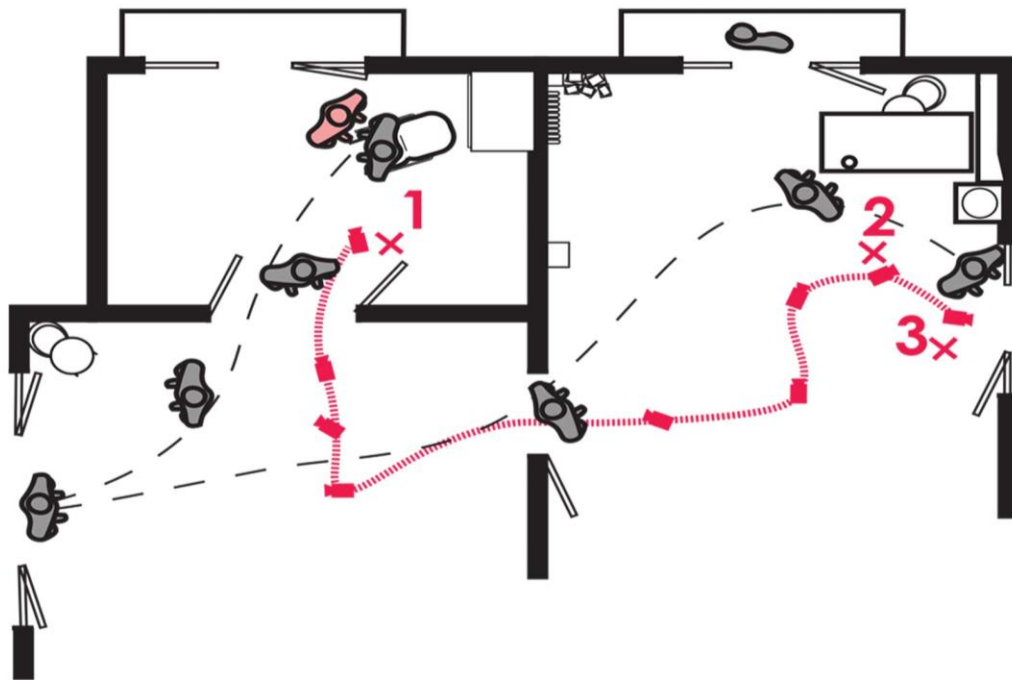
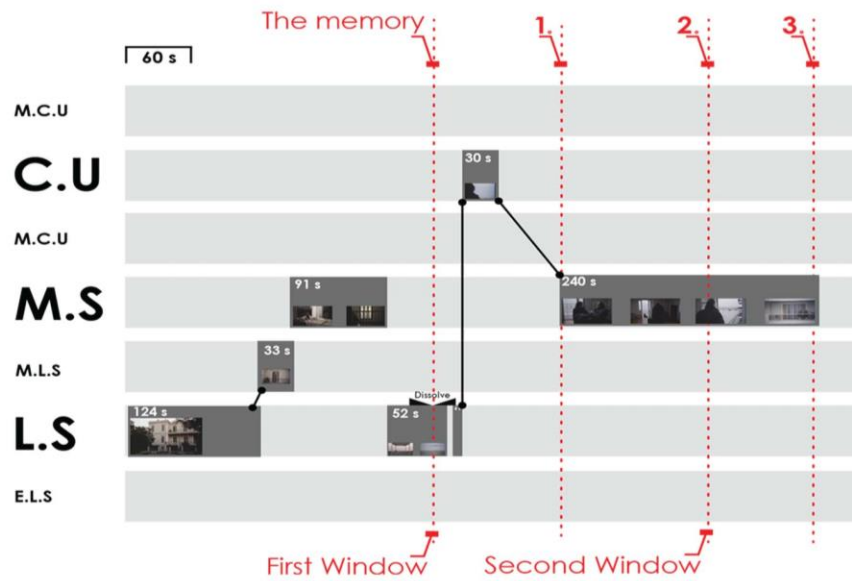


Figure 63. The cinematic plan of the shot in *Eternity and A Day* indicates the camera movement in the scene. Points 1, 2 and 3 are three key moments in the camera choreography that are analyzed in detail in the following figure. The time-scale diagram on the top shows the change of scale and the transitions of the shot and illustrates the position of the windows within the narrative of the scene as well as where Angelopoulos ties the reality to memory.

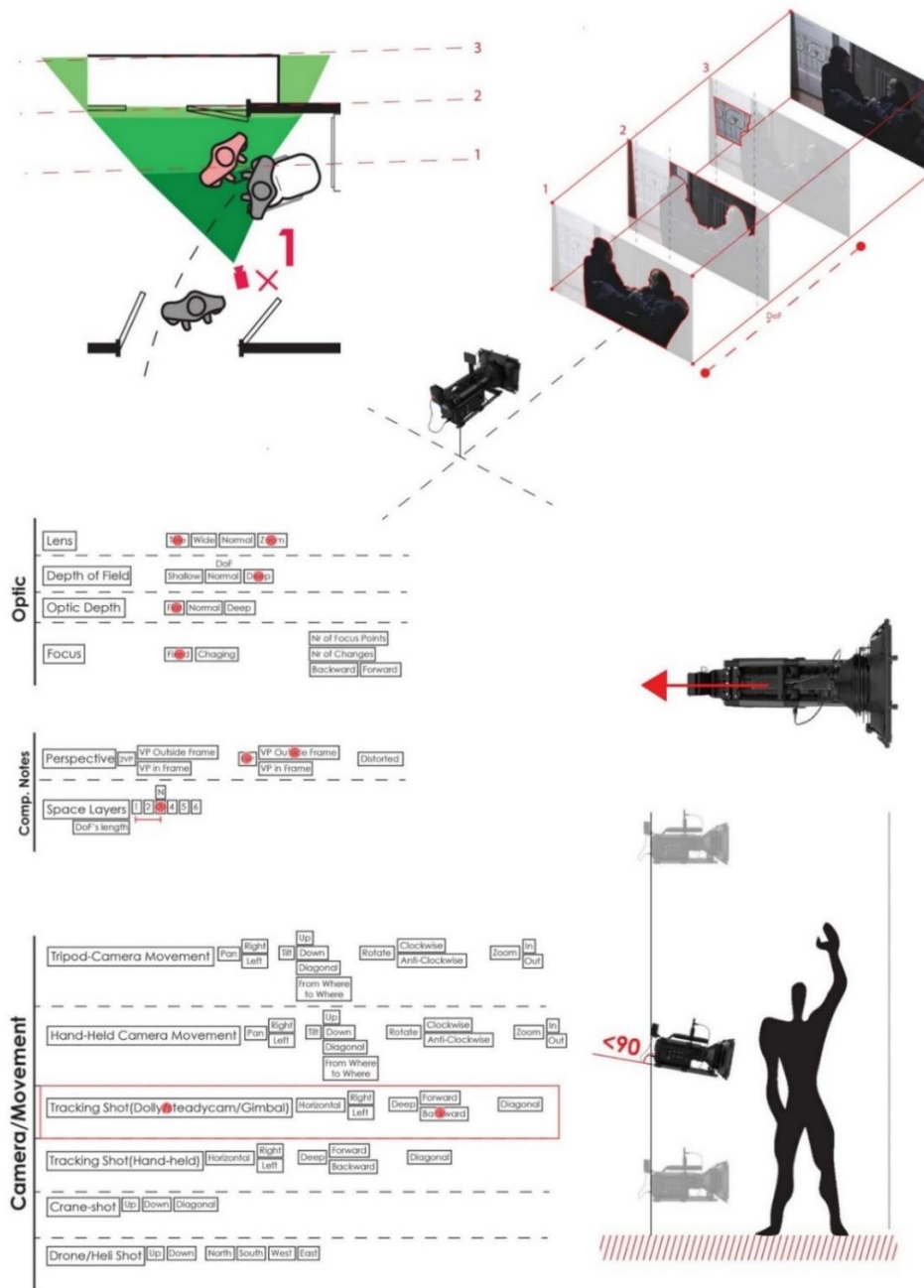


Figure 64. The analysis of the first moment. The camera draws back and we see Alexandros and his maid in the apartment in front of the window. The exploded diagram (on the top right) of the shot shows that the shot has three spatial layers which draw the eyes of an audience toward the background and the depth of the shot. As demonstrated in the camera-height diagram (bottom right) the shot starts with low-angle as the camera draws back. The optic and the compositional checklist (bottom left) remains the same as the previous moment of the shot and keeps everything in focus through a normal lens. The optic depth of the shot is not exaggerated as the lens is not a wide-angle one.

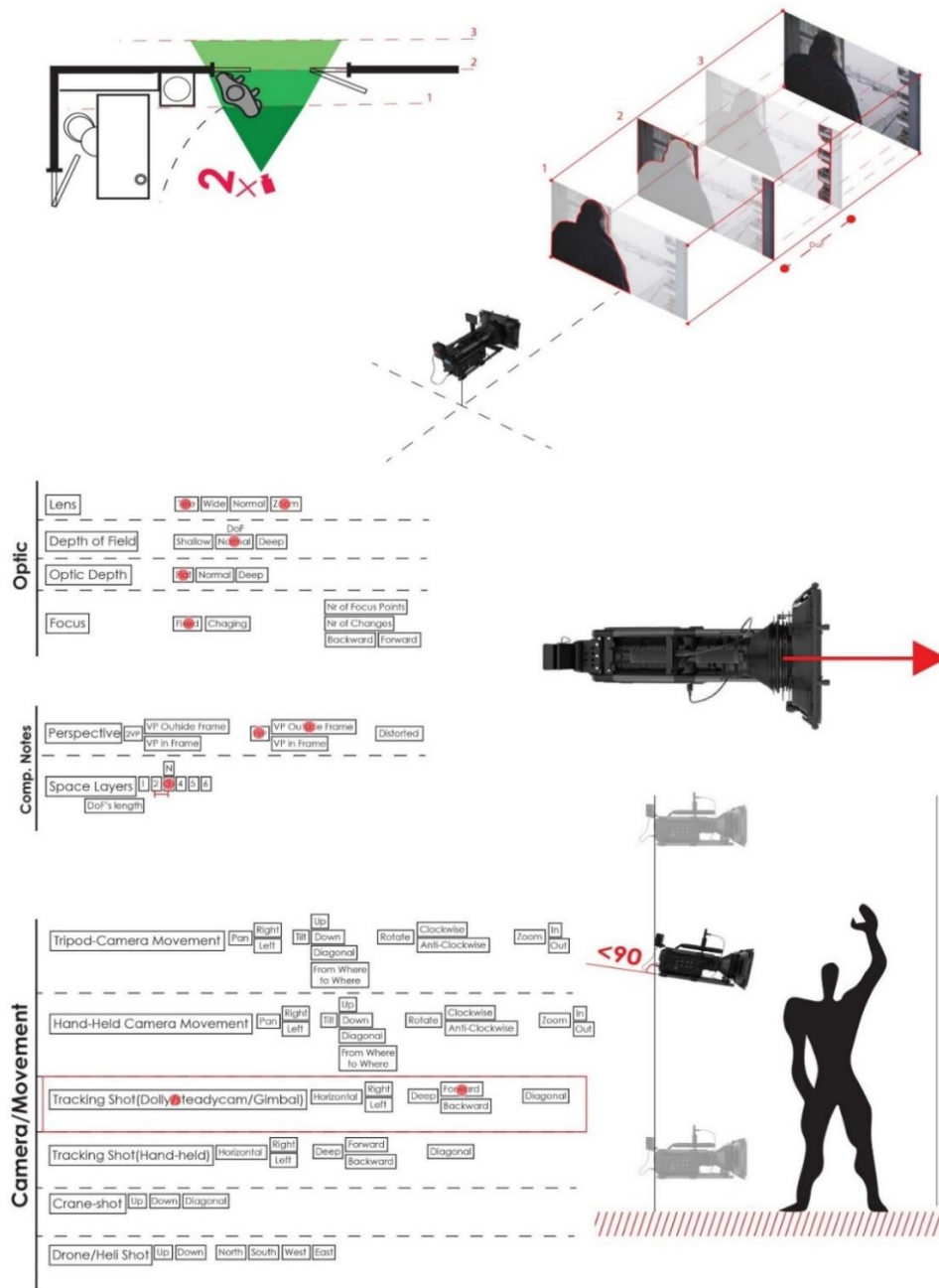


Figure 65. The analysis of the second moment. The camera approaches the window and Alexandros. The exploded diagram (on the top right) of the shot shows the window provides shot with three layers. As demonstrated in the camera-height diagram (bottom right) the shot continues as low-angle. The optic and the compositional checklist (bottom left) remains the same as the previous moment of the shot and keeps everything in focus through a normal lens. The optic depth of the shot is not exaggerated as the lens is not a wide-angle one.

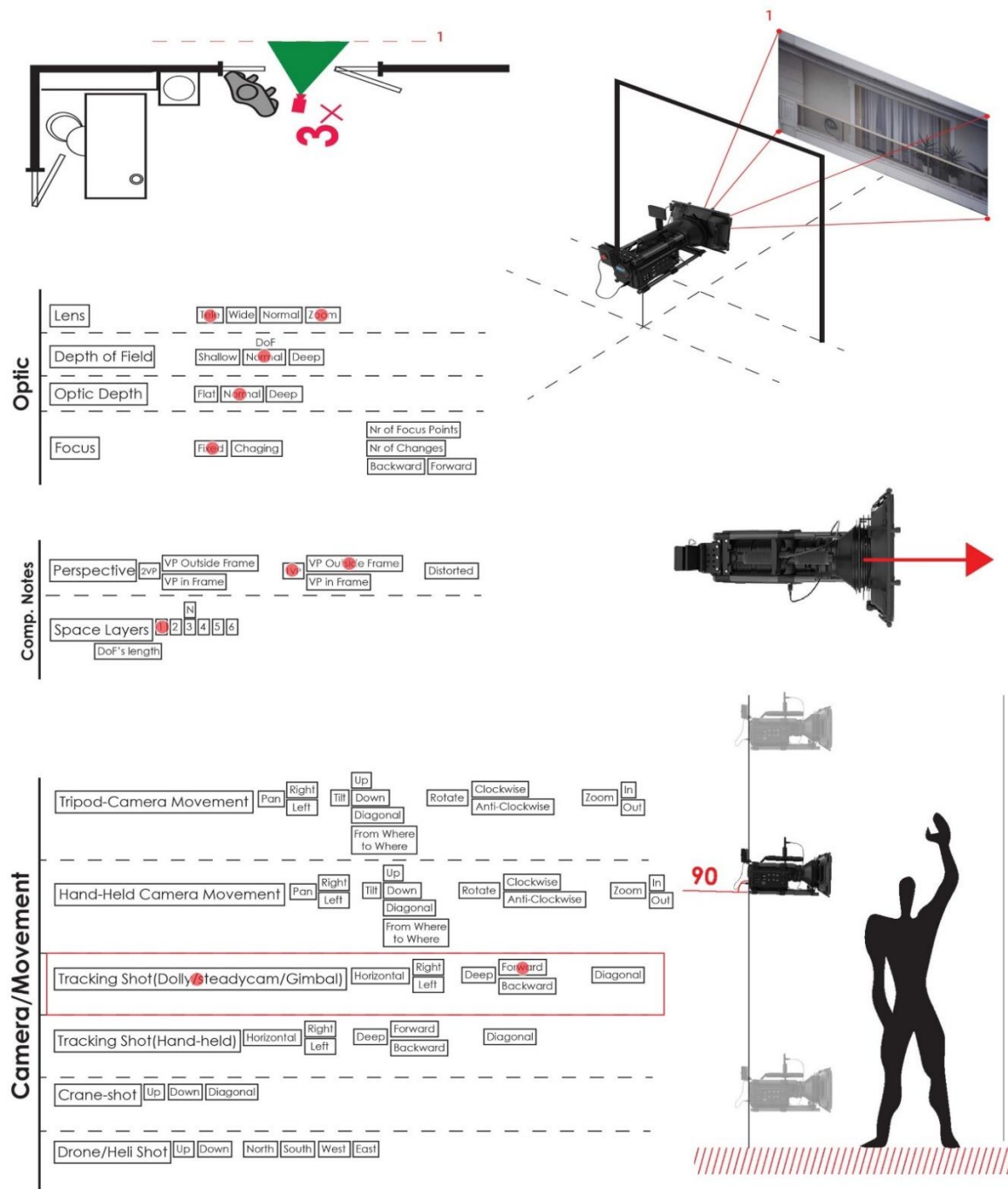


Figure 66. Analysis of the third moment when the camera zooms to the other window and moves toward the window frame. The camera captures the image we see from the window. The exploded diagram (on the top right) shows that the shot is flat and includes only one layer. As demonstrated in the camera-height diagram (bottom right) the shot continues in a straight angle. The optic and the compositional checklist (bottom left) remains the same as the previous moment of the shot and keeps everything in focus through a normal lens. The optic depth of the shot is not exaggerated as the lens is not a wide-angle one.

The same journey back in time to a memory through a window takes place when Alexandros, in his daughter's flat, is recalling his memories with his wife, Anna. Alexandros approaches the window, as we hear Anna's voice, and the camera follows him with a tracking shot which is combined by a zoom to Alexandros' face. Furniture and the setting tell us that we are still in the daughter's apartment, but when he reaches the window, we instantaneously discover that the director has adopted the window as a mechanism to pass from the window of the apartment to the central *porte-fenêtre* of the beach-house. Anna appears behind the curtain and Alexandros draws the curtain. At this point in the shot, Angelopoulos cuts on the action of opening the curtain to another window. In the last shot, we see the couple (Anna and Alexandros) behind the curtain in the balcony as the camera tracks them from the front and zooms out (Figure 67).

The same pattern of establishing a connection between a window and a memory is repeated in another scene when Alexandros visits her mother who suffers from Alzheimer's disease. His mother looks through the window recounting the memories of the beach house, imagining the window of the hospital is the *porte-fenêtre* of the beach-house with its view of the landscape (Figure 68).²⁶⁶

²⁶⁶ See the scene here <https://www.youtube.com/watch?v=WMyLRyVs6Pg>.



Figure 67. In the first three shots, we see Alexandros in his daughter's flat. When he opens the curtain the window functions as a *porte-fenêtre* to Alexandros' memory with Anna in the beach house.



Figure 68. Screenshot *Eternity and A Day*. © Theo Angelopoulos.

This recurrent cinematic formula is applied to the last scene as well.²⁶⁷ Alexandros approaches the camera, staring at it. Simultaneous to his movement, the camera zooms to his face. He comes close to the camera, looking at the lens. The camera, here, functions as the window, this time showing Alexandros' gaze to spectators instead of offering a view from the landscape. This shot is glued to another shot in which the camera is traveling toward the *porte-fenêtre* of the house that we visited several times during the film. The camera goes closer and closer, little by little. The *porte-fenêtre* opens, the camera passes through the window showing Alexandre's mother in the balcony. The camera keeps gliding in the air, passing through another frame continuing its way to a walkway

²⁶⁷ See the scene here https://www.youtube.com/watch?v=rc_b9AgKYjE.

on which Anna is waiting for Alexandros. The fluid and slow movement of the camera represents the free-floating, wandering of Alexandros' memories. However, the shot does not clarify if it is a dream or a memory. At the end of the shot, Alexandros suddenly enters the frame running toward Anna. Angelopoulos, at this point, makes a spectator oscillate between a memory narrated from the point of view of a protagonist and the gaze of viewers. In doing so, he entangles his spectators more and more in the architecture and spaces of the memory of the protagonist (Figure 69Figure 72).

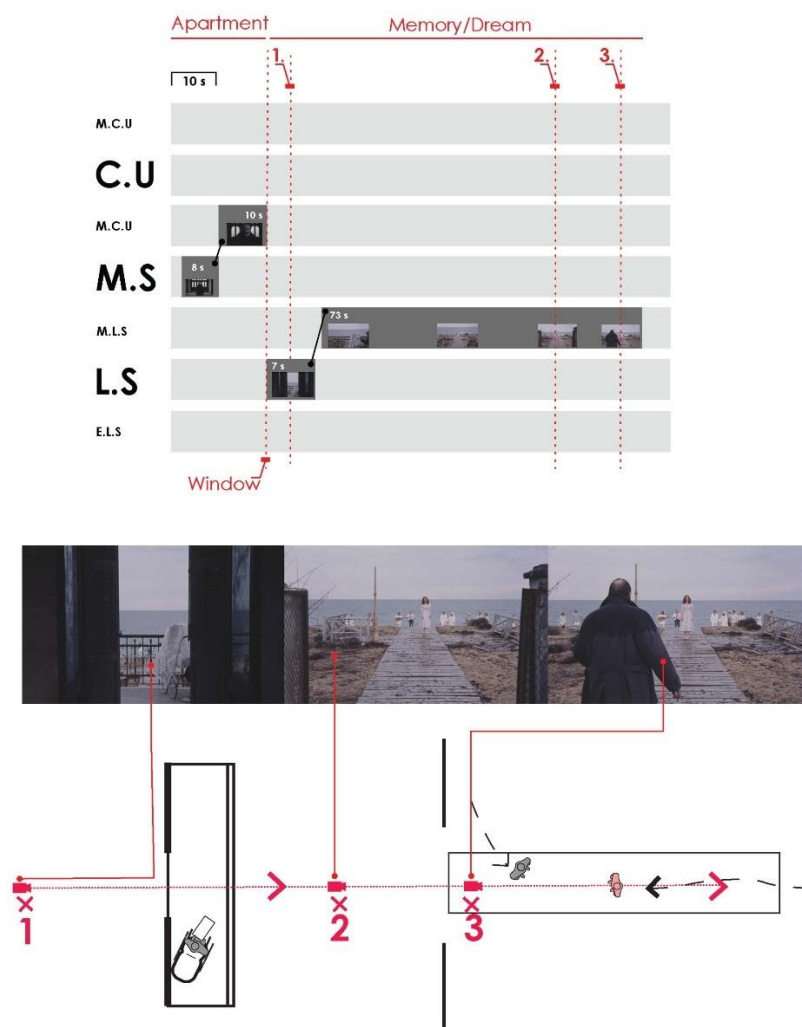


Figure 69. The time-scale diagram indicates the changes in the shot scale as well as how the scene cuts from the reality to the dream through the window. The cinematic plan of the scene shows how the camera travels from reality and dream.

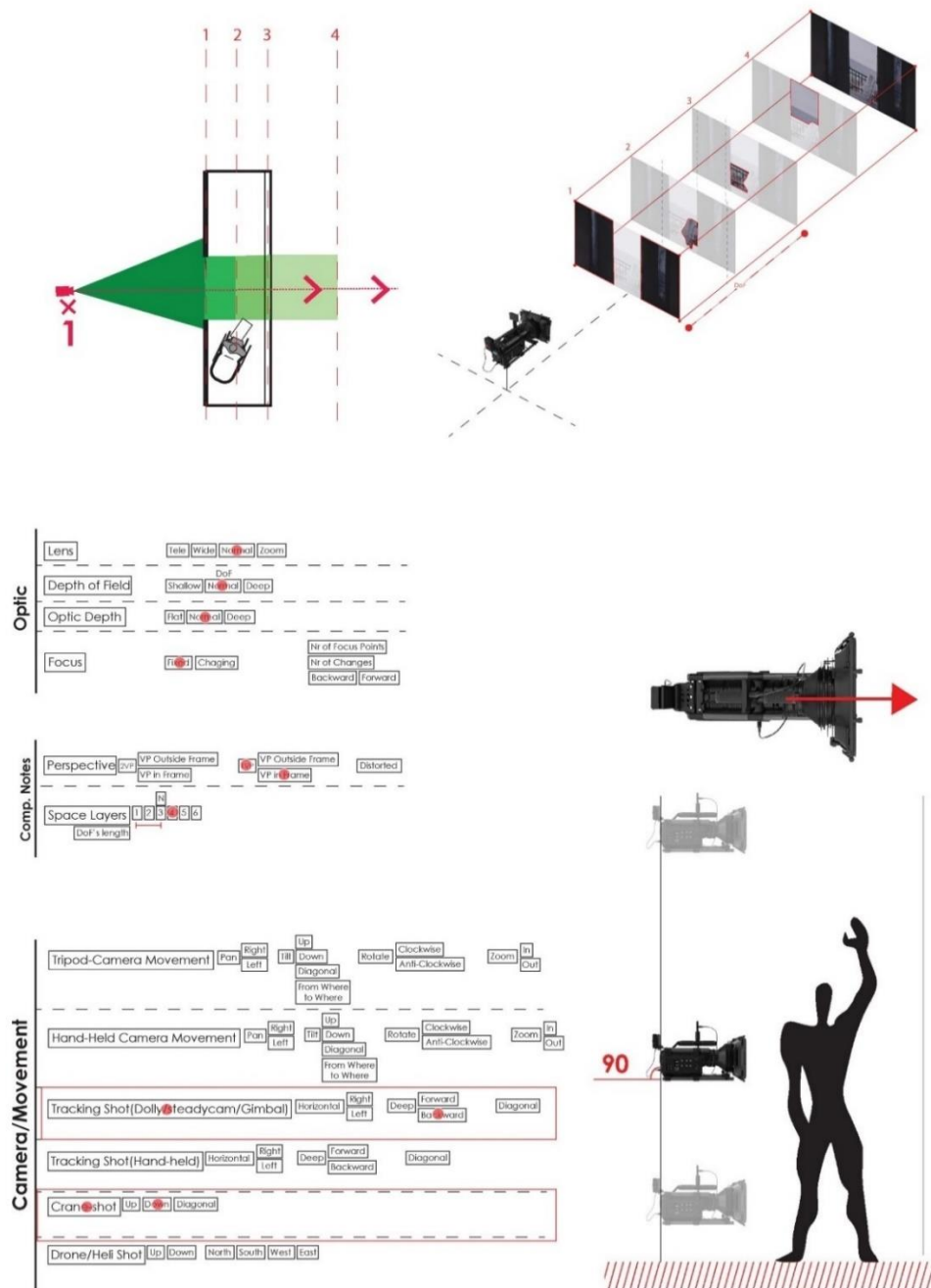


Figure 70. The analysis of the moment when the camera enters the balcony. The camera peeks through the balcony window as it opens. The exploded diagram (on the top right) shows that the shot includes four layers and the depth of it is enhanced through the half-open balcony window. As demonstrated in the camera-height diagram (bottom right) the shot continues in a straight angle. The optic and the compositional checklist (bottom left) show that the camera keeps everything in focus through a normal lens.

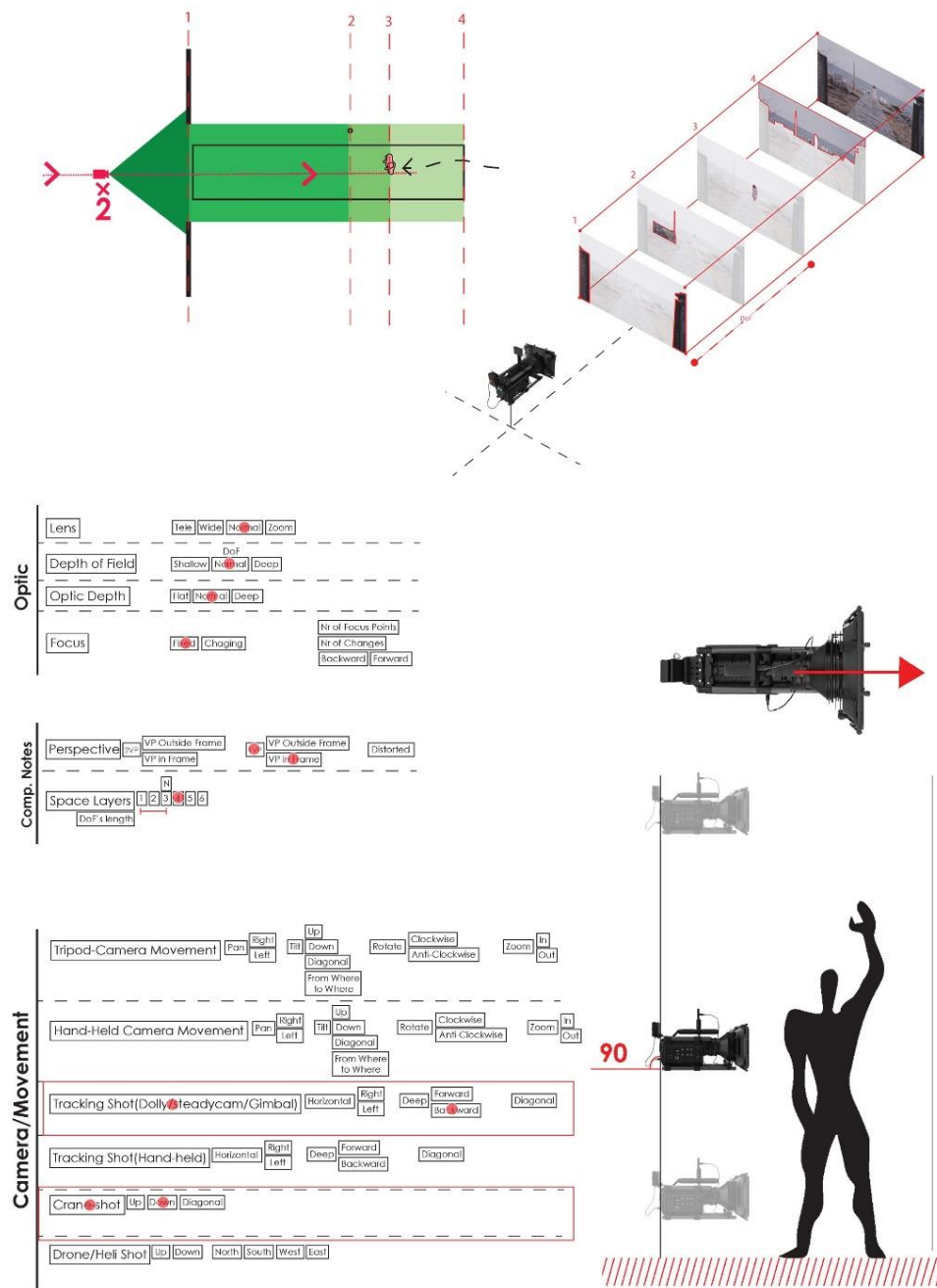


Figure 71. Analysis of the second moment of the long take. The camera passes the balcony and continues its movement. The exploded diagram (on the top right) indicates that similar to the previous shot this shot includes four layers and the depth and the perspective of the image guide the eyes of a spectator towards Anna. As shown in the camera-height diagram (bottom right) the shot continues at a straight angle around the shoulder height. The optic and the compositional checklist (bottom left) show that the camera keeps everything in focus through a normal lens as the previous shot.

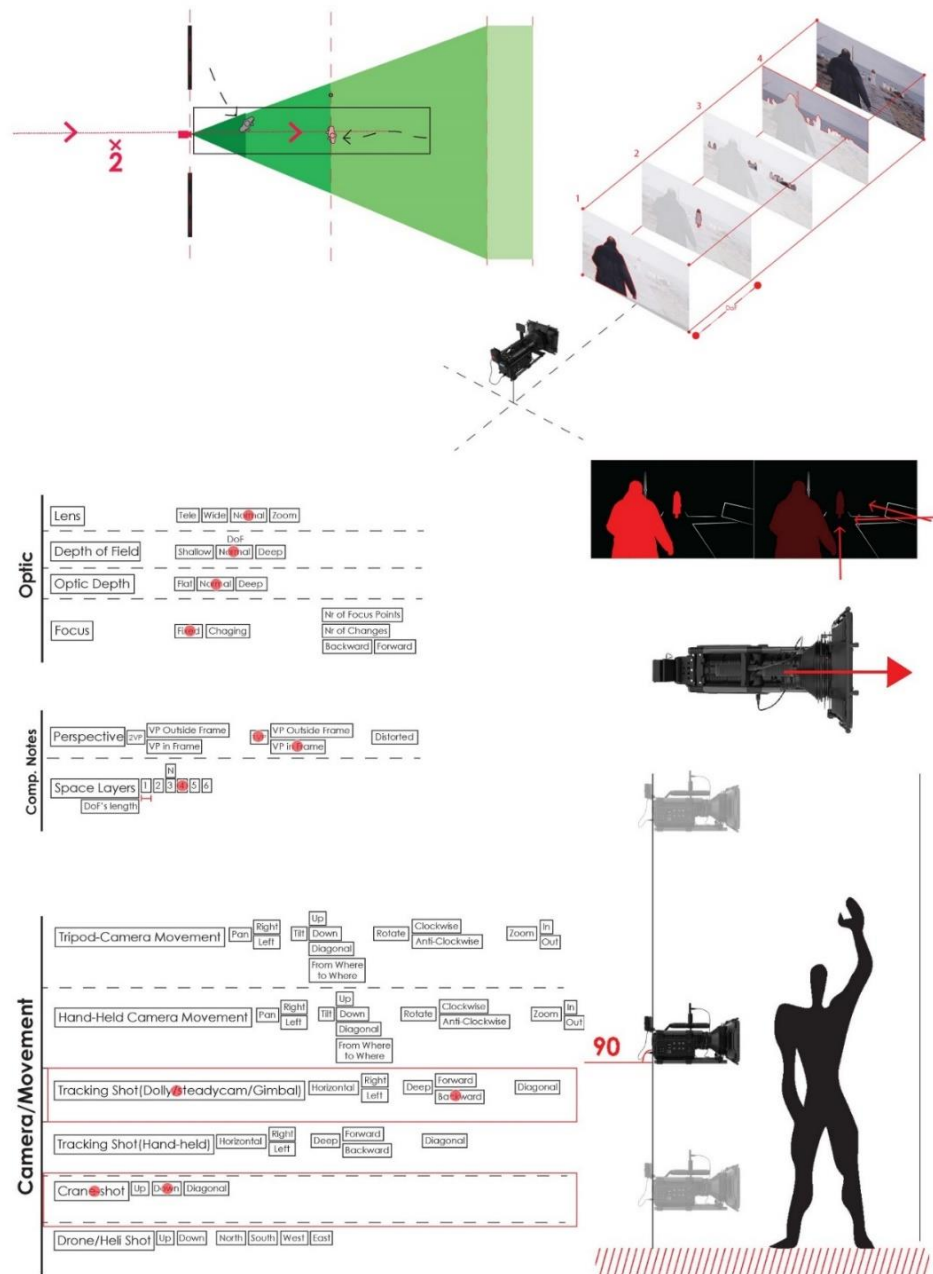


Figure 72. Analysis of the third moment of the shot when Alexandros enters the frame from the left and move toward Anna. The camera continues its movement. The exploded diagram (on the top right) shows that similar to the previous shot camera keeps for spatial layer in the shot. The dynamism and movement of the element of the shot, as depicted in the abstract diagram (black and red) guides the visual movement of the shot toward the figure of Anna in the middle and it is enhanced by the movement of the camera itself. As illustrated in the camera-height diagram (bottom right) the shot continues at a straight angle around the shoulder height. The optic and the compositional checklist (bottom left) show that the camera keeps everything in focus through a normal lens as the previous shot.

4.2.2.4 Tarr, Windows and the Penetrating Reality

Bela Tarr has remarked: “it is possible to make a film without a movie camera but it is almost impossible to make a film without a window.”²⁶⁸ The statement explains the reason behind his unusual long-takes in which there is nothing but a window and a character looking through it. Windows in his films reflect how his protagonists interact with their society, environment and even nature. A window-shot in a film by Tarr can describe how a character sees the world, how a character feels about the world and, more importantly, how the world is treating Tarr’s protagonists. In fact, a typical Tarrian window-protagonist juxtaposition discloses the entire filmic cosmos of his narrative. In other words, Tarr’s characters project their inner emotions, hopes, social regrets and sorrows on the material world through his cinematic use of windows.

Tarr’s main characters are rarely shot in front of a window from the outside in a long-take. This technique of shooting windows in combination with a character from the interior space, convinces a spectator to see the landscapes behind the window in the same vein as the characters see it, from their inner world. Put another way, the significance of Tarr’s use of windows lies beyond the frames, which present a landscape, an image or a point of view. His windows often blend different cinematic-spatial experiences of viewing. Indeed, and opposite to Angelopoulos’ approach, whose camera flies from the interior spaces to the outside and even memories and dreams, Tarr is inclined to orchestrate the direction of viewing from the outside to the inside.

Dissimilar to Angelopoulos, Tarr’s windows do not have anything to do with memories or dreams, they are the mirrors that reflect the brutal reality of the outside and how it affects interiors spaces. His emphasis is seldom on the interior space itself and how a visual passage from inside to outside is provided by a window, as we see

²⁶⁸ Bela Tarr, unpublished interview by Hamid Khalili, 2018.

usually in other films. On the contrary, in the window *plan-sequences*, Tarr shows how the events in the outside; a corrupt society, a menacing nature, or betraying comrades, puncture the walls through windows and collide with the internal spaces. Sometimes, Tarr follows a reverse direction. Nonetheless, how he blends a view, a viewer, a frame of viewing and the site of viewing, functions immaculately and alludes to the invasion occurring from the exterior to the interior contaminating the vulnerable life of the inhabitants.

Ranciere describes Tarr's window shots as "the signature of Bela Tarr's style".²⁶⁹ In *Bela Tarr, the Time After* (2013), Ranciere studies the iconic window shot at the beginning of *Damnation* and concludes that the window-shot does not work as a Hollywood establishing shot to "set a scene where the action takes place". Instead Tarr infuses contradictory experiences of viewing in one single shot. For him, it is not the matter of providing an introduction to a narrative that is going to unfold in the following moments, it is the matter of what the characters, and consequently we as spectators, "see, perceive and feel". Furthermore, Ranciere argues that in Tarr's films "it is not individuals who live in the places"; it is "the external world" that come to them, and "surround, penetrate or reject" them and "invades their gaze" through the windows fashioning a "continuum at the heart of which the material world becomes affect".²⁷⁰

One of the most notable window shots in the films of Tarr is the opening shot of *Damnation*.²⁷¹ In the shot which lasts three minutes, the camera shows a foggy landscape that integrates the industrial elements such as electricity towers, wires and carts with a natural context. The repetition of the electricity towers toward the vanishing point at the end of the frame and the forward/backward movement of the carts enhances the depth

²⁶⁹ Rancière, *Bela Tarr, the Time After*, 25.

²⁷⁰ Ibid., 27.

²⁷¹ See the scene here <https://vimeo.com/458490573>.

and visual permeability of the shot. The camera backs up from the landscape gradually for thirty-five seconds. The sound effect of the traffic of the mining carts that accompanies the shot is exaggerated, echoed and reverbed (see Figure 73Figure 76).

The camera keeps drawing back, and suddenly, as the window bars appear, we understand that we are looking at the landscape from an interior space and through a window (Figure 75). At this moment, from the landscape (view) we pass to the situation of seeing the landscape through the window (frame). By passing through various visual thresholds and gazes, once again, Tarr challenges his spectators by opposing and contradictory experiences of viewing in the same place and at the same time.

As the camera continues zooming out and traveling back, and after twenty-five seconds, we come across the main character of the film, Karrer, in the room. The cinematic screen, at this point, encompasses the character, window and the landscape. The composition indicates that in the last two minutes the camera was not moving neutrally in the space. It was virtually hauling a spectator from one experience of viewing to the next. In the beginning, a spectator was looking at a view, a landscape outside, then he/she was dragged to the position of someone (a viewer) looking at a window (from inside). After that, an unexpected element was added to the scene, a physical viewer in the room, the protagonist of the film (Figure 76). At this stage, a spectator was not staring at the window and the landscape framed by it anymore, a spectator was watching an actual viewer viewing the view that the spectator was staring at a while ago.

At this exact moment of the shot, a spectator is transfigured from a viewer of the window to someone watching the window and its viewer (the protagonist in the room) together. Through the arranged sequence of different kinds of gazing Tarr shows an interest in the act of looking more than the subject of the window view. Commenting on this scene, Tarr remarks that: "it is like a film theater. In a film theater, the most interesting thing for me is that I can watch the film on the screen and at the same time I

can watch how people react to it ...I should say that, sometimes, watching how people watch a film in the film theater is more interesting than watching the film itself.”²⁷²

Tarr seems to be fascinated with the act of ‘spectatorship’ even more than the image that a spectator is looking at, in this case, a viewed framed by a window. Tarr’s camera carries on drawing back from the motionless, unrealistically frozen, and silhouetted character illustrating, concurrently, all the three types of gazes – looking at the view (landscape), at the frame and at the viewer of the frame (inside the space of viewing). The organized sequence that flows from view to the frame and the viewer invites outside in and through the opening of the window casts its heavy shadow on the interior spaces. It prompts the spectators to explore how the outside affects, mobilize, undermines and destabilizes an inside. Or as Tarr put it, “the windows remind us how fragile our lives are and how we will be easily affected by what is going around us, even if we build walls around ourselves”.²⁷³

²⁷² Bela Tarr, unpublished interview by Hamid Khalili, 2018.

²⁷³ Bela Tarr, unpublished interview by Hamid Khalili, 2018.

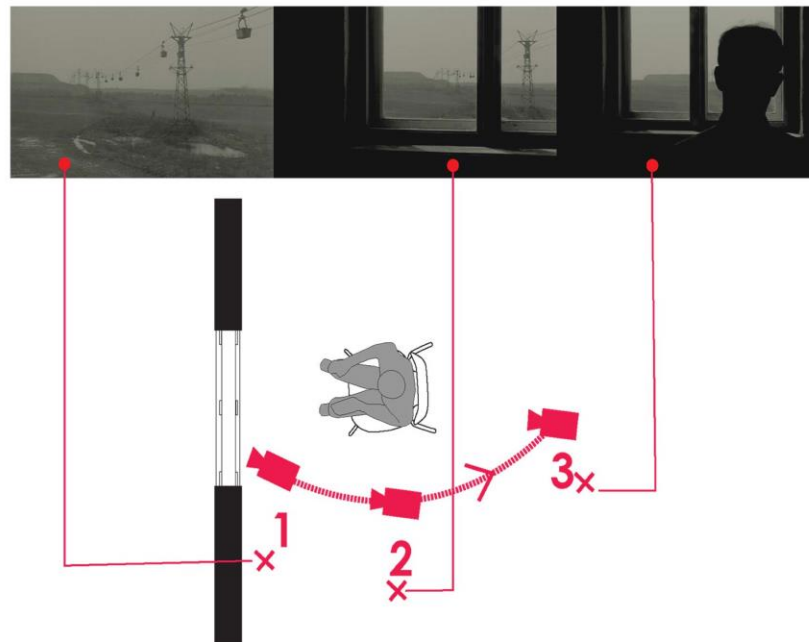
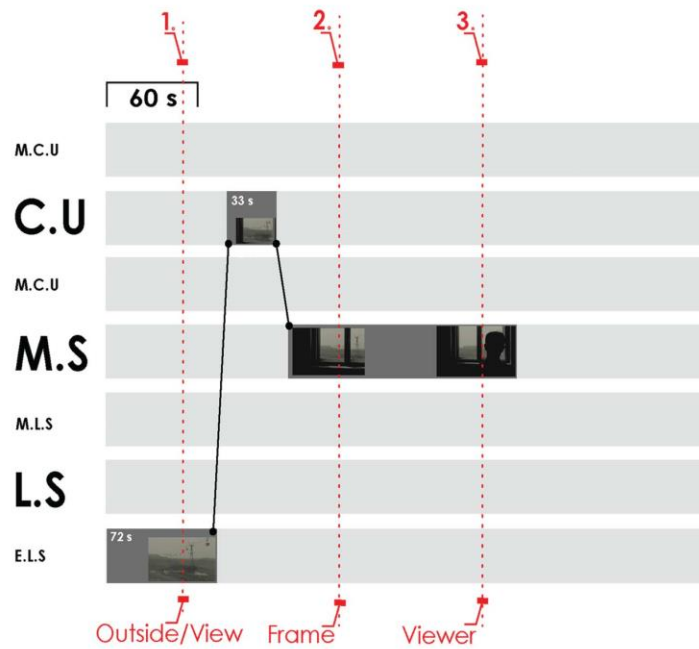


Figure 73. The cinematic plan and the timeline-scale diagram of the long take show how Tarr passes through the three experiences of viewing. The moment number 1 shows when we look at the landscape, number 2 indicates when spectators realize that the scene is watched through a window, and number 3 is when the viewer of the scene is revealed too.

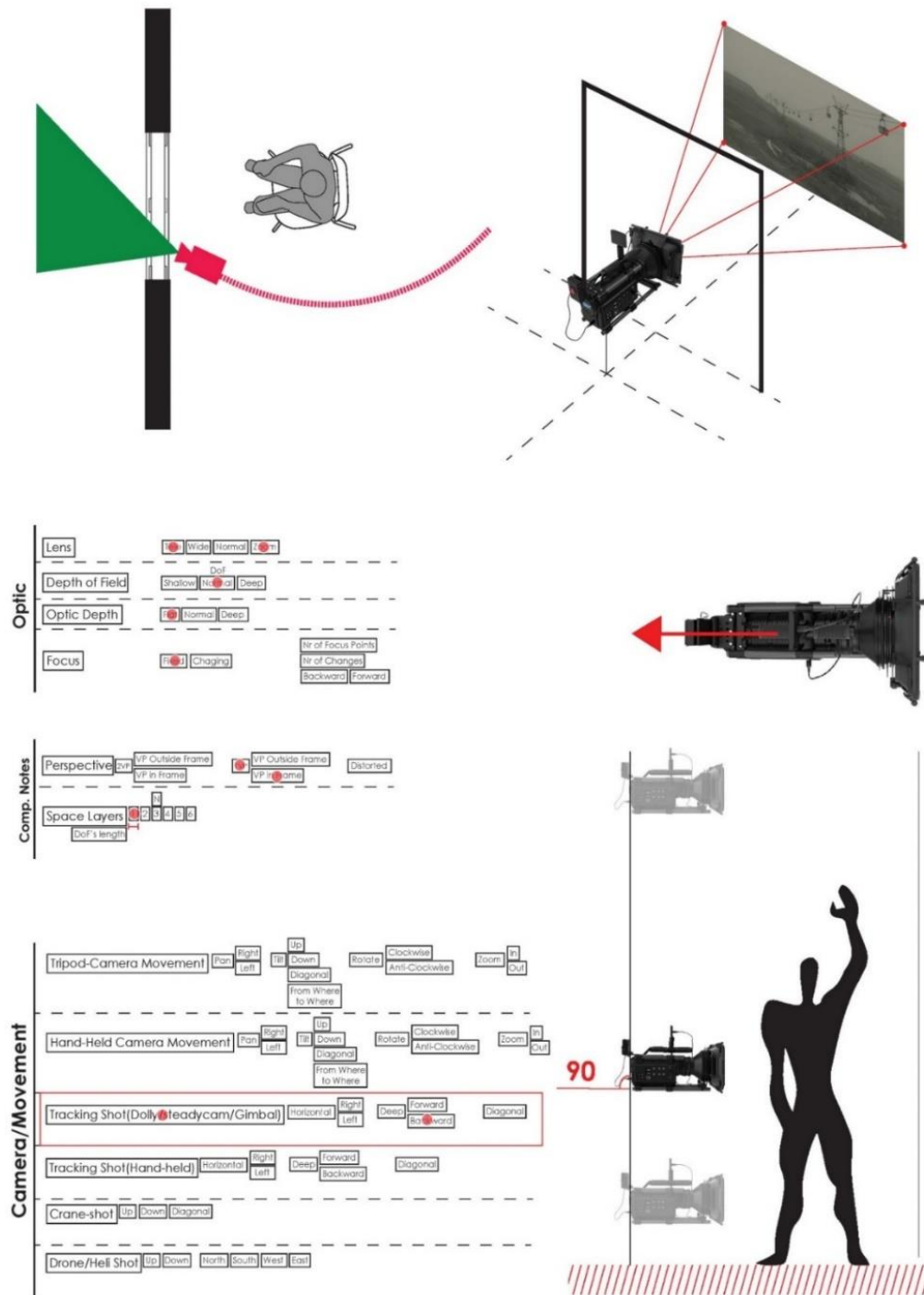


Figure 74. Analysis of the first moment of the shot. The exploded diagram (on the top right) depicts that the flatness of the shot and gives the impression that the camera is located in the desert (outside) — there is only one layer in the image. The other two diagrams show that the movement of the camera is a movement backward and the camera stays at a height a bit lower and the should height. The optic and the compositional checklist (bottom left) indicate the lens utilized in the shot is a zoom lens.

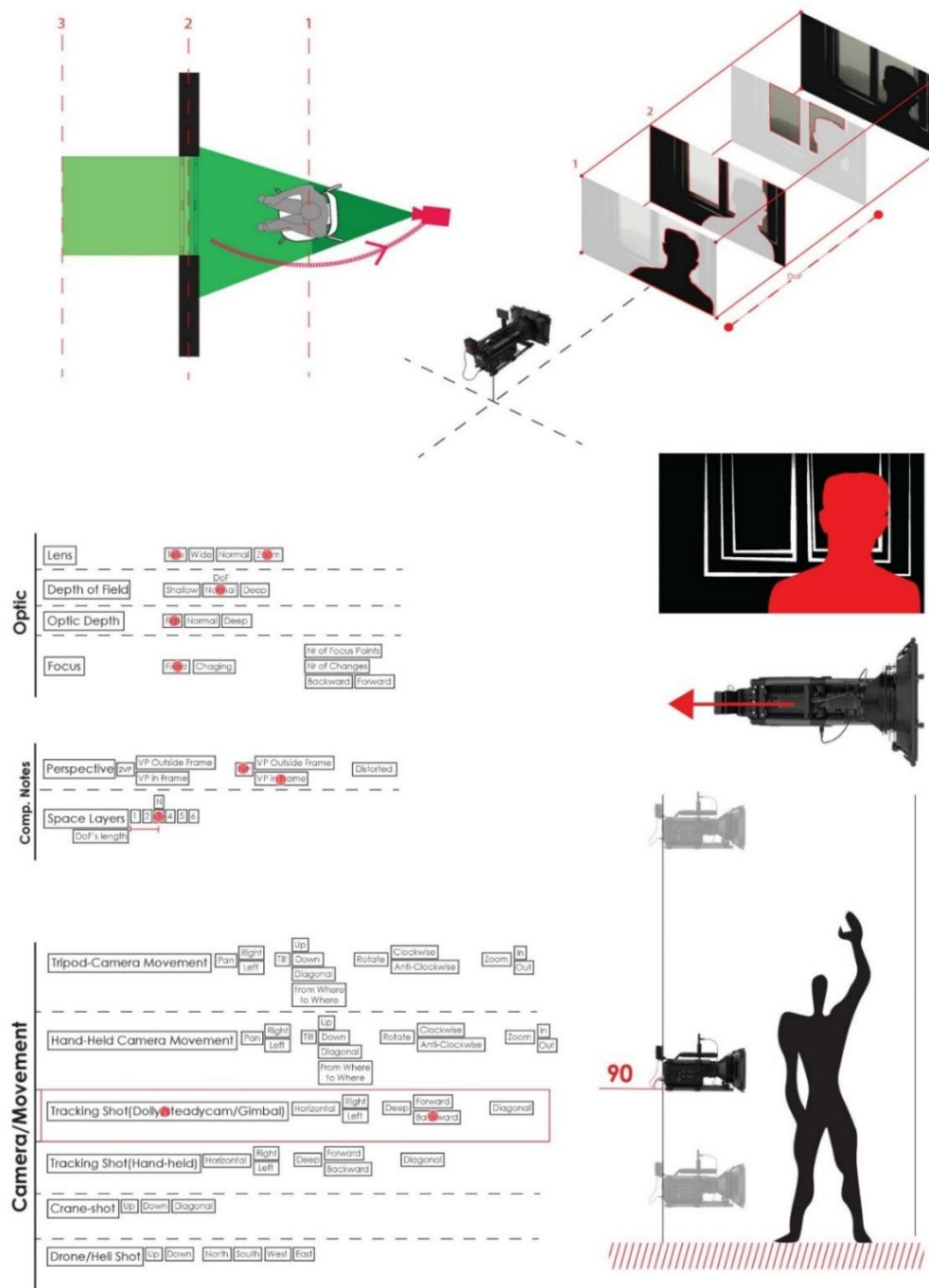


Figure 76. Analysis of the last segment of the shot. The exploded diagram (on the top right) shows that the flatness the shot becomes deeper and a new spatial layer is added through over the shoulder technique and from this moment there are three layers in the shot. The rest of the features of the shot remain the same as the previous diagram..

4.2.2.4.1 Interior Windows

In *Damnation*, there are scenes depicting the passage from outside to inside, for instance, the opening scene as previously discussed. In these shots, at the beginning of the shot, it is not clear whether the shot is an interior shot or an exterior shot. The remaining window shots in the film put an emphasis on the interiors rather than the passage from outside to inside. This type of shot does not begin with an image that seems to be an exterior shot similar to the opening scene of *Damnation*. Instead, within the first moments of the shot, there is always a dominant element from the interior, such as a considerable piece of the wall or the window.

These windows are still used as elements that make the interiors affected by the outside. However, what these shots emphasize and scrutinize in detail is not the passage but the interior itself, its characters, their relationships and actions. For instance, in a window-scene, Tarr's camera draws back, through a zoom out, travels back and pans to the left, from a window and this time not from a view of the outside but from a composition that is masked mostly by window shutters (Figure 77).²⁷⁴ The image of the factory in the outside is seen vaguely at the start of the shot, but soon it becomes fully concealed behind the shutters and the attention of the viewer is shifted to the interior. These are interiors affected by the outside but are temporarily sheltered against it.

After this scene, Tarr does not have a protagonist-viewpoint, which is typical of his kind sitting in front of a window. The characters are conducting their own activities or look directly through a window and never position themselves as an obsessed observer in front of the screen of the window. It can be construed that in the opening shot of *Damnation*, characters are viewers gazing at the actions happening outside,

²⁷⁴ See the scene here <https://vimeo.com/463759243>.

contrastingly, in other window-shots characters are not observers of the outside, but actors in whose actions outdoor events are reflected and imitated.

In these window-shots, Tarr highlights the interior spaces and events where machine-like human acts counterpoint the mechanical movement of mining carts; the interiors and the activities inside them are influenced by the incessant forward/backward motion of the cable cars. The singer (played by Vali Kerekes) and Karrer act as if they are lifeless creatures. The sex scene has a mechanistic, repetitious movement, and Karrer chews in a mechanical manner in front of the window (Figure 77/78). The inside-outside amalgamation here is not dependent solely on the camera work of the shot (zooming/traveling from outside to inside) or on the act of gazing through the window which draws spectators' attention carefully to the window, rather, it seeps into the activities occurring inside. These interior actions, however, correspond to what is happening outside, framed by the window. But this time the gaze of the spectators' direction is guided from inside to the outside mediated by the window. These "metonymical" shots, as film theorist Andras Kovacs calls them, turn characters into interior elements that are "part of the space" of a shot, precisely, in the same way as objects, furniture and architectural elements are part of a room.²⁷⁵

²⁷⁵ Kovács, *The Cinema of Bela Tarr*, 64. In the book Kovacs dedicated a long section to analyzing Bela Tarr the interior window shots in *Damnation*. Nevertheless, Kovacs totally ignores the fact that the unique cinematic experience is facilitated by the window and does not mention the crucial role of the windows in the shots. He also neglects the fact that the spatial experience in opening shot of *Damnation* is totally different from these shots as in the opening shot of *Damnation* it is no clear if the shot is interior or exterior whereas in these shots from the beginning a spectator realizes that the shot is filmed from an interior space.



Figure 77. Screenshot from *Damnation*.



Figure 78. The screenshots from *Damnation* demonstrate Tarr's second approach toward windows in which the emphasis is on the interior spaces and the human acts.

4.2.2.4.2 The Exteriorized Interior

In *The Turin Horse*, there are long scenes in the outside entirely shot through the window. For instance, there is a scene where gypsies invade a well.²⁷⁶ Here we see the gypsies approaching, then the camera zooms back and we realize that we are watching the scene through the window and from over the shoulder of the daughter. The camera then travels, and simultaneously, zooms in to the main event of the scene, with gypsies screaming, dancing, etc. The father asks his daughter to chase the gypsies away (Figure 79).

In the end, the father gets involved in the skirmish with the gypsies threatening them with his ax. The whole scene is a four-minute shot filmed entirely through the window. In the *plan-sequence*, we do not see anything from the interior and the scene could be categorized as an exterior shot if we did not watch the beginning of the shot. Even the sound is recorded with a microphone that is very close to the main event of the shot (in the outside) and hardly reflects the distance and perspective of the event. The scene itself does not convey any sense of interiority and enclosure but surprisingly is filmed from the interior through the window. The only clues given by the director are the window bars and the over-the-shoulder shot that we see at the beginning of the *plan-sequence*. It can be argued that these shots work in the opposite direction of the opening shot in *Damnation*. While in *damnation* the passage of the shot occurs from outside to inside, in this shot the camera moves from inside to outside through the vehicle of the window. These sequence of shots illustrate how a camera located inside can be actively engaged in the outside through the visual connection offered by a window and the virtual movement of the zooming a telephoto lens. As Tarr suggests: “how can we claim that we are far from what is going on out there when there is a camera and we have a telephoto lens?” Through the combination of a window and a camera, the experience of

²⁷⁶ See the scene here https://www.youtube.com/watch?v=59X_r0uhohg.

an interior space can be exteriorized and an audience can be dragged from inside to outside or vice versa.



Figure 79. Screenshot. *The Turin Horse*. The camera zooms to the hill showing the gypsies' arrival. Then, zooms back and we see the window bars and an out-of-focus part of the daughter's shoulder close to the lens of the camera. After that, the camera zooms at the well, the gypsies' actions and the moment the daughter enters the frame to send them away. As she is not successful the father enters the frame with the ax in his hand.

4.2.3 Conclusion; Windows, Beginning and the End

One of the longest scenes of *The Turin Horse* is a shot that starts with the central window of the cottage and ends by a fade-out on the same window. The shot takes place in the last part of the film, as the scene that guides the entire narrative of the film to the last scene. At the first moments of the long-take, the recurrent visual motif of the storm, leaves, dust and the misty landscape behind the window is shown. The camera draws back and zooms out gradually, disclosing the interior walls of the house and keeps drawing back from the over-the-shoulder of the father who is sleeping in front of the window. The camera continues its movement to the table and after a series of interactions between the father and his daughter, tracks the father returns to the window. The camera moves toward the right and stops on a frame with the daughter in the middle in a symmetrical point and still keeps the father on the left side of the background of the frame as a noticeable element. The daughter leaves the frame introducing a new interior perspective with an evident emphasis on the father and the window. The daughter re-enters the frame with the pots of potatoes. By a sliding movement toward the right camera homes on the dining table. After two or three bites of potato, the father refuses to continue his dinner and returns to the window. At this point, the camera concentrates on the familiar image we have encountered before in *The Turin Horse* and viewed in Tarr's other films; the image of the man gazing through a window.²⁷⁷

Similar to the scene from *The Turin Horse*, in which a window marks the ending and the beginning of a scene, windows and openings through which one can look are one of the most recurrent elements in the history of cinema. As Bela Tarr stated, it is impossible to imagine a film that does not entail a window. In the described scene from

²⁷⁷ See the scene here <https://vimeo.com/463772540>.

The Turin Horse, Tarr's camera returns to the window after its long journey in the interior space.

This chapter presented the ways windows can bridge the experience of reality to that of dreams, memories and situations that are not physically present in a scene. The impact of the outside on interiors spaces and narratives, and how a window can turn the image of the outside into something that is part of the inside (an interior object) is a significant area that has the capacity to be employed in architectural films, animations and even architectural design proposals. One of the noticeable cinematic experiences that windows generate and is rarely observed in the films of other filmmakers is the way Tarr welds disparate experiences of viewing through the combination a long take and windows. By zooming in/out Tarr shows three manners of viewing through windows and blends three entities: the view offered by a window as an independent entity, the window itself and the experience of someone viewing the window.

Tarr amalgamates these types of viewing by zooming/dollying back (or forward) from windows. This technique is used in his films to demonstrate the interaction between outside and inside, to contextualize a scene, to show the relationship between a character (his/her acts) and society or built environment and, on occasion, to punctuate the beginning and ending of scenes and sometimes films. All of these cinematic effects of windows can be implemented in architectural films and have the potential to be studied by the field of film and architecture.

4.3 Corridors

In our contemporary culture, a corridor is usually defined as “a long passage in a building from which doors lead into rooms”.²⁷⁸ Nevertheless, the diversity of the realms in which the term ‘corridor’ is adopted demonstrates that this word is capable of describing a clear spatial configuration in various fields and contexts: urban corridor, humanitarian corridor, biological corridor, business corridor, flight corridor, wind corridor, etc. ‘Corridor’ in diverse contexts does not connote the same meaning, but all of them have one feature in common, accommodating a sort of movement between parts of a spatial system. A spatial system in which corridors operate could be a building (interior corridor), a city (urban corridors), or an area comprising multiple towns (extra urban corridors).

The function of interior corridors is to connect two points within an enclosed or semi-enclosed space, usually a building with a series of rooms and programs across it. Spaces such as interior passageways, hallways and galleries are classified within this category. Urban corridors, on the other hand, are similar to interior corridors but are located on a larger, city-scale: their primary task is providing a connection for a range of programs. Streets, alleys, lanes, avenues, parkways, boulevards, arterials and cul-de-sacs fit into the category of urban corridors.²⁷⁹ The third category, extra-urban corridors resemble urban corridors and are comparable with them although the scale and the context in which they perform is different “A street can be seen as a road that has an

²⁷⁸ <https://en.oxforddictionaries.com/definition/corridor> (accessed March 7, 2019).
<https://dictionary.cambridge.org/dictionary/english/corridor> (accessed March 7, 2019).

²⁷⁹ In the book *Street Design* (2014) Victor Dover and John Massengale, urban theorists categorize all the mentioned categories as different types of corridors. Victor Dover and John Massengale, *Street Design: The Secret to Great Cities and Towns* (Hoboken, New Jersey: John Wiley & Sons, 2014), 27.

urban character” and subsequently an extra-urban corridor (a road) is a street that does not encompass programs and features of urbanity.²⁸⁰

4.3.1 Movement and *Currere*

As Simon Unwin, architect and theorist, highlighted “experiencing products of architecture involves movement through the serial stages of a route.”²⁸¹ The concept of movement is crucial to architecture and gained more significant importance after Le Corbusier, along with other modernists insisted that “architecture is circulation” and movement.²⁸² It was after modernism that the way corridors (as the main spaces hosting movement) have been designed and understood was brought into the attention of architects.²⁸³

Etymologically, ‘corridor’ is tied with the notion of movement. *Corridore*, *corridoio* and their Latin root *currere* (running/walking fast) allude to a specific act, of moving in space.²⁸⁴ *Corridore* means runner and was used to describe something that is in a

²⁸⁰ Stephen Marshall, *Streets and Patterns* (London Spon, 2005), 22. Extra urban corridors are served to connect cities, town, villages or in the case of highways they function as a road for neighbourhoods that are far from each other. Stephan Marshall explains that urban corridors are distinguishable by the fact that there is no urban element such as buildings or shops arrayed across them and their surrounding settings is unoccupied by inhabitable urban structures.

²⁸¹ Simon Unwin, *Analysing Architecture* (London: Routledge, 2009), 157.

²⁸² Le Corbusier, *Le Corbusier Talks with Students* (New York Princeton Architectural Press, 1999), 45. The attempts of Le Corbusier, along with other modernists, toward establishing an approach that recognizes the notion of movement as a primary element of architecture led to developing motion-oriented architectural concepts such as *promenade architecturale*.

²⁸³ Although it was the obsession of modernists with concept of movement that led to a condition in which spaces of movement and corridor-like structures were brought into the attention of architects, considering corridors, hallways, passageways, and galleries as salient spaces around which a group of programs can be structured, dates back to 12th century BC. See for instance, Koolhaas et al., 3. Also Robin Evans traces the emergences of the first corridors, “as devices for moving traffic”, to the sixteenth century in England. Robin Evans, “Figures, Doors and Passages,” *Translations from Drawing to Building and Other Essays* (London: Architectural Association, 1997), 70.

²⁸⁴ Mark Jarzombek, “Corridor Spaces,” *Critical Inquiry* 36, no. 4 (2010), 728. <https://www.etimo.it/?term=corridore&find=Cerca> (accessed March 7, 2019). https://www.etymonline.com/word/corridor#etymonline_v_19108 (accessed March 7, 2019).

sustained high-pace movement.²⁸⁵ *Corridoio*, stemming from the same root, is a space that possesses the movement itself or accommodates the movement of a runner, a *corridore*. The root *currere* has also affinities with ‘current’ and ‘recurrent’. Thus, the word corridor, functionally and semantically, alludes to a recurrent movement, something that runs forever and entails some sense of consistency and repetition. Corridors are physical spaces that house a consistent motion and an incessant dynamism. In this sense, the term ‘corridor’ does not signify only a covered passage located inside a building or in an enclosed space that has “doors and rooms on one or both sides” into which “compartments or rooms open”.²⁸⁶ From an architectural and urban design point of view, a corridor is a platform for movement on the three scales: interior corridors, urban corridors and extra-urban corridors.

On the city scale, an urban corridor is a street, a lane, an avenue, a boulevard, a parkway, a close or an alley that is surrounded by different buildings and hosts the flow of peoples, cars, trams, buses and bicycles.²⁸⁷ An extra-urban corridor, on the other hand, is a road or a highway that supports the movement between two cities or villages. And a corridor, on the building scale, supports the movement of users between rooms and spaces. Hence, regardless of their size, scale and context, the corridors entail a guided movement.

4.3.2 Corridor Platform and Corridor Frames

Spaces in their simplest form, as Bernard Tschumi suggests, “are made of vectors and envelopes.”²⁸⁸ The vectors of mobility in space are determined by direction, length and

²⁸⁵ *Corridore* was further changed to the English term corridor.

²⁸⁶ <https://www.merriam-webster.com/dictionary/corridor> (accessed March 7, 2019).
<https://www.collinsdictionary.com/dictionary/english/corridor> (accessed March 7, 2019).

²⁸⁷ In the book *Street Design* (2014) streets (as urban corridors) are categorized into the categories of streets, roads, lanes, avenues, boulevards, parkways, closes and alleys. Dover and Massengale, *Street Design*, 27.

²⁸⁸ Bernard Tschumi and Irene Cheng, *The State of Architecture at the Beginning of the Twenty-First Century* (New York: The Monacelli Press, 2003), 64.

a mechanism that guides them. Corridors are architectural elements responsible for orientating movements in space. In corridors, there are visual and physical cues that trigger a movement, prescribe the territory of the movement and even determine its pace. From the most primitive to the most avant-garde and sophisticated corridors, there are spatial techniques that indicate how the movement should take place within the boundaries of a corridor.²⁸⁹ Amongst various characteristics that influence how the movement of people (and objects) takes place in a corridor, there are two components that affect the mobility of users within a corridor: movement platforms and framing elements.

The platform of movement is a ground on which moving takes place, a surface on which a subject walks.²⁹⁰ And often two surfaces on the sides of a corridor function as framing elements of the movement in a corridor. The framing elements can be as conspicuous as flanking (street) walls on the sides of interior or urban corridors. At times, the framing elements are as short as guardrails of the extra-urban corridors and roads. A movement platform can be framed without a movement frame and by a simple change in material or level as well.²⁹¹

²⁸⁹ One of the most basic aspects that influence the manner people move through a corridor is its geometric form and how it is being seen through the eyes of a spectator. Obviously, a convoluted and tortuous laneway in Lisbon does not operate in the same way as a long straight multi-lane highway in a modern city. Other features such as the pavement materiality, lighting, angles, edges, protruded and recessed parts, reference points of orientation and visual markers make their own contribution to the use of a corridor as well.

²⁹⁰ Establishing a platform for movement is imbedded in the definition of the word street, the origin of the word 'street' *strata* (paved) and its related Latin verb *sternere* (laying down). The word street itself tells us that an urban corridor is defined primarily by installing and laying down (*sternere*) a platform of movement. For other types of corridors, similar to streets, laying down a fundament is the first phase of the process of generating a corridor.

²⁹¹ When a corridor platform is at the same level as its surrounding environment, a visual intimation will define its area. In the case of roads, these visual clues are the yellow and white road markings. Sometimes an elementary demarcating technique such a change in the materiality of pavement (being asphalt, concert, stone, or a humble patch of dirt) suggests how the platform of movement is framed.

In interior spaces, the framing elements and the guides of movement are walls; vertical barriers that connect a ceiling to the floor. Regardless of a space being covered or not, walls (as framing elements) together with the floor (platform) work as the defining components of a corridor. Situated on the sides, the two vertical elements, separate rooms and other enclosed spaces form a corridor and, simultaneously, dictate the way people are supposed to move within a corridor. The expanding walls function as a thread that stitches all the rooms to a corridor, across which one can find his/her own destination. In spaces such as airplanes, buses and trains, the area of a corridor is determined without a wall and only through the repetition of programs along the corridor. Seats (as programs) are arranged across a passage. In fact, the programs serve also as a framing element of a corridor, forming its frame and defining its space of movement (the passage) in the same way that rooms and programs are organized across a corridor in a building (Figure 80).

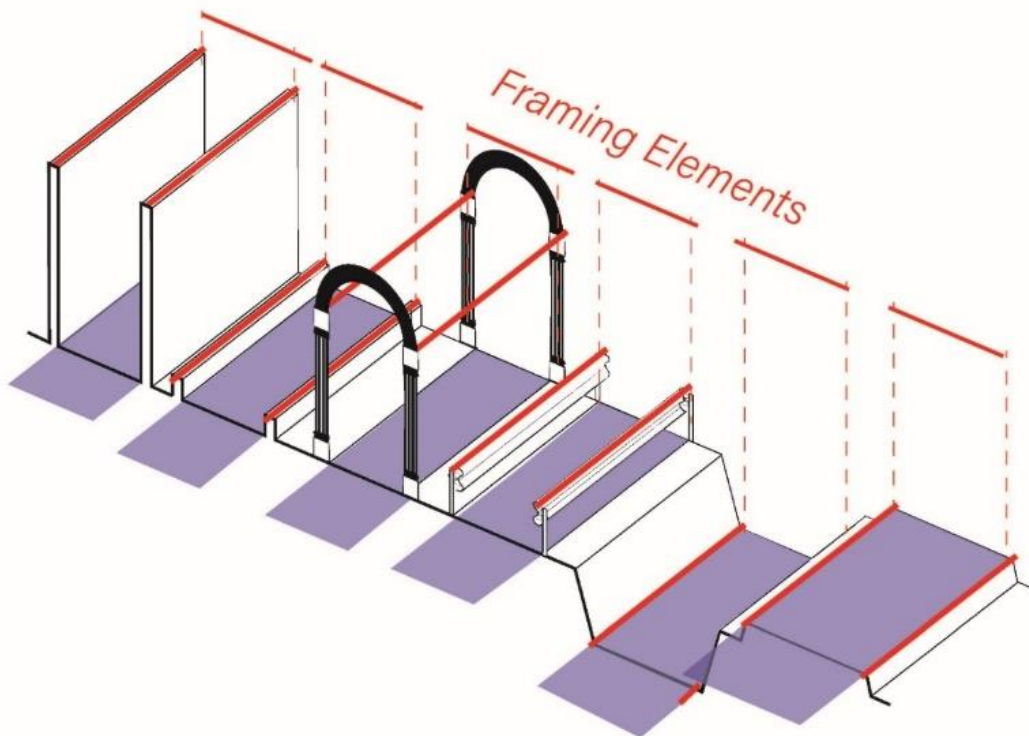


Figure 80. The diagram shows how the framing elements mark the boundaries of the movement platform in different types of corridors.

4.3.3 Corridors as an Organizational Device of Drama

Aldo Rossi ascertained certain affinities between “drama”, “screenplay”, streets and corridors. For Rossi, the facilitated continuity through corridors and streets resemble the continuity of “drama” and spatial narrative in film.²⁹² The resemblance between films and corridors and the similarity between the sequence of corridors and narratives of films has been spotted in other architectural and urban design texts such as *The View from the Road* (1964) by urban theorists, Donald Appleyard, Kevin Lynch and John Myer. In this work, the authors looked into the notion of continuity and sequentially in the experience of traveling and how events unfold in extra-urban corridors. They drew a parallel between the sequence of motion in extra-urban corridors (roads and highways) and our kinaesthetic experience of the sequences of moving images in cinema.²⁹³

Appleyard, Lynch and Myer highlighted two characteristics in the resemblance of roads and movies. For the authors, an urban or extra-urban corridor is similar to a movie, firstly, because of the existence of the continuity and the sequence of a movement and secondly, and more importantly, since the sequence of movement is framed and controlled in a manner that results in encountering several “elements of attentions” across a road.²⁹⁴ In both film and architecture, corridors act as organizational devices along which a series of programs (actions in films) can be arranged. Corridors directly “act upon bodies” and guide their movement toward desirable destinations.²⁹⁵ Interior corridors are referred to as a “skeleton” or “vessels” of buildings and urban corridors as “prime shapers” of city form.²⁹⁶

²⁹² Aldo Rossi, *A Scientific Autobiography* (Cambridge: MIT Press, 1981), 10.

²⁹³ Appleyard, Lynch, and Myer, *The View from The Road*, 1-4.

²⁹⁴ *Ibid.*, 6.

²⁹⁵ Considering corridors of different types as an architectural element that works as device of ordering is not specific to modernism or contemporary architecture. See Sven-Olov Wallenstein, *Biopolitics and the Emergence of Modern Architecture* (New York: Princeton Architectural Press 2009), 25, 62, 64, 70, 78.

²⁹⁶ Sylvia L. Horwitz, *The Find of a Lifetime: Sir Arthur Evans and the Discovery of Knossos* (New York: The Viking Press, 1981), 133. Gabetti, *Insegnare L'architettura. Scritti E Testimonianze*, 108. Richard Ingersoll,

In architecture, corridors control how a user moves and encounters spaces and places after one another, and in film, corridors determine a route, a camera, or a protagonist takes and the way actions and events unfold across the pathway. The continuity and directionality of roads infuse cohesion and seamlessness into a film and, on another level, sustain the pace and the rhythm of the film. Tarr believes that the drama of every narrative and every film is structured along a corridor:

It is all about a route, a road, a corridor, a street...every story begins with a character starting a journey. He continues on the road and continues and continues. Then something happens to him, meets someone, makes a mistake, kills somebody, sees a strange thing or falls in love. Here we come back to the road again. Now, the character has to decide if he wants to continue the same road or he wants to change another road. But these moments are momentary and short. What always continues and is permanent in the story is the road ... it is all about walking and walking... walking in the roads, streets and corridors. We deviate from the roads and then come back to them.²⁹⁷

Zeynep Çelik, and Diane G. Favro, *Streets: Critical Perspectives on Public Space* (Berkeley: University of California Press, 1994), 1. Spiro Kostof, Greg Castillo, and Richard Tobias, *The City Assembled: The Elements of Urban Form through History* (London: Thames and Hudson, 1999), 280. Michel Foucault pays particular attention to corridors as devices of control and organization in *Discipline and Punish* (1975) and *Madness and Civilization* (1961); he describes corridors as the “canals of communication”, instruments of “ranking” and “regulatory devices” along which a series of programs can be distributed in “regular intervals”. Michel Foucault, *Discipline and Punish: The Birth of the Prison, Social Theory* (New York: Vintage Books, 1979), 15, 260-64. *Madness and Civilization: A History of Insanity in the Age of Reason*, Routledge Classics (Routledge, 2001), 38-42, 90-93.

²⁹⁷ Bela Tarr, unpublished interview by Hamid Khalili, 2018. Tarr continues: “what is essential here and continues for ever is walking, pursuing and the road itself. The road is what drives the story. Every story is also a road, or I don’t know, a long corridor... and heroes are always in a struggle in the road or (they are) struggling with the difficulties of a road, or they are not sure about the route they want to take. That is how a story starts; your hero enters a journey, a road, a long corridor. It is all about continuing a road or deviating and, again, continuing the new one.”

In interior and urban corridor shots, when a character enters a room and the camera cuts (on the act of opening a door) inside, it is very likely that the interior shots of the room are recorded miles away from the pictured street or corridor.²⁹⁸ Corridors in cinema perform as a narrative tool and dovetail disparate spaces and events from unrelated geographies to each other. Road movies benefit from the characteristic of corridors and employ them as a strong visual and spatial thread stringing together the narrative of a film. Shooting spaces from different locations and assembling them so that they appear to be located on one road is typical of road movie genre.²⁹⁹

4.3.4 Corridor as a *Geschehensraum*

Corridors have been considered as useful organizational tools to work with during the process of design. Nevertheless, when the experience of users is concerned, corridors do not seem to be one of the best-loved spaces. Frequently labeled as “second-ranked”, “un-architecture”, “unhomely”, “displacing”, “uncertain”, “transitory”, “zones of hesitation” and “non-places”, corridors appear to be subservient spaces with the primary function of serving other spaces.³⁰⁰ Roger Luckhurst, in *Corridors: Passages of Modernity* (2019), identifies that after the 1950s post-war modernization and the introduction of corridorless, wall-free open-plan buildings, corridors were disregarded in our culture and Christopher Alexander, the influential design theorist, strongly

²⁹⁸ For example, in *Rocco and His Brothers* (1960), directed by Lucchino Visconti, the interior shot at the beginning of the film and some of other interior shots are shot in Rome while the exterior shots are filmed in the streets of Milan. Caterina D'Amico, "Rocco E I Suoi Fratelli, Tra Sceneggiatura E Montaggio Finale. Incontro Con Caterina D'amico," Cineteca Bologna, accessed October 15, 2020, <https://www.youtube.com/watch?v=yGvTaptJNV0>.

²⁹⁹ Giampiero Frasca, *Road Movie: Immaginario, Genesi, Struttura E Forma Del Cinema Americano on the Road* (Milan: UTET libreria, 2001), 259-61, 26. John Ford, director, used to capture images from unconnected cities and locations and arrange them along a road. Route 66, as an example, in *The Grapes of Wrath* (1940), amongst other road movies, performs as a narrative thread to connect the locations that are not necessarily located on Route 66.

³⁰⁰ Evans, , "Figures, Doors and Passages," 77. Koolhaas et al., *Elements*, 39. Penz, *Cinematic Aided Design*, 202-06.

advises architects to keep them “short” to make them more “human”.³⁰¹ During the era of studio filmmaking, corridors were ignored and the shots entailing corridors were non-existent or extremely short. Corridors of any kind were used only as secondary spaces in gluing shots to indicate that a character was transferred from one main place of narrative to another.

In cinema, however, from the moment cameras started moving and filmmakers were enabled to record the actions of characters in corridors in longer scenes, corridors became significant places in the narratives of cinema. Corridors were turned into exemplars of what Hugo Häring, architect, designated as *Geschehensraum* (space-event); a space of “happening and occurrence” and a space of encounter.³⁰² Corridors of cinema were elevated from being stitching materials to ‘locations’; locations with the capacity to accommodate important events of a story and became *Geschehensraums* themselves. The change of attitude towards corridors is twofold. First, the main function of corridors – movement – was recognized as a genuine action that can be filmed in longer scenes. And second, corridors were transformed into spaces preparing a protagonist and an audience for an encounter somewhere further down a corridor.

The term “dynamic place” was coined by Simon Unwin, who opposed the idea that places are only static places where we can stay. He argues that a route a user takes to go from one static place to another is a place too, a dynamic one. Unwin observes a strong dialectic between a dynamic place (a corridor) and a static place it leads to. Providing the examples of a corridor that leads to a cell with an electric chair and corridors leading to the heart of an ancient Egyptian pyramid, Unwin concludes that the

³⁰¹ Christopher Alexander, Sara Ishikawa, and Murray Silverstein, *A Pattern Language: Towns, Buildings, Construction* (Oxford: Oxford University Press, 1977), 635. Roger Luckhurst, *Corridors: Passages of Modernity* (London, UK: Reaktion Books, 2019), 12.

³⁰² Peter Blundell-Jones, *Hugo Häring: The Organic Versus the Geometric* (London: Edition Axel Menges, 1999), 187. Botz-Bornstein, *Organic Cinema*, 166.

experience of a corridor “is affected by one’s awareness of the place to which it leads” and it is the corridor that prepares one for the destination that is being reached.³⁰³

Tarr acknowledges this view and regards the corridors of cinema as important spaces that have the role of “preparation and contemplation”.³⁰⁴ Corridors prepare and process characters and spectators for the next room, building or city that a spectator is about to visit. In addition, Tarr thinks corridors make spectators contemplate. He believes that corridors in films are mostly “one-directional” and that is the direction of moving forward. In tracking shots in corridors, the focus of a scene is rarely on an action happening behind a camera. Corridors are “the receptacles of future events and experiences” and prepare protagonists for what is in front of them, their next confrontation, a future event or an upcoming space a protagonist might enter.³⁰⁵ Tarr explains that “a fixed shot in a corridor is static and works as a pause in film”, but when a camera starts moving in a corridor with or without a character “that is a movement toward the future, toward encountering something important, something you might foresee and expect, like the bright opening at the end of a tunnel or maybe something that you do not expect, a moment of revelation”. This act of walking toward an expected upcoming event or space prepares an audience for it and at the same time makes him/her think about it.³⁰⁶

4.3.5 Depth, Movement and Anticipation

Senses of anticipation, uncertainty, and escalating anxiety, and sometimes fear, are intertwined with what is meant to be introduced to a character in a corridor. Corridors

³⁰³ Unwin, *Analysing Architecture*, 157.

³⁰⁴ Bela Tarr, unpublished interview by Hamid Khalili, 2018.

³⁰⁵ Penz, *Cinematic Aided Design*, 206. Penz regards the corridors as devices that contribute to “spatially organized narratives”. Using an example from *Pulp Fiction* (1994), Penz shows how corridors prepare audiences for the next action.

³⁰⁶ Bela Tarr, unpublished interview by Hamid Khalili, 2018. We will return to corridors and the moments of revelations further in this chapter.

in films may lead to unknown and unexpected places and situations. The quality of corridors that is underpinned with a visible deep trajectory toward a destination associates corridors with the notion of Bathophobia (fear of depth).³⁰⁷ Tarr identifies similarities between what he calls the process of preparation and walking in the corridors of cinema and the tension and uneasiness amongst the sporting players while they walk through the hallways of stadiums before entering a court or field:

[W]hen you keep walking your character, your camera and therefore your audience in a corridor, road or street, they start to anticipate what is coming next. They continue speculating about what they are going to see further or in the next shot, they even will ask: why am I walking in the corridor? ... and this speculation and contemplation continues as they keep walking. The action of walking in a road or corridor activates spectators' thoughts and engages them in monologues with themselves.³⁰⁸

In tracking shots that take place in corridors, the action of a character (walking/running), as depicted in the frame is repeated during a shot. In contrast, the space through which a camera is moving is everchanging and profound. The framing elements of a corridor or the spaces around it keep evolving and the platform of the corridor is subject to an incessant movement and change. As a camera begins its promenade in a corridor, what an audience experiences through the moving images is a constant variation in the background as well as a perpetual movement of the walls on the sides of the image and a continuous movement of the ground (the platform of movement) and other spatial elements.

³⁰⁷ Bathophobia comes from the Greek words bathos (depth) and phobos (phobia). Bathophobia is fear of deep spaces such as long hallways and corridors, wells, caves, etc. See *Psych Times*, "Bathophobia (Fear of Depths)," accessed October 15, 2020, <https://psychtimes.com/bathophobia-fear-of-depths>.

³⁰⁸ Bela Tarr, unpublished interview by Hamid Khalili, 2018.

Due to the ongoing exchange of moving elements between the screen space and the off-screen space, corridor shots engender a strong sense of motion and sequentially which expands into off-screen space and in the spectators' minds. The sense of motion is strengthened by the familiar one-point-perspectives in corridors. In effect, the movement of a camera establishes a relationship between the very depth of an image which is an imaginary vanishing point where the lines informing a corridor will meet, and the off-screen space behind the camera.

4.3.6 Corridors as Spaces of Encounter

In a corridor, a space that is "no one's place and therefore everyone's", any encounter, conflict and collision can happen at any time. Urban theorist Kim Dovey, observes that corridors, despite being spaces that are meant to organize and structure, have an intrinsic tendency toward generating unplanned "contacts".³⁰⁹ Dovey suggests that the corridors of political buildings that were supposed to segregate and order became a place of unpredictability where politicians "ministers, backbenchers, staff and media cannot escape one another", and in order to avoid the unplanned collisions in corridors, politicians agree on doorstep interviews "provided that they were not to be asked for public comment in the corridors".³¹⁰ Corridors are designed to guide and control movement, but simultaneously, the nature of corridors cause unpredictable collisions.

³⁰⁹ Michelle Grattan, "Old Habits at Odds with New House," *The Age*, 9 May (1988), 13.

³¹⁰ Kim Dovey, *Framing Places: Mediating Power in Built Form*, Architext Series (Oxfordshire: Routledge, 2008), 92. Kim Dovey shows how through certain strategies, corridors are adopted for the purposes of hierarchizing and structuring the sites of collision and encounter in political settings. These strategies include controlling access, devoting corridor to a group of users, and more crucially, arranging (and preventing) moments of encounter where different paths cross each other. See *ibid.*, 88. In the book, Dovey also discusses the manner in which corridors could serve as channels of transmitting information and the "cheek by jowl jumbles of corridors" engenders conditions that "if something is going on it literally buzzes around the corridors". Corridors has also functioned as a means of separation that provides the possibility of encounters only for a specific group of users. For example: "house keeper's corridor", butlers' corridor, nursery corridor, women servant corridors". See also Koolhaas et al., *Elements*, 55.

In the world of politics, the term ‘corridor diplomacy’ is referred to the act of programming allegedly accidental and “staged-managed” meetings in corridors of the United Nations headquarters between the “statesmen and women who have not quite made up their minds whether they want to be seen together”.³¹¹ The feature of corridors that allows for pre-planning and staged encounters has been used in a considerable number of films. The director Jean-Marie Straub sees dramaturgy as the “art of planning unplanned actions”. Straub describes unanticipated narrative conflicts as “drivers of drama” and argues that to achieve verisimilitude, unpredictable conflicts need to be planned assiduously and should happen “amid the most seemingly normal situations in a tranquil street in a village” or in the “hustle and bustle of a normal corridor leading to a concert hall”.³¹² In this sense, corridors are effective dramaturgy devices as they naturally introduce unexpected and dramatic encounters to protagonists.

Corridors of cinema are full of battles, chasing scenes and shoot-outs. Whether it is an underground hallway that hosts the battle between Neo and agent Smith in *The*

³¹¹ A couple of significant cases of corridor diplomacy occurred during Barack Obama’s presidency, including the meeting with Javad Zarif and Hugo Chavez. In 2015, after weeks of speculation regarding the chance of a historic encounter between U.S President Barack Obama and Hasan Rouhani, the president of Iran, on the sidelines of the U.N. General Assembly, it was the foreign minister of Iran who ran into Barack Obama and shook his hand. The encounter, according to White House officials, lasted “less than one minute” and according to IRNA (Islamic Republic News Agency) was totally “accidental”. The allegedly accidental encounter in the corridor, as the first meeting between an Iranian official and the president of the United States, was criticized by hardliners in Iran, the United States and Israel. Hardliners sought an “investigation to see what the case really was” and described the handshake as a “plotted tête-à-tête”, a “preplanned meeting” and a “schemed handshake”; a “pact with the devil” in a corridor that should remain “a place of shame for the foreign minister’s rest of life”. See Julian Borger, “Obama and the Art of Corridor Diplomacy,” *The Guardian*, accessed October 15, 2020, <https://www.theguardian.com/world/shortcuts/2013/sep/16/obama-corridor-diplomacy-iran-rouhani>. “Obama Engages Iranian Foreign Minister in Historic Handshake at Un,” *The Guardian*, accessed October 15, 2020, <https://www.theguardian.com/us-news/2015/sep/29/obama-iranian-foreign-minister-mohammad-javad-zarif-handshake>.

³¹² Alberto Momo and Donatello Fumarulo, *Atlante Sentimentale Del Cinema Per Il Xxi Secolo* (Rome: DeriveApprodi, 2013), 116-20. Straub suggests that “a random randomness will fail easily and will be noticed by an audience; for example, an accident scene that is a random and accidental event should be planned to happen in the right place, at the right time and after and before suitable actions”.

Matrix (1999), a tortuous corridor in a gigantic spacecraft in *Star Wars: The Force Awakens* (2015), a haunted corridor in an abandoned building in *Oldboy* (2003), a cramped and claustrophobic corridor in *The Raid Redemption* (2011) and *Daredevil* (2003) or a rotating corridor in *Inception* (2010); a corridor is a suitable place for characters to confront each other (see Figure 81-Figure 83). The occurrence of a confrontation between two antagonistic forces takes place on large-scale corridors such as the streets of New York in *Gangs of New York* (2002) and the 110th and 68th street in Manhattan in *West Side Story* (1961) as well. The same type of event, with its own traditions of cinematography and editing, appears in the iconic duel shots between the cowboys of Western movies in unpaved and deserted spacious main streets that are saturated with a dreadful silence before the first cowboy shoots.³¹³ At times, the encounters in corridors can be as simple as a moment when a protagonist runs across someone who he/she is evading. The encounters result in disparate dramatic conditions and the dramatic outcomes are contingent on how a filmmaker organizes the clashes within a corridor. The encounters can be the momentous birthplaces of the entire narrative of a film.

³¹³ This cinematic trope is recurrent in many Western movies. For example, see duel scene in *The Quick and the Dead* (1995) directed by Sam Raimi.



Figure 81. The scene from *The Matrix* (1999) directed by the Wachowskis in which the encounter between Neo and Agent Smith leads to a fight in the corridor.

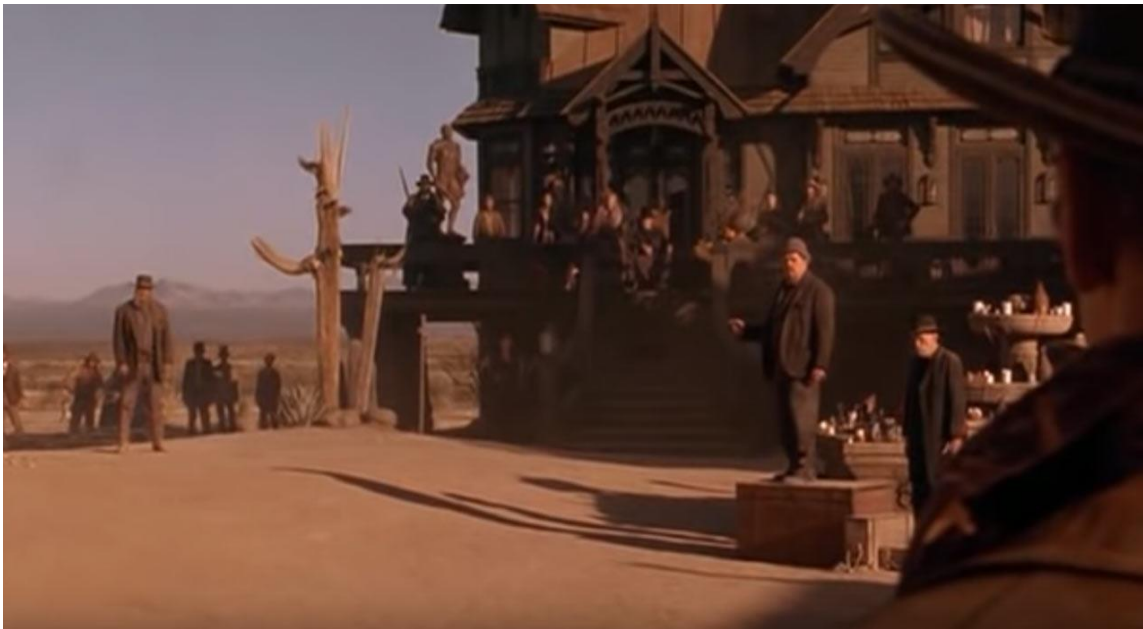


Figure 82. The first duel scene in *The Quick and the Dead* (1995) directed by Sam Raimi taking place in an unpaved urban corridor.



Figure 83. The scene in *Inception* (2010) known as hallway fight or corridor fight is another example of the confrontation that happens in the cinematic corridors.

4.3.7 Corridors of Love, Corridors of Terror

From the most amorous encounters to confrontations impregnated with terror; these cinematic moments have taken place within the envelope of corridors. For instance, in *In the Mood for Love* (2000) directed by Wong Kar Wai the whole complicated love story of the film pivots around the encounters occurring in corridors. Signaled by Yumeji's theme, composed by Shigeru Umebayashi, and shot in slow-motion, the journey of the main characters flows in the cramped corridors of flats and the narrow laneways of Hong Kong (Figure 84Figure 85). Every time the slow-motion montage and the piece of music accompany Chow Mo-wan and Su Li-Zhen (main characters) in the corridors, the protagonists come upon each other.³¹⁴

³¹⁴ The same pattern of characters coming across one another is discernible in other films such as *Malena* (2000) directed by Giuseppe Tornatore. In *Malena*, urban corridors, streets, alleys and laneways offer an opportunity to Renato (the protagonist) to encounter Malena for the first time and to stalk her for the rest of the film.



Figure 84. In *In The Mood for Love* the first encounter of the characters happens in the interior corridor.



Figure 85. In *In The Mood for Love* the long walks in the laneways of Hong Kong leads the characters to the usual point of encounter.

A corridor might mingle the collisions in a way that leads to comedic, tragic or action events.³¹⁵ It appears that for the two sides of an encounter there is no escape from one another. The framing elements of a corridor stiffly confine the territory of an encounter to the platform of a corridor, in a way that it seems there is no space to evade. Even in the hinterlands of Western movies where there is nothing in the frame, but a dirt main street surrounded by a two parallel lines of buildings, the collision remains limited to the vast unpaved corridor of a duel enframed by the buildings on the sides. It is as if the main street is a corridor in which all of the drama, action and attention is condensed and focused.

It is no surprise that the horizontal platforms of corridors have served as stages for the most shattering and unsettling moments in the history of cinema. The rape scene in *Irréversible* (2002) directed by Gaspar Noé, has been described as one of the most controversially “disturbing” and “galling” scenes by many film critics (Figure 86).³¹⁶ The scene is shot in a red and deep hallway by a low angle long shot that lasts for ten minutes.³¹⁷ The exaggerated depth of the corridor (emphasized through the one-point perspective and lighting at the end of the corridor) on the one hand, and the walls that make the corridor seem unescapable on the other hand cause the appalling impression

³¹⁵ For example, *Mr. Bean in room 426* (1993) the encounters between the naked Mr. Bean and people in a hotel's corridor generates a comic situation.

³¹⁶ See Roger Ebert, "Irreversible," accessed October 15, 2020, <https://www.rogerebert.com/reviews/irreversible-2003>; Douglas Keesey, "Split Identification: Representations of Rape in Gaspar Noé's *Irréversible* and Catherine Breillat's *Ma Sœur! / Fat Girl*," *Studies in European Cinema* 7, no. 2 (2010); Mikita Brottman and David Steritt, "Irreversible (Film)," *Film Quarterly* 57, no. 2 (2003). While there are numerous examples in the history of cinema that are far more explicit and detailed in terms of how violence is illustrated, this scene remains on the top of the list of most disturbing scenes for many reviewers. See for instance Amy Roberts, "Why Is 'Irreversible' Still Shocking 15 Years Later?," accessed October 15, 2020, <https://filmdaily.co/obsessions/irreversible-shocking-15-years-later/>.

³¹⁷ In the scene, the camera (that functions as viewers' eye) is staged on the ground close to the body of the victim, as if an audience is obliged to look at the scene from the same level as the victim. Observing the corridor from a low angle is an unfamiliar way of experiencing a corridor that is typically a space for walking through and passage

of the scene. The minimal geometrical form of the corridor that resembles a massive box lit by a high contrast lighting arrangement, the overlong lines of the walls that cross each other at the unreachable end of the hallway, the distance and verticality of the walls that incarcerate the protagonist firmly, as well as the visual stress on the notion of depth enhance the nightmarish psychological effect of the scene. The scene is not visually descriptive about the act of penetration and rape as the camera mostly stays in a long-shot and medium-long-shot position filming the characters from a frontal view. Moreover, the quintessential tropes of brutal scenes such as accentuation on blood, wounds, injured body parts, as well as close ups of the aggressive actions and slow motion do not exist in the scene. Nonetheless, the corridor of the scene, which was further portrayed on the official posters of *Irreversible*, became an icon representing one of the most “unwatchable” scenes of the whole history of cinema (Figure 87).³¹⁸ The unavoidable cinematic confrontations in corridors happen by exploiting narrative as well as spatio-visual characteristics of corridors..

³¹⁸ Roger Ebert, "Irreversible," accessed October 15, 2020, <https://www.rogerebert.com/reviews/irreversible-2003>.



Figure 86. The rape scene in *Irréversible*.

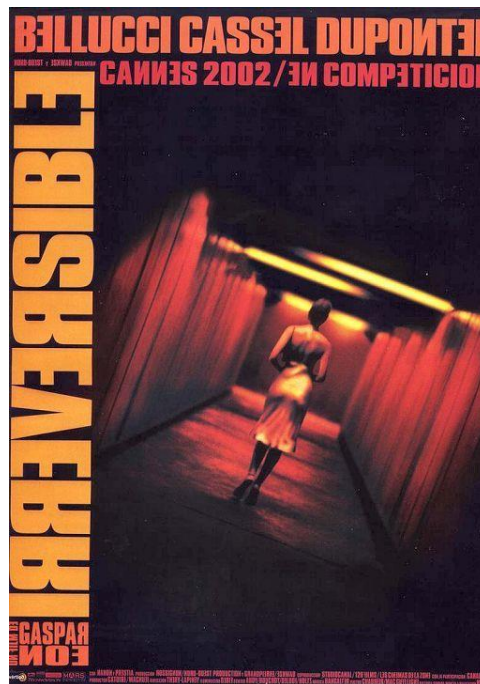


Figure 87. The official poster of *Irréversible*.

4.3.8 Camera Movements, Corridors and the New Tendencies

The images of corridors in cinema, as spaces that are inextricably coupled with the notion of mobility, have been influenced by developments in the tools of filmmaking. The end of studio had a major influence on the frequency of the presence of corridors in films as well as on the ways in which corridors were filmed in cinema. Koeck argues that new methods of cinematography, inaugurated in the French *Nouvelle Vague* and Italian Neorealism, along with mobile filmmaking technologies and long takes resulted in the development of a “new film language” and unprecedented manners of articulation of space in film.³¹⁹ It was through the new methods of filming that “talkies became the walkies”, as David Bordwell, film theorist suggests, and filmmakers “taught us that you could make a film about a character walking”.³²⁰

The end of studio filmmaking, in the first place, and the reign of urban filmmaking in the second half of the twentieth century encouraged filmmakers to invent new methods and tools for filming mobile characters wandering in urban corridors. The introduction of advancements in camera movement technologies such as Steadicams enabled cameras to track protagonists while capturing spaces and cityscapes in the second plane (background behind characters) of images, more effectively. Today, the emergence of Steadicams and further Glidecams, Gimbals and drones as tools available even to amateurs, has reinforced a cinema of “walkies” and impacted different styles and genres of filmmaking. Sophisticated camera movements that were not possible when using the expensive, and hefty dollies can now be easily filmed by ubiquitous, light and mobile cameras.

³¹⁹ Koeck, *Cine-Scapes*, 32-33.

³²⁰ David Bordwell, "The Sarcastic Laments of Béla Tarr," accessed October 15, 2020 <http://www.davidbordwell.net/blog/2007/09/19/the-sarcastic-laments-of-bela-tarr>.

The film industry, through the new camera movement technologies, managed to fashion an unprecedented method of filming corridors in motion. The methods of shooting corridors in movement, introduced and practiced from the mid 1907s, were adopted by numerous filmmakers in specific occasions. *Bound for Glory* (1976) was one of the first films in which Garret Brown, the American cinematographer, used his invention, the Steadicam.³²¹ Further, Stanley Kubrick became the first preeminent filmmaker who embraced the Steadicam as the main camera movement tool in his film, *Shining* (1980) (Figure 88).

Tarr and Angelopoulos were amongst the most notable examples who insisted on capturing the experience of a continuous movement in spaces more than any other director.³²² The following sections look into some of the features of the cinema of Angelopoulos and Tarr, particularly Tarr, that epitomizes the new generation of the mobile tracking shots in corridors.

³²¹ Brooke Comer, "Steadicam Hits Its Stride," *American Cinematographer* 73 (1992). Also see "Steadicam: Then and Now," *StabilizerNews*, accessed October 15, 2020, <https://www.youtube.com/watch?v=7GURHXOIGQ8>.

³²² It has been argued in various sources that Tarr and Angelopoulos are one of the most important filmmakers who persistently practiced and even theorized the new method of filmmaking that is based on mobile long takes (continuous movement of characters and cameras in space). See for example, Bordwell, "The Sarcastic Laments of Béla Tarr". In the chapter Why Tarr and Angelopoulos it is discussed in more details.

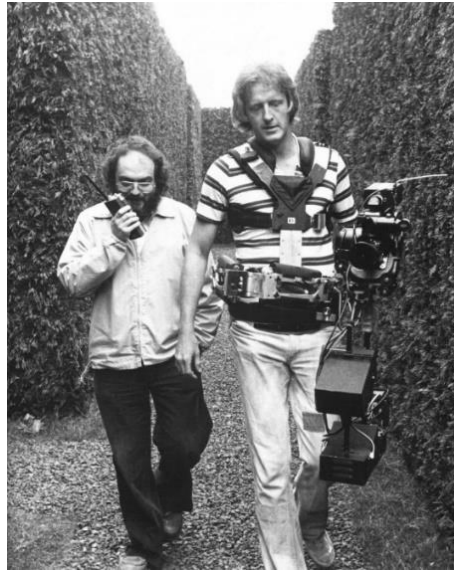


Figure 88. Garret Brown and Stanley Kubrick rehearsing with Steadicam for the final scene in *The Shining* (1980).
tested.com/art/movies/457145-shining-and-steadicam.

4.3.8.1 Corridors and Post-pictura Cinema

The relationship between corridors and perspectival images dates back to the era that cinema and movie cameras did not exist. Corridors, hallways, streets and laneways were rewarding spaces to practice central perspective by Renaissance painters and architects, simply because the images of corridors could showcase the convergence of the horizontal lines toward the vanishing point and the dwindling effect of repeated vertical elements better than any other species of space (Figure 89Figure 92).³²³ Not only in the case of corridors, but perspectival image-making, in general, is a static exercise, and perspective, in nature, is motionless. This direct link between perspective and

³²³ Just as some of the architects and painters who practiced one-point-linear perspective through corridor like structure are the following names can be mentioned: Albrecht Durer, Leone Batista Alberti, Sebastiano Serilo, Baldassare Peruzzi, Donato Bramanate, Bernardino di Betto (Pinturicchio) and Jacques Androuet du Cerceau. See Mario Carpo and Frédérique Lemerle, *Perspective, Projections and Design: Technologies of Architectural Representation* (Routledge, 2008), 78-94. Robin Evans, *The Projective Cast: Architecture and Its Three Geometries* (Cambridge, Mass.: MIT Press, 1995), 120-38. Chris Brisbin, "Images in Space & Space in/within Images: Charting a Shifting Dynamic in Architecture from Disembodied Viewpoint to Embodied Viewer" (Doctorate Thesis, University of Queensland, 2010), 106-49.

motionlessness is what convinced Sokratis Georgiadis, architectural historian, to state that adopting a “cinematic view” only happens through abandoning “conventional perspectival image”.³²⁴

Paradoxically, after more than five centuries, in the *moving* images of cinema, static shots of corridors, often, with an accentuation on converging lines and central perspective record images that bear an undeniable visual resemblance to one-point-perspective of Renaissance paintings. With a hypothetical vanishing point in the center of the image and sharp horizontal converging lines running toward the very end of corridors, these shots are reminiscent of the perspectival images of the archways, hallways and other corridor-like structures meticulously painted by Renaissance painters and architects on the gridded screens of perspective machines. The film screen in the fixed corridor shots becomes an Albertian *velo* that divides the world into two parts: the corridor (containing an action), the central perspectival image of which projected on the perspective screen and the part where the camera and the spectator stand.³²⁵

In the fixed shots of corridors, the screen of film performs as a separating element, similar to a section cut, and distances the space of a corridor from the viewer. Even when a camera is staged inside a corridor, it seems that an audience is looking at the scene from the point of view of “an outsider”, as Tarr puts it.³²⁶ These static shots separating

³²⁴ Sokratis Georgiadis, "Appendix: The Book as a Gesamtkunstwerk," in *Building in France, Building in Iron, Building in Ferro-Concrete* ed. Sigfried Giedion (Santa Monica, CA: Getty Center for the History of Art and the Humanities, 1995).

³²⁵ *Velo* or perspective veil is component of drawing machine on which (or on a piece of paper fixed on it) the perspectival images are drawn. See for instance, Maria G. Bartolini Bussi and Michela Maschietto, *Macchine Matematiche: Dalla Storia Alla Scuola* (Berlin: Springer, 2006), 34-36. See also Brisbin, "Images in Space & Space in/within Images," 105-07. Chris Brisbin discusses the notion “of-the-wallness” of perspective and how perspectival image functions as “window cut” on the separating wall of perspective.

³²⁶ Tarr regarding a static corridor shot in *Satantango*, in which characters are waiting in a corridor remarks: “When you put your camera in a static position in a corridor, you ask your audience to watch the corridor from the point of view of an outsider. But when you move your camera with or without your actors in a

an observer from the space of a scene through the impenetrable veil of the screen generate painting-like, static images that give an audience an opportunity to observe the corridor, but put no emphasis on engaging a spectator in the experience of the movement in a corridor. These static perspective shots seem to be supporting evidence for the claims of historians and theoreticians such as Mario Carpo who argued that cinema is a continuation of pictorial perspective and cameras are not much more than mechanized “perspective making machines”.³²⁷



Figure 89. Sebastiano Serilo, View of a City; Ferrara. Piancoteca Nazionale.

corridor, you are saying to your spectator, look, that is how moving in this corridor or this road feels.” Bela Tarr, unpublished interview by Hamid Khalili, 2018.

³²⁷ Carpo argues that images recorded by cameras are perspectival drawings in which perspective of the image is “made by the imprints of each beam of light onto the surface of a film”. Some cinema theorists consider cinema as a continuation of pictorial perspective too. Mario Carpo, “On the Rise of 3-D Technology,” *Artforum*, accessed October 15, 2020, <https://www.artforum.com/video/mario-carpo-on-the-rise-of-3-d-technology> 66940?fbclid=IwAR0WsxA5R_-S7A6TXmF2GvDiEznH2vLNWhQUhlzxaQpfVJiDf-ZsFNSb0sw. See Jean Louis Comolli, “Machines of the Visible,” in *The Cinematic Apparatus*, ed. Teresa De Lauretis and Stephen Heath (Macmillan, 1980).

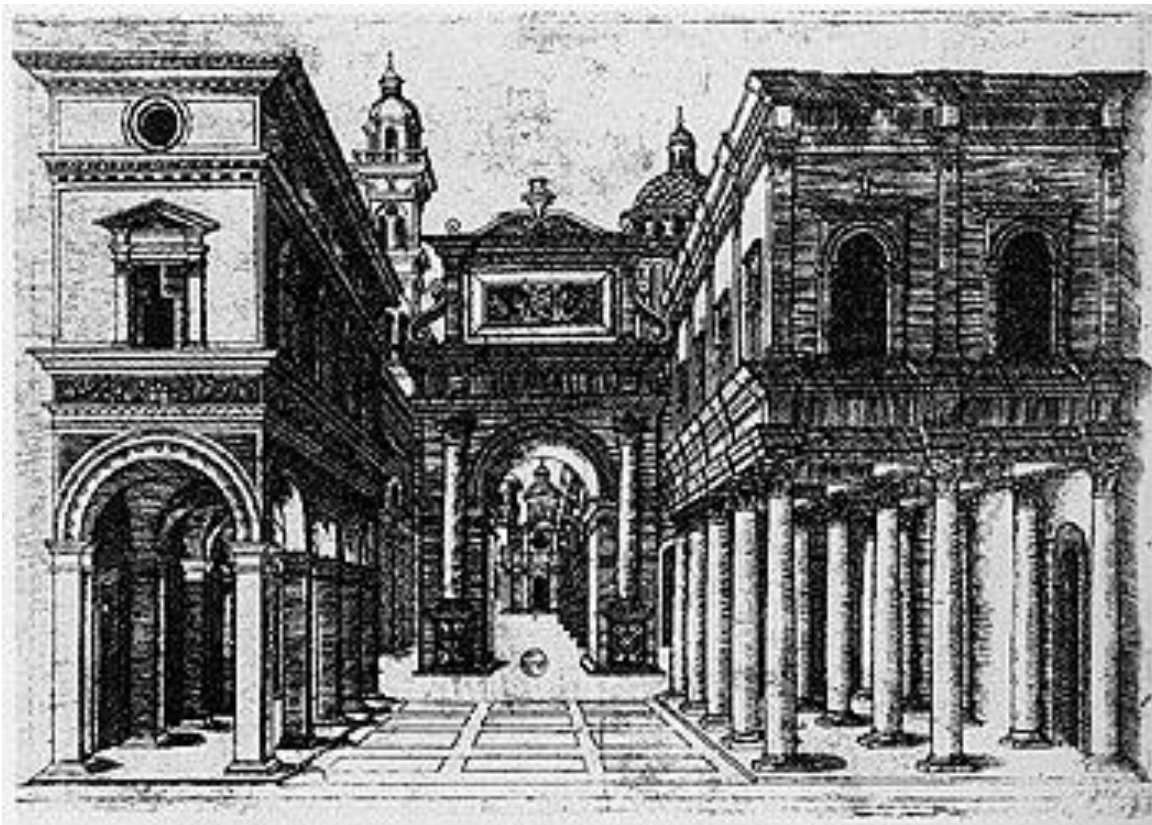


Figure 90. Donato Bramante, *Scena prospettica* (1475 ca.); Florence, Gabinetto Disegni e Stampe degli Uffizi.



Figure 91. Sebastiano Serilo (?), View of a City; Ferrara. Piancoteca Nazionale.

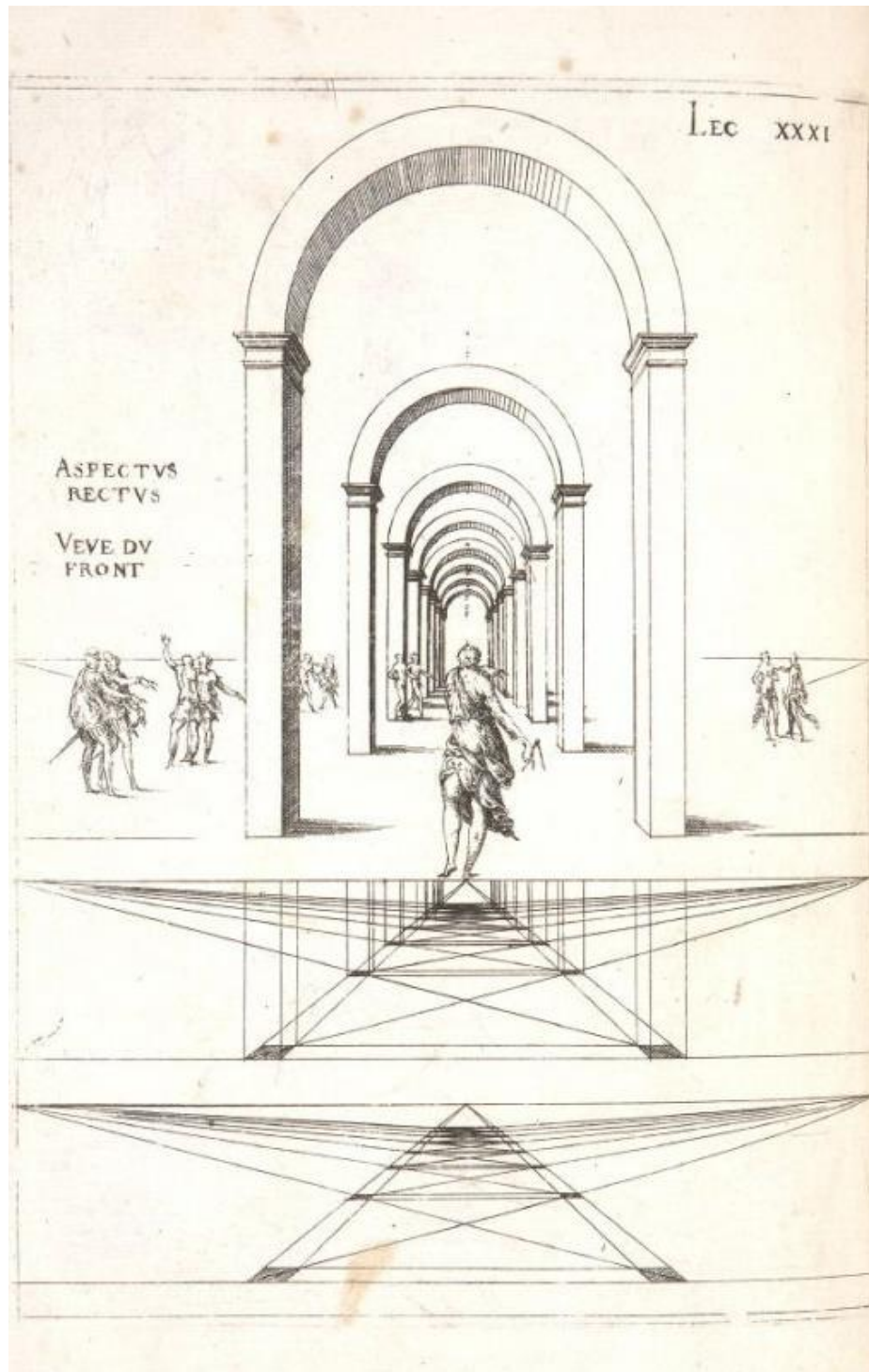


Figure 92. Jacques Androuet du Cerceau (1576), perspective construction, from *Lecons de Perspective Positive*.

In the static shots of corridors, the steadiness of the camera, in the same way as an assembled fixed perspective drawing machine does, freezes the space of a corridor and molds a firmly rigid relationship between the motionless camera and the imaginary vanishing point to which all the horizontal lines of the image are converging. The unchanging distance between the vanishing point in the center of the image looks like an infinite gap between the transfixed camera and the unreachable depth of a corridor. Screened off and barred from the action taking place, the stationary cameras welded to the ground appear to be unable to infiltrate and even approach the depth of corridors.

Pallasmaa praises the distancing effect caused by the fixed shots of corridors in which a camera is divided away from the space and does not move toward the vanishing point of the image. Pallasmaa identifies that the shots of corridor-shape structures such as archways in the movies of Tarkovsky are similar to the works of *quattrocento* painters, namely Fra Angelico, Bellini and Botticelli. He aestheticizes the “suppression of the dynamic effect” and the act of flattening a scene “into a two-dimensional image, a painting” that is caused by the immobile “frontal perspective with a single vanishing point”.³²⁸ He observes that the camera of Tarkovsky “never rushes into the depicted space” and keeps the viewer on the “edge of the painterly image”.³²⁹ Pallasmaa approves of two specific effects generated by static shots of corridors: the painting like immobility of the fixed shots and the distancing effect of the shots that keeps a camera (and an audience) on the “edge” of the painterly image and does not let them enter and move through the image.

Bruno ruthlessly rejects this kind of fascination with perspectivism and the belief that these static shots are based on the linear perspective of the Albertian Renaissance.

³²⁸ Juhani Pallasmaa, "Space and Image in Andrei Tarkovsky's *Nostalgia*: Notes on a Phenomenology of Architecture," in *Chora: Intervals in the Philosophy of Architecture* ed. Alberto Pérez-Gómez and Stephen Parcell (London: MQUP, 1994).

³²⁹ *Ibid.*, 151.

She states that this “narrow and reductive” understanding of film reduces the experience of cinema to a “fixed, unified geometry of a transcendental, disembodied gaze”.³³⁰ For Bruno, the movement of the camera pushes the boundaries of the static perspectives into the realm of “mobile architectonics” and introduces a “corporeal disruption of static, absolute vision – a deviation from perspectivism”, noting that the notions of motionlessness and perspectivism precondition one another.³³¹ Generating a perspectival image requires one to stand in a fixed position and to perceive a perspective, as Stephen Parcell claims, one “remains stationary, without reaching out and touching its surface to see why one's eyes do not fully perceive depth”.³³² Bruno proposes that the valuable quality that film can offer is motion which is a deviation from linear perspectivism.

Once a camera sets off on its movement through a corridor and toward its depth, the congealed and static perspective melts and the motionless painterly image becomes destabilized by the movement of the camera. Passing through the veil of perspective, the camera passes by the edge of the image, walks toward the vanishing point and, in doing so, makes viewers accompany the movement toward the infinity of a corridor. In a moving shot in a corridor, by producing at least twenty-four perspectival images per second, a camera gives rise to a sustained dynamic and everchanging tension between the picture plane (veil or film screen) and the vanishing point of the image.

Dissimilar to the static images where perspective is unalterable, unchallenged and permanent, when a camera moves perspective becomes transitory, short-lived and extremely contingent on re-defining itself many times in every moment. It is through

³³⁰ Bruno, *Atlas of Emotion: Journeys in Art, Architecture, and Film*, 129.

³³¹ Ibid., 176-87. Other theorists such as Louise Pelletier propose arguments similar to Bruno. Pelletier suggests that film “re-embodied motion and retrieved tactile space from the perspective frame.” See Louise Pelletier, “The Building of a Horizon,” in *Chora: Intervals in the Philosophy of Architecture* ed. Alberto Pérez-Gómez and Stephen Parcell (London: MQUP, 1994), 212-14.

³³² Stephen Parcell, “The Momentary Modern Magic of the Panorama,” *ibid.*, 174.

the mobilized cameras that the vanishing point of the image becomes a shifting entity that constantly moves as long as a camera moves and makes a corridor “swallow” and “draw” a camera toward the end of it.³³³ The moving shots through corridors present a post-*pictura* image in which the “sequence of shots that corresponds to a perception in movement” challenges the dominance of linear perspective and its motionlessness.³³⁴ The following section looks into moving (tracking) shots of corridors and their cinematic and spatial features.

4.3.8.2 Corridors and Tracking Shots

Corridors of cinema, as spaces hosting movement, are contingent on the journeys of characters and cameras. Since camera movements in films often follow the actions of characters in space, the umbrella term ‘tracking shot’ is used for them even when the shots move in spaces independent of actions and characters.³³⁵ Filming scenes in which a character moves in a corridor or an urban corridor and a camera follows him/her has been facilitated by handheld camera movements technologies such as Steadicams and

³³³ In the interview with the author Bela Tarr stated: “the depth and the vanishing point of the corridor swallows a camera and draws the camera and audience toward the end of the corridor”.

³³⁴ Georgiadis, "Appendix: The Book as a Gesamtkunstwerk," 207. These terms are borrowed from the phrase through which Georgiadis describes the difference between a conventional perspectival image and images with cinematic qualities in the images of Sigfried Giedion. Georgiadis decryption seems to be applicable to a type of cinema in which the camera starts moving in corridors and challenges the conventional perspectival images of corridors in the fixed shots.

³³⁵ The naming of the type of camera movements is a controversial area and the same type of camera is named differently in various sources. However, any type of shots in which a camera moves is considered tracking shot. Originally, ‘tracking shot’ was used to refer to shots recorded by a dolly moving on rails. But, nowadays, the term refers to any type of shot in which a camera moves. See Jakob Nielsen, "Camera Movement in Narrative Cinema - Towards a Taxonomy of Functions" (Doctorate Thesis, University of Aarhus, 2007). In cinema, tracking shots in corridors in which a camera moves independent of characters and actions are often employed for establishing a setting, building or a city. The opening scene of the *Last Year in Marienbad* (1961), directed by Alain Resnais, exemplifies the function of establishing independent shots in the corridors of a building and the opening scene of *The President* (2014), directed by Mohsen Makhmalbaf, demonstrates how the type of shot can be employed in urban corridors as an establishing shot for a city.

Gimbals, however, this type of shots – usually filmed in corridors – with its a distinct visual and spatial disposition has a longer history.

In corridor tracking shots, paradigmatically, there is a character whose body is partially (or fully) framed and occupies some areas of the foreground, or middle ground, of an image (Figure 93Figure 96). As the character moves in space and, a camera clinging to the character, follows him/her, the shot depicts the moving and changing spaces in the background. In other words, the foregrounded action that the movement of a character through space is a repeated one, and the significant narrative information introduced to an audience is the perpetual movement and change of spaces, observed in the areas enfolding the character, in the background. The repeated action of an actor in space functions as an activator of the background or as a conductor that guides the camera and spectators in the space. A character might be tracked from the back, front or a lateral view but the relationship between the passive foreground (character) and the active and everchanging background (the corridor through which the character moves) always exist. The background in movement is the main protagonist of these shots. In essence, the moving shots in corridors prioritize the space over the action of moving. Although it is the action and the mobility of a character in the foreground that drags and draws a camera through space, what revitalizes the frame is the movement of space in the background or the peripheral part of an image.



Figure 93. *Shining* (1980) directed by Stanley Kubrick was one of the first films in which Steadicam was used as the main moving camera tool in various scenes of the film.



Figure 94. Tracking shots in *Dunkirk* (2017) directed by Christopher Nolan. Both shots from the frontal view and from the over-the-shoulder view have a repeated action in the foreground and a background (space through which a character is moving) that is in a constant movement and change.



Figure 95. In the two recent acclaimed films, *An Elephant Sitting Still* (2018) directed by Hu Bo and *The Wild Pear Tree* (2018) directed by Nuri Bilge Ceylan, there are long scenes in which directors take spectators for long walks in the cities and urban corridors through the type of tracking shot.

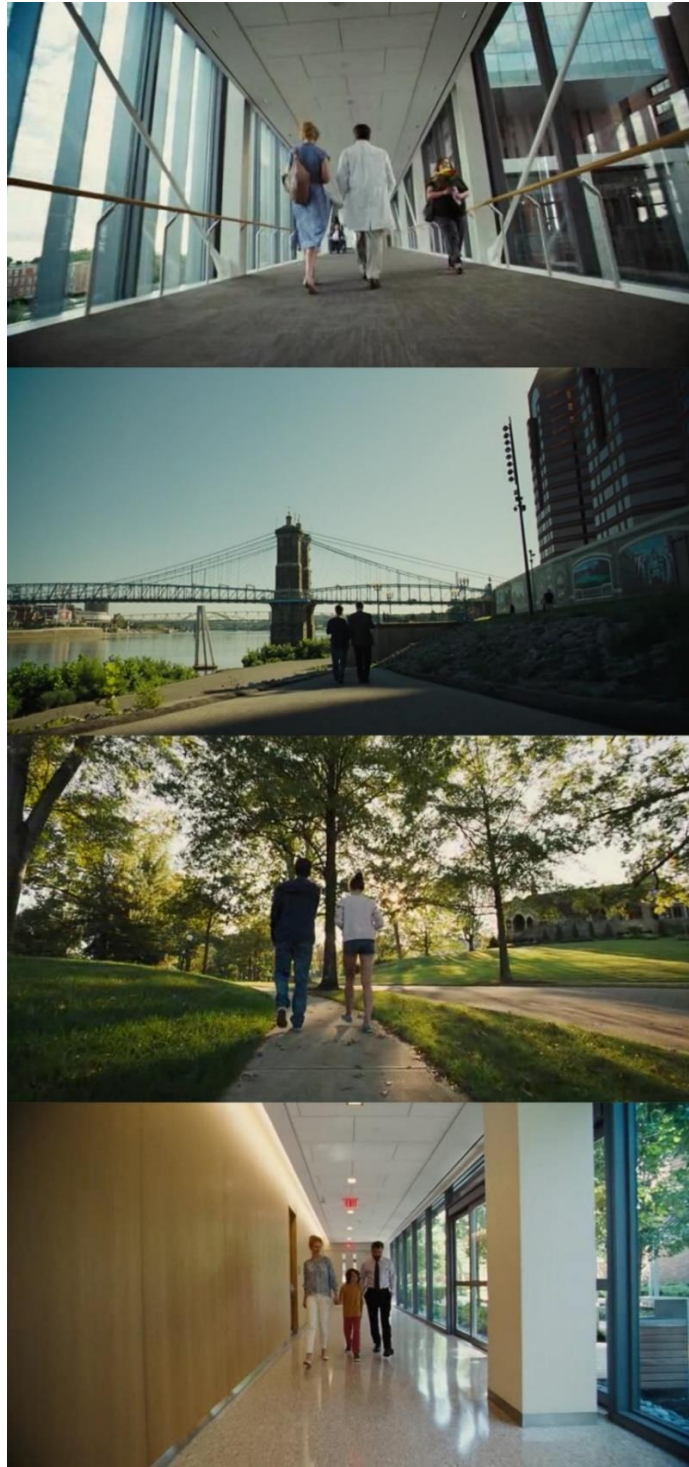


Figure 96. In *The Killing of a Sacred Deer* (2017) directed by Yorgos Lanthimos, there are numerous scenes in which the camera follows the characters (in the foreground or middle ground) walking in various types of corridors (illustrated in the background).

The specific spatial juxtaposition of a character, a camera and spaces in the background generated through the tracking shots is not, nonetheless, limited to walking scenes. If we consider the tracking shots as a type of camera work in which a camera moves in space keeping a certain distance from a mobile subject (character) and captures spaces in the background, shots captured in moving vehicles can be considered within this category too. For instance, in *Mamma Roma* (1962) directed by Pier Paolo Pasolini, in the well-known scene when Ettore takes his mother (Mamma Roma) for a ride in the peripheries of Rome, the entire scene is narrated with the same visual arrangement as a Steadicam shot (Figure 97).

Anna Magnani (Mamma Roma) and Ettore Garofolo (Ettore) act in the foreground as the conductors of the journey through the streets of Rome. The camera and actors both move, with the motorbike probably fixed on a vehicle, and the cityscapes of Rome unfold in the background by the movement of characters and camera through streets. There are important dialogues in the scene, but the dialogues can take place anywhere else. The main intent of Pasolini in the scene is to introduce the environment inhabited by the characters to spectators as the dialogues are being exchanged. It is not only a journey taken by the protagonists, but an audience (represented by the camera) also accompanies the characters on the motorbike with characters as well.

Through this type of shot Pasolini demonstrates that *Mamma Roma*'s dreams and aspirations for a future within the new petit bourgeois neighborhoods in postwar Rome, as mentioned in the dialogues and visually revealed in the new city which is being explored by characters. Within the process of movement through these streets, with a camera capturing modern and old buildings, neighborhoods, social housing projects, posters in urban environments, streets signs, shops and monuments in the background, Pasolini prioritizes the locations presented in the background over the action (the dialogues) taking place in the foreground. Then, as a result of this act, the dialogues — that point directly to the place — become meaningful when the space is already created

and felt by an audience through the tracking shot.³³⁶ A viewer observes the city that Mamma inhabits in the background of the image, which is not the center of Rome with its tourist sites, grand viales, piazzas, churches and fountains which is the foreground of every postcard. But it is a cheaper Rome built in the postwar era on its yet-to-be fully inhabited, somewhat desolate fringes, in the periphery, is recorded in the background of the long ride of Mama Roma. The periphery in the background, however, is foregrounded through a long tracking shot and is brought to the center of attention.³³⁷



Figure 97. Screenshot. *Mamma Roma*.

³³⁶ Colleen Ryan-Scheutz, *Sex, the Self, and the Sacred: Women in the Cinema of Pier Paolo Pasolini*, Toronto Italian Studies (Toronto: University of Toronto Press, 2007), 51.

³³⁷ See AnnMarie Brennan, "Life at the Periphery: The Urban Politics of Neorealism in Post-War Rome," *Interstices: Journal of Architecture and Related Arts* (2011). In the paper, Brennan discusses the relationship between the urban spaces of Rome and, particularly, the peripheries in Neorealism cinema with a focus on the case study of *Mamma Roma* and *Rome, Open City* (1945) by Roberto Rosellini.

This accentuation on the background exists in every moving shot where a character and a camera both move in a corridor and the camera films the spaces, with a distance maintained from the character in the foreground and capturing spaces in the background. In the tracking shots, the backgrounds are not turned into foregrounds, through the movement they become a haptic space encompassing the moving characters, cameras and spectators. In the conditions of walking, driving and filming spaces through car windows in the background of the image, bike riding and even skateboarding the spaces in the background in which a character is moving become activated and established through the simultaneous movement of character and camera.³³⁸

4.3.8.3 Walkies in Corridors

The cinema of Tarr and Angelopoulos is characterized by extremely long tracking shots of characters walking in different kinds of corridors. Angelopoulos' films are repeatedly described as "peripatetic".³³⁹ Entailing some sort of "poetics of wandering", his characters are constantly meandering in "non-places" and "geographies of displacement".³⁴⁰ The films of Angelopoulos are regarded as a species of road movies in which characters are unceasingly pursuing "a lost paradise, a lost innocence or a lost reference point" and for them, a home is found in the corridors connecting "destinations".³⁴¹

Bela Tarr's films, comparably, abound with the extraordinary long takes in which characters do nothing but walk in roads, urban or interior corridors. The act of walking

³³⁸ Iain Borden, "Skateboard City: London in Skateboarding Films," in *London on Film* ed. Pam Hirsch and Chris O'Rourke, Screening Spaces (London: Palgrave Macmillan, 2017).

³³⁹ In the chapter 'Why Tarr and Angelopoulos', the relationship between movement and the cinema of the two film directors is thoroughly discussed.

³⁴⁰ Les Roberts, "Non-Places in the Mist: Mapping the Spatial Turn in Theo Angelopoulos' Peripatetic Modernism," in *Revisiting Space: Space and Place in European Cinema*, ed. Wendy Everett and Axel Goodbody (Bern: Peter Lang Publishing, 2005). 333.

³⁴¹ Ibid.

itself is conceived as an act of placemaking. Botz-Bornstein, drawing upon the theories of de Certeau, argued that the long walking scenes in the films of Tarr produce a space with a higher degree of verisimilitude. For de Certeau, the existence of space is contingent on its movement and “mobile elements”.³⁴² Botz-Bornstein, following de Certeau’s view accounts that the spaces of Tarr’s scenes become “real” (and organic as he claims) through the mobility of the camera and characters that “never get tired of walking”.³⁴³

Tarr is not the only filmmaker who employed the long walking tracking shots in corridors, streets and roads.³⁴⁴ Yet, as David Bordwell, film theorist and historian suggests, Tarr’s walking long takes in corridors, urban corridors and rural corridors are the hallmarks of his films, and are unparalleled in the works of other filmmakers; even the long-takes of filmmakers such as Andrey Tarkovsky are not comparable to the “Steadicam marathons” of Tarr (Figure 98Figure 99).³⁴⁵ Although the long tracking shots and continuous experience of movements within corridors were established and theorized by filmmakers such as Tarr and Angelopoulos, in recent years the once

³⁴² Michel de Certeau, Pierre Mayol, and Luce Giard, *The Practice of Everyday Life* (University of California Press, 1984), 117.

³⁴³ Botz-Bornstein, *Organic Cinema*, 169. Koeck draws a similar conclusion based on de Certeau’s accounts. Koeck argues that that mobile spectatorship and walking in space creates space in which a space becomes a protagonist, acts and performs. Koeck, *Cine-Scapes*, 93-110. Igea Troiani and Hugh Campbell, architectural theorist and filmmaker, commenting on the walking long takes in streets, that are similar to Tarr’s scenes, argue that the flow created through the act walking and driving is akin to “our experience of moving along a street”. Igea Troiani and Hugh Campbell, "Orchestrating Spatial Continuity in the Urban Realm," *Architecture and Culture* 3, no. 1 (2015), 17.

³⁴⁴ Recently there are many scenes that have been shot using the same technique of tracking shots, including the opening scenes in Alejandro Iñárritu’s *the Birdman* (2014), , tracking scenes in Christopher Nolan’s *Dunkirk* (2017), Yorgos Lanthimos’ *The Killing of a Sacred Deer* (2017) and *The Favorite* (2018), *The Florida Project* (2017), directed by Sean Baker, *An Elephant Sitting Still* (2018), directed by Hu Bo, *Holy Motors* (2012) directed by Leos Carax, just a few to mention.

³⁴⁵ Bordwell, "The Sarcastic Laments of Béla Tarr". Marcy Saude, "5 or 6 Minutes on Cinematic Time," *Three Colors*, all Black, accessed October 15, 2020, <https://vimeo.com/2587598>. Marcy Saude filmmaker and film critic states that “Tarkovsky’s long take look like a MTV in comparison with Bela Tarr’s Steadicam marathons”.

unusual long takes of characters traveling in corridors are becoming prevalent in various genres of cinema.

From documentaries about architecture to mainstream films, the long takes of characters in movement has become a praiseworthy skill of filmmakers.³⁴⁶ Long takes of characters walking from one corridor to another that in the past were described as “unattractive”, “empty”, “unnecessary” and “pompous” have become a commendable method of filming and reflective more a realistic, authentic depiction of the way in which people communicate and interact, based on this linear experience of space.³⁴⁷ Bi Gan, the director of *Long Day's Journey into Night* (2017) shoots a one-hour-long take of his protagonist walking, flying and riding; an entire episode of *Mr. Robot* (2015) films its characters wandering in corridors in a mobile long take; and even the blockbuster *1917* (2019) records the journey of its protagonists through trenches and wide roads of battlefields through seemingly moving long takes (Figure 100Figure 103).

³⁴⁶ There are numerous filmmakers influenced by Bela Tarr. Gus Van Saint (American filmmaker) has been outspoken about the influence of Tarr on his film *Gerry* (2002), Laszlo Nemes and his *Son of Saul* can be mentioned as another example. See Ed Gonzalez, "Interview: Gus Van Sant Talks *Gerry*, Béla Tarr, J.T. Leroy, and More," *Slantmagazine*, accessed October 15, 2020, <https://www.slantmagazine.com/film/gerryandering-an-interview-with-gus-van-sant>. Ila Bêka and Louise Lemoine employ the same type of shot in *Koolhaas Houselife*, *25 BIS* and *Inside Piano*. In *Cathedrals of Culture*, a series of documentary films made by prominent filmmakers such as Robert Redford and Wim Wenders, this type of tracking shots is one of the recurrent motifs.

³⁴⁷ In the interview with the author, Tarr states how his long walking shots, especially in *Satantango* and *Werckmeister Harmonies*, were criticized because they were seen as unusual, “unattractive”, “empty”, “unnecessary” and “pompous” by some critics. Bela Tarr, unpublished interview by Hamid Khalili, 2018.



Figure 98. The image on the top (from *Satantango*) and the image on the bottom (from *Werckmeister Harmonies*) show two examples of the tracking shots in the films of Tarr.



Figure 99. The images from *Ulysses' Gaze* indicate the tracking shots from the back view and from the frontal view.



Figure 100. In the *Koolhaas Houselife* (directed by Ila Bêka and Louise Lemoine) the camera undertakes a long journey through the Maison à Bordeaux and narrates most of the spaces through an over-the-shoulder tracking shot.

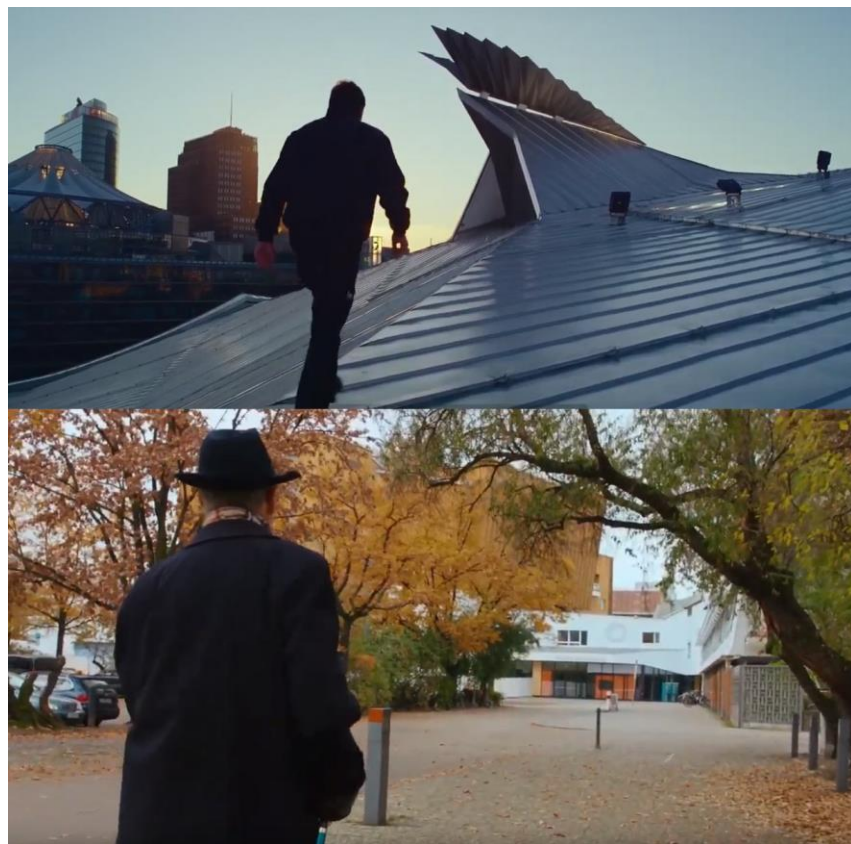


Figure 101. In the episode of *Berlin Philharmonic* (directed by Wim Wenders) from the series of *Cathedrals of Culture* the filming strategy chosen by Wenders to capture the spaces is the tracking shot in many scenes.



Figure 102. Screenshot from *Mr. Robot* (2015),



Figure 103. Screenshot from *1917* (2019).

4.3.8.4 The Importance of the Figure in the Foreground

The fact that movement in a corridor makes the space more haptic for spectators has been highlighted in various theoretical sources.³⁴⁸ However, there is a vital disparity between tracking shots with a character and tracking shots with no character in the frame (such as P.O.V shots or omniscient views with no characters being tracked) that has always been overlooked in the investigation into the (long) tracking shots and their relation to space and architecture. When a camera moves in space, the point of view of the camera movement is as crucial as the movement itself. Tarr believes that tracking shots in which there is no sign of a person in the frame are not as effective as tracking shots with a person. He describes the P.O.V shots or the shots in which a camera moves in spaces without a guiding subject as “unfamiliar” and “visually and experientially hypocritical”:

For me P.O.V camera movements in spaces are not subjective at all. I believe in some level of *verfremdung* [alienation] in film. Full immersion is impossible in any medium... there should always be a sign that says this is a representation...A human character in front of your camera gives you also some depth of space.³⁴⁹

Tarr's remarks reveal that the notion of depth of space generated through the relationship between a camera, a character and the moving background is a key in these

³⁴⁸ In the chapter ‘Why Tarr and Angelopoulos?’ and the section ‘Choreographed Movement’ the relationship between haptic experience and camera movements is discussed. See also Giuliana Bruno, *Visualizing the City*, 13. See also *Atlas of Emotion*, 16. Botz-Bornstein, *Organic Cinema*, 169. Koeck, *Cine-Scapes*, 93-110. De Certeau, Mayol, and Giard, *The Practice of Everyday Life*, 117. Troiani and Campbell, “Orchestrating Spatial Continuity in the Urban Realm,” 15-17.

³⁴⁹ Bela Tarr, unpublished interview by Hamid Khalili, 2018.

tracking shots.³⁵⁰ Moreover, for him, a mechanistic movement of a camera in space that superficially tries to simulate the kinesthetic experience of characters through corridors fails due to its unfamiliarity to the visual perception of spectators. He explains what he means by unfamiliarity:

When you do this — [he refers to tracking shots where a camera follows a character] — no one looks at your characters anymore and spectators look at [the] space around them. But if you move a camera in the same space with the most interesting camera movement with no character in the image spectators get bored. Spaces get repetitive... but with a human in the first plane of your frame they do not care about the action anymore, on the contrary, they think the space is changing and (they) become interested in space. This is how our eyes work when we focus on something (in this case a character moving) we see also what is around him, sometimes even more than the character himself. When we move in real spaces, we do not focus on something in space; we look around, or we do not focus at anything, but we see spaces passing by. When there is a character or another visual element in the first plane of image you watch the space as something that is *around* [he emphasized the word 'around' whenever he used it] the character.³⁵¹

Following his filmmaking instinct and spatial cleverness, Tarr alludes to an important difference between first-person shots and tracking shots that is neglected by the scholarship on how movement in film affects our experience of architectural spaces of a film. Tarr makes a statement that might not be scientifically proven and academically discussed, but what he sketches on his agenda can be supported and understood through theory. He underscores three main points that help us comprehend the spatial

³⁵⁰ In the same interview, Tarr emphasizes the notion of depth of space in film: "I hate the new films. They are too flat. Walls are too close to objects, characters and cameras... nowadays architecture is the same; spaces and buildings are too flat."

³⁵¹ Bela Tarr, unpublished interview by Hamid Khalili, 2018.

and visual anatomy of the tracking shots in corridors with a human character (in the foreground) being tracked.

At the first stage, Tarr points to the depth of space as a feature that makes the experience of movement more palpable. Secondly, he recognizes the significance of activating peripheral or para-central vision, stressing the areas of the image that are not in the center of our gaze (point of fixation). By prompting spectators to look at the incessant movement in the background (marginal areas of an image) and what he names as the space *around* characters, Tarr activates the realm of peripheral vision of his frames. Pallasmaa, while rejecting the notion of focused vision in architectural photography, affirms Tarr's opinion, and comments on the importance of peripheral vision in architectural images. He considers peripheral vision as a remarkable factor in our experience of "spatiality and hapticity", the "very essence of our lived experience" that envelopes us in the "flesh of the world".³⁵²

Similarly, philosopher Slavoj Žižek, contends that an emphasis on peripheral vision and what resides in the background of a scene while a character is in the foreground generates some sort "anamorphosis". He claims that "you do not see it when you look at it directly". For Žižek, the moving spaces of corridors in the background become visually effective if we look at it "obliquely" and "indirectly".³⁵³ Studies in the field of cognitive science confirm that movement is mainly perceived through the detection of motion in peripheral vision and there is a consensus that the peripheral vision is the principal responsible for the perception of temporal changes and motion detection in the structure of our perceptual system.³⁵⁴ Therefore spaces in the

³⁵² Pallasmaa, *The Eyes of the Skin*, 14-15.

³⁵³ Sophie Fiennes and Slavoj Žižek, *The Pervert's Guide to Cinema* (2006), <https://www.imdb.com/title/tt0828154>.

³⁵⁴ See D. Finlay, "Motion Perception in the Peripheral Visual Field," *Perception*, no. 11 (1982); S. P. McKee and K. Nakayama, "The Detection of Motion in the Peripheral Visual Field," *Vision Research*, 24 (1984). Marisa Carrasco, Anna Marie Giordano, and Brian McElree, "Attention Speeds Processing across

background of images that run “tangent” to a viewer do not only activate peripheral vision but play a chief role in enhancing the perception of movement in the moving shots in corridors.³⁵⁵

In the tracking shots which take place in corridors, there are two types of spatial tensions affecting a character positioned in the foreground. A character has a constant tension with the camera, and, at the same time, he/she is in continuous friction with the depth of the image (background) — the space he/she is moving toward. Moreover, the constant movement in the background of the image — the area of peripheral vision, the space “around” the character — enhances the perception of mobility and the kinesthetic experience of the shot.

As a camera and a character move in space, the movement of the frame of viewing across the ground engenders a sort of reciprocity between the camera, the character and the depth of a corridor. The interrelations of the spatial relationships fashions a rectangular barrel, a negative space, perpendicular to the contour lines of the frame. It erects a continuous and voluminous virtual corridor along with the axial movement of the frame, a camera and a character; as if the whole movement crystallizes and solidifies the ephemeral passage of the camera and gives it a permanent shape and volume in screen and off-screen space. The endless repetition of the vertical edges of the frame acts as the framing elements of the corridor of the image and the continuous movement of the horizontal lines becomes its platform and ceiling (Figure 104Figure 105).

Eccentricity: Feature and Conjunction Searches," *Vision Research* 46, no. 13 (2006). Hans Strasburger, Ingo Rentschler, and Martin Juettner, "Peripheral Vision and Pattern Recognition: A Review," (2011).

³⁵⁵ The term “tangent” is borrowed from Cristopher Alexander, architecture theorist. Alexander argues that the only “balance situation” for designing paths is to design them in a way that they run tangent to common areas. Alexander, Ishikawa, and Silverstein, *A Pattern Language*, 619.

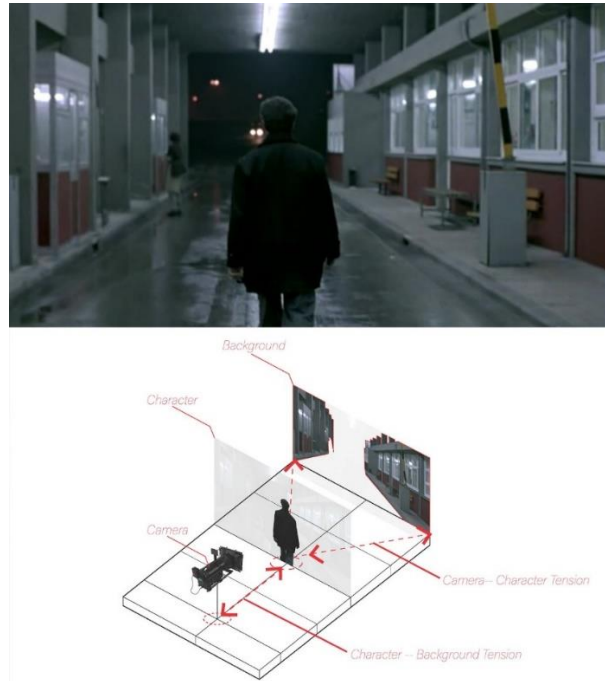


Figure 104. The diagram illustrates the spatial tension between the background (the zone of peripheral vision) and the character in the foreground in a tracking shot from *Ulysses' Gaze*.

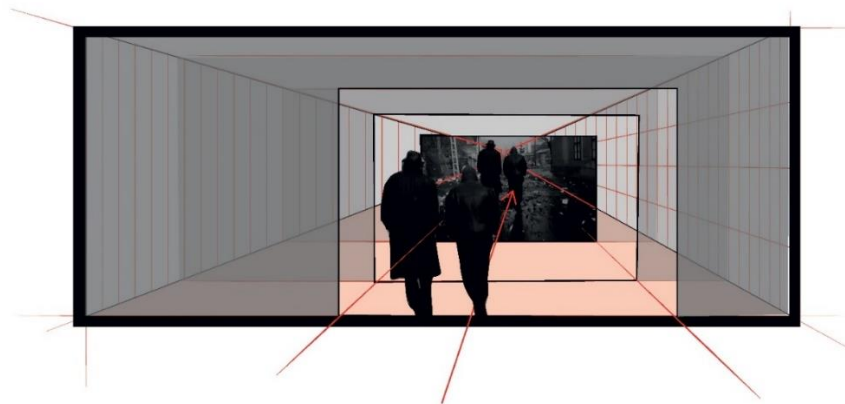


Figure 105. The diagram shows how the juxtaposition of the continuous movement of the frame in space, the character in the foreground and the incessant movement of the spaces around characters in one of the scenes of *Damnation* create a sense of space, three-dimensionality and negative space.

4.3.9 Corridors and Tracking Shots in the Films of Tarr and Angelopoulos

The oeuvre of Bela Tarr is replete with long takes in corridors, laneways, streets and roads where a camera follows characters from back (over-the-shoulder) or front. These scenes are one of the recurrent motifs in *Werckmeister Harmonies*, *Satantango*, *The Man from London* and *Damnatinon*. In most of these *plan-sequences* the cinematography and spatial juxtaposition of a character and a corridor as well as the camera movement is close to what Tarr outlines as his ideal tracking shot: a moving human figure in the foreground, an activated peripheral vision through a moving an everchanging background.

There is another type of tracking shot in the corridors of Tarr that has been described as an “autonomous” and “independent” tracking shot.³⁵⁶ Kovacs argues that in the autonomous tracking shots, the camera work is independent, as the camera does not follow characters as rigidly as it does in other tracking shots of Tarr, nevertheless, the camera movements are “fundamentally motivated by character movements, only it follows them at a different speed”.³⁵⁷ In the shots, characters might not be framed for some seconds, but the camera still stays in the orbit of characters and their actions by returning to the previously tracked protagonists in cyclic periods.³⁵⁸ The hospital scene in *Werckmeister Harmonies* is one of the examples in which Tarr’s camera sometimes stops tracking the main characters of the scene. The following examples are corridor scenes from Tarr and Angelopoulos.

³⁵⁶ Kovács, *The Cinema of Bela Tarr*, 81.

³⁵⁷ Ibid., 83. Kovacs does not mention that the independence of the camera work does not rely only the difference between the speed of characters and cameras since in the examples discussed by him there are several instances where the camera follows characters at the same pace as characters move in space.

³⁵⁸ The opening scene of *The Turin Horse* is filmed through a similar strategy of the independent camera work but with a more centralized and strengthened affinity between character and camera. In both scenes, camera follows characters for some seconds then deflects from them and after tortuous movements returns back to them.

4.3.9.1 Corridors of Alienation and Revelation

The hospital scene in *Werckmeister Harmonies* is located in a corridor that is filmed by fluctuations between conventional tracking shots and what is called an independent tracking shot by Kovacs. The *plan-sequence*, its cinematography and *mise-en-scene*, has been noted and studied by film critics, philosophers and architects.³⁵⁹ The scene follows a long take in which an aggressive mob is marching obstinately toward a hospital stamping their feet belligerently and rhythmically on the ground. The camera floats in front of the marching crowd as the echoing *crescendo* of the footsteps escalates and prepares spectators for the next scene (Figure 106).



Figure 106. Screenshot. *Werckmeister Harmonies*.

³⁵⁹ Different film theorists who wrote on Tarr commented on various aspects of this scene. See Austin Dale, "Critics Explain Their Love for Bela Tarr: A Round-Up," *Indiewire*, accessed October 15, 2020, <https://www.indiewire.com/2012/02/critics-explain-their-love-for-bela-tarr-a-round-up-242488/>; Tawa, "Consilient Discrepancy."

There are two corridors linked to each other: the first scene of the walking mob in an urban corridor, acting as an overture, and then the second scene when the throng enters the corridor of the hospital. The street scene cuts to the hospital corridor and the echoing sound effect of stomping footsteps in the street overlaps inside and dissolves into the sound effect of the interior corridor. The camera movement in the hospital corridor is atypical as it does not follow the path of the characters as often happens in the tracking shots in which Tarr depicts walking characters (Figure 107). He describes the camera work of the scene as a deliberate technique of distancing and alienation:

[W]hen a camera follows characters in walking or tracking shots, it means spectators are accompanying them; as if they already know each other and trust each other. It means that characters share their feelings with spectators and spectators see the world as characters see it... spectators sympathize with characters because they are walking on the same path side by side. When a director does this, spectators feel what the characters are doing is right, it is what they would do too; since they are already involved in it.³⁶⁰

Tarr believes a camera that does not follow the characters closely gives rise to a sense of alienation and estrangement. In the scene in *Werckmeister Harmonies*, as the camera is moving forward in the corridor, the obsessed crowd enters the frame from the off-screen space. The camera looks through the open door of a bathroom, revealing a man being beaten. Then, the camera, with a circular movement, turns its frame to the corridor again (this time moving backward and following characters from the frontal view) and we see the faces of two characters who we will meet at end of the corridor shot again. The camera changes its pace and tracks them for four seconds. As the characters pass, the camera enters a ward where the fuming rioters beat up patients and destroy the objects

³⁶⁰ Bela Tarr, unpublished interview by Hamid Khalili, 2018.

in the room. Tarr does not try to add any sentimental dimension to this scene.³⁶¹ The alienating camera work, the silence and the absence of any screaming show that Tarr intended to generate an uncanny milieu in which his camera and audience are “lost” and alienated. In the interview with the author, Tarr explains that through the scene he intends to lead his audience to the questions: “Where am I? Where is this corridor? Are these guys (rioters) really human beings”? ³⁶²

In the entire scene, the camera tries to distance itself from the rioters and the entire *plan-sequence* is shot in longshot and medium long shot except for the first moment when we see the faces of the two characters in a medium close up (Figure 108). After the camera leaves the ward, it continues its movement in the deserted corridor by itself and in a state of *horror vacui*. At this point, the angry mob enters and exits the wards but the camera does not enter any room and watches the scenes while the crowd is ransacking and ravaging every single ward. The camera pursues its trajectory forward in the corridor and its frame infiltrates a darker corridor that is connected to the last ward (Figure 109). The ambiance of the last ward is imbued with darkness and the brutal lurking figures in the unilluminated areas of image keep thrashing, hitting and smashing.

As the camera passes through the last ward located at the end of the corridor and gears toward the bathroom of the ward outside the frame, which is a brighter area and its brightness illuminates some areas of the frame, suddenly, the two characters we faced at the beginning, enter the shot (Figure 110). From this moment, the camera work is transfigured from a wandering and autonomous tracking shot into a conventional tracking shot from over the shoulder view. The two characters rip down the shower curtain by an orchestrated gesture, music embarks upon the scene and the camera

³⁶¹ See the scene here <https://vimeo.com/458525767>.

³⁶² Bela Tarr, unpublished interview by Hamid Khalili, 2018.

through a movement toward the depth of image reveals the naked and fragile body of a motion-less elderly man (Figure 111).

It is not until this part that the camera is positioned at face-level, abandoning its previous height which was about the chest-height for most of the sequence. The change in the height of the camera is an indication that the encounter with the elderly man at the end of the corridor transforms the brutal and nonhuman attitude of both camera and characters into a more sympathetic narration of the space and event. Before this action, the camera never approached the characters and avoided their faces by staying at a lower position and distancing itself from them. At this point, the mob unexpectedly stops and leaves the hospital through the same corridor in which its journey took place. The camera tracks them for seven seconds then begins wandering in the room in a perplexing manner. With the accompaniment of the music, the camera gradually travels toward an unknown corner of the wall where Valuska, the main character of the film, has hidden himself. And, this is the second instance in the scene where the camera continues its movement at the face-height of one of the characters and travels closer to the close up of a human face.

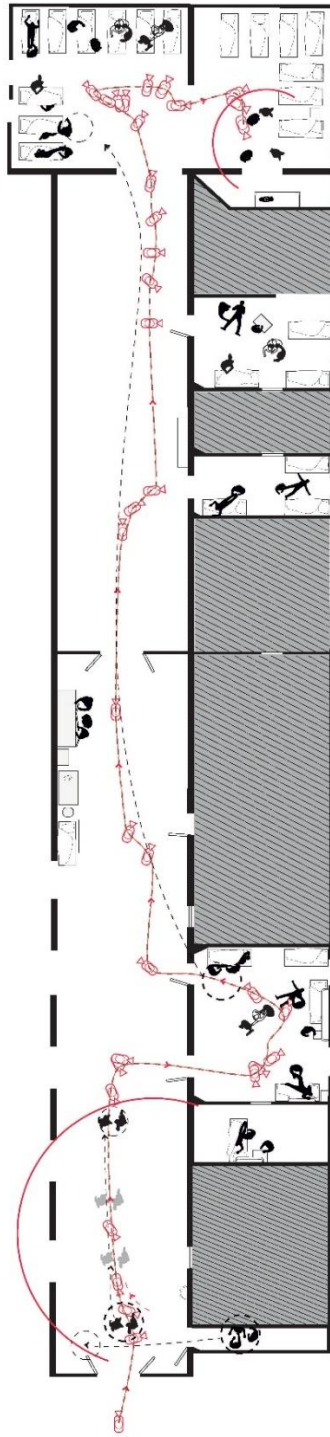


Figure 107. The cinematic plan of the *plan-sequence* indicates the complex camera movement toward the last ward. The semi-circles show the instances where the camera changes from an autonomous tracking shot to a typical tracking shot.

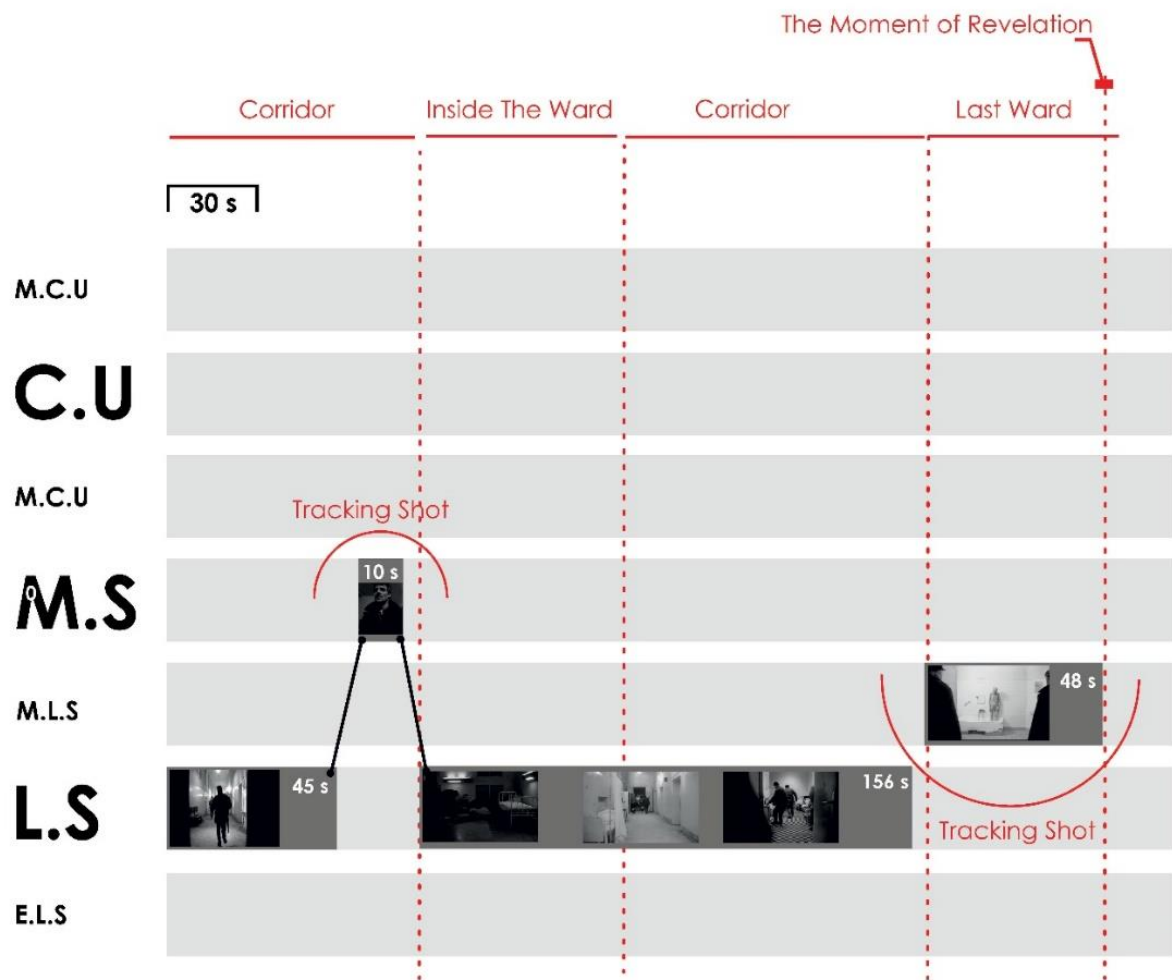


Figure 108. Timeline-scale diagram of the corridor shot. The whole temporal journey as the camera leads to the last ward and the moments when the shot turns into a tracking shot



Figure 109. The images demonstrate the progression of the camera in the corridor. The third image from the top is the moment when camera tracks the characters (circled part on the cinematic plan) and the second image from the bottom is the shot where camera enters the ward.



Figure 110. The images show the camera movement in the darker side of the corridor and the last ward. The second image on the bottom is the moment when the camera starts tracking the characters and the last image is when characters face the naked man in the tub, the moment of “revelation” in Tarr’s words.

There are controversial and contradicting opinions regarding the ending of the scene. Some critics have noted that what occurs at the end of the scene is “implausible”, “unrealistic” and at “the level of psychological realism, this change in behavior” is not justifiable.³⁶³ On the other hand, other critics and theorists argued that the unanticipated ending of the scene points successfully to the “absurdity of violence”.³⁶⁴ Tarr, himself considers the confrontation with the naked body of the helpless man as a moment when the raging mob encounters “human dignity” and finds itself unable to continue.

For Tarr, the image is a moment of “revelation” that, spatially, will be solely realized at the end of the “dark ride” that his audience and his camera took in the corridor. Tarr insists that it is the act of walking and suffering (of characters and camera) through the corridors that prepares and surges the space-event of revelation. The corridor as narrative organizational device, piling up all the instances of violence, and the tracking and independent shots through the alternating *chiaroscuro* of the hallway prepares an audience to anticipate and accept the glaring image at the end of the corridor in the same vein as a voyager anticipates “the brightness at the very end of a tunnel”.³⁶⁵

³⁶³ Kovács, *The Cinema of Bela Tarr*, 83. Kovacs, for instance, argues that “a mob carried away by rage in the middle of lynching and breaking is not likely to be impressed and stopped in its tracks by the sight of the naked body of an old man.”

³⁶⁴ Ibid. Kovacs states that some spectators that are “clearly moved by this scene and, turning to the metaphorical interpretation, consider it the expression of the ultimate absurdity of violence”.

³⁶⁵ Bela Tarr, unpublished interview by Hamid Khalili, 2018.

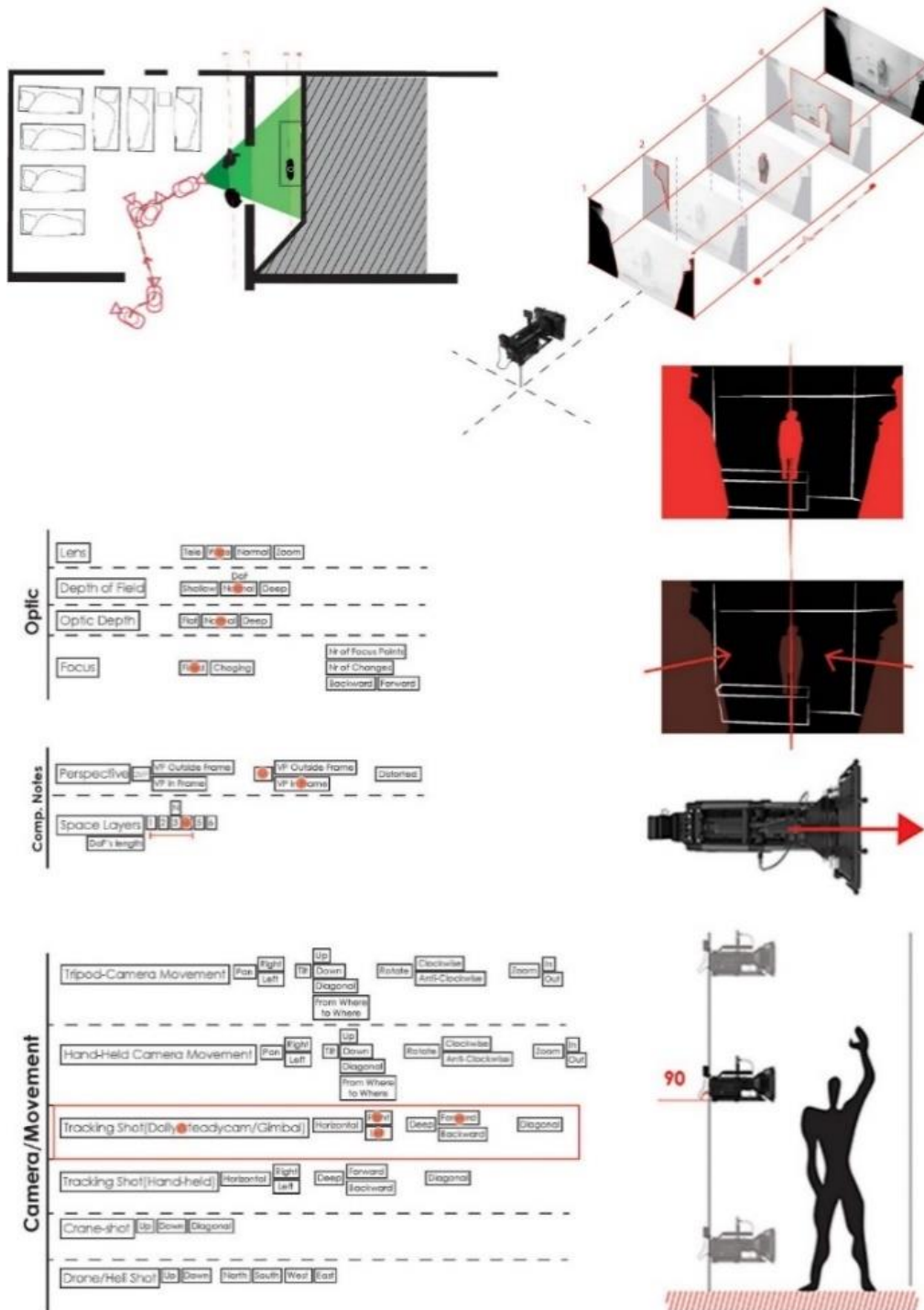


Figure 111. Cinematic dissection of the moment of revelation of the scene where characters face the naked body of the elderly man at the end of the corridor.

Although there are various similarities in the overall approach of moving long tracking shots in Angelopoulos' and Tarr's films, their method in filming interior corridors is quite dissimilar. The interior corridor shots in the films of Angelopoulos usually tend to be static with a camera staged at the end of a corridor, sometimes with a slow and imperceptible zoom in, accentuating the depth and emptiness of corridors. This use of the static shot in corridors, particularly applied to the moments of hesitation and waiting, exists in some of Tarr's corridor scenes too, the waiting scene in *Satantango*, for example. However, the autonomous camera tracking shots and wandering camera movements in corridors emerge in some of the scenes in Angelopoulos' work as well. The scene in *Trilogy: The Weeping Meadow* where Eleni is in the hallways of a conservatorium looking for her sons (Figure 112).³⁶⁶ These scenes demonstrate a cinematic choreography akin to the independent camera work in the corridor scene in *Werckmeister Harmonies*.

The camera of Angelopoulos moves in the corridors of the conservatorium in a state of bewilderment. Through a three hundred sixty-degree pan and dolly, the camera tries to find the room where Eleni's son is rehearsing. The camera gazes through open doors and catches glimpses of the kids playing in the rooms, in the same fashion, that Tarr's camera was orchestrated in *Werckmeister Harmonies*. At a certain point, Eleni and her lover enter the frame while the camera is panning to the left. From this moment the shot becomes a tracking shot of Eleni as they approach the room in which Eleni's son is rehearsing piano. The camera slowly approaches Eleni from the over-the-shoulder view as she is looking through the door frame. When Eleni starts crying and the woman in the room chases her, the camera completes its three hundred sixty-degree movement and stays in its position while capturing the characters leaving the corridor. In the same vein as the corridor shot in the hospital of *Werckmeister Harmonies*, the wandering of the

³⁶⁶ See <https://www.youtube.com/watch?v=G1bBuhDqzYk>.

camera in corridors without any directly tracked subject in its frame engenders a spatial narrative infused with a sense of estrangement that leads to and prepares a character for a revelation that occurs at the end of the corridor.



Figure 112. Screenshots. *Trilogy: The Weeping Meadow*. The use of independent camera tracking shots corridors.

Aside from the tracking shots with independent camera work, conventional tracking shots in streets and roads are one of the frequent tropes in *Trilogy: The Weeping Meadow, Ulysses' Gaze, Eternity and a Day, Landscape in The Mist* and *The Travelling Players*. Angelopoulos' tracking shots, however, are shorter in length and, in most cases, are underpinned by actions (dialogues, voice over or music) instead of simply walking in a street or road. Another inclination that can be discerned in Angelopoulos' films is the tendency toward filming new types of mobility and viewing spaces, specifically urban corridors, through the windows of cars, trams, trains and buses (Figure 113Figure 115).

In *Eternity and A Day*, Angelopoulos puts a remarkable emphasis on the experience of seeing spaces and events (real or imaginary) through car windows, tram windows and bus windows, and uses them as viewing machines. The pseudo-architectural structure of the moving rooms (trains, trams, busses and cars) generates a hermetic capsule that can contain an interior event in the same fashion as stationary built spaces. The moving rooms, in parallel, by traveling in urban and extra-urban corridors bombard their motionless voyagers by ample views contaminating the interiority of the semi enclosure. In this sense, the *flaneurs* are not always pedestrian. The voyagers while motionless and fixed inside the moving rooms experience and view spaces in high-speed motion.

This mobile spectatorship and viewing out from inside the cars and other urban transportation ignites some kind of relativity between what is in a street and what is inside a moving room. In *Eternity and A Day*, the moving rooms serve as a medium to infuse the narratives of an individual with societal narratives. Alexandros encounters the Albanian squeegee kid for the first time in his car and the ten-minute bus scene toward the end of the film is another instance where the spatial narrative of the film persistently shifts from the social interactions inside the bus and the views of the outside

framed through windows.³⁶⁷ As a filmmaker who is obsessed with the notion of movement in space, Angelopoulos tries to explore the new spatial and spectatorial possibilities offered by the unparalleled ways of simultaneously moving and seeing.

³⁶⁷ See https://www.youtube.com/watch?v=rB_r7JqlzMI and <https://vimeo.com/458490055>.



Figure 113. Screenshot. *Eternity And A Day*. The first encounter between the main characters of the film happens while Alexandros is in his car.



Figure 114. Screenshot. *Eternity and a Day*.



Figure 115. Screenshot. *Eternity and a Day*.

4.3.10 Conclusion

Tarr claims that “nothing engages spectators more than the images of movement in corridors”.³⁶⁸ The corridor scenes of Tarr and Angelopoulos stubbornly manifested the advent of novel ways of experiencing movement in space which emerges in the contemporary forms and techniques of moving image-making. The methods of creating ‘corridor images’ are influenced by technologies as well as by the *zeitgeist* of this era, when watching corridors while moving and moving while watching corridors is becoming an inseparable part of a new visual culture. It is impossible to identify whether it was the technological improvements that resulted in the emergence of moving images in corridors or it was a need to capture the movement in corridors that led to the technological inventions and the paradigm shift in cinematic approaches. Notwithstanding, the tendency toward the long moving shots in corridors in films of any genre, the unprecedented long Slow TV (*Sakte-TV*) images, as well as the Night Walks/ Night Rides in which there is nothing but a marathon of walking, moving cars and trains progressing in corridors are symptomatic of a radical change.³⁶⁹ These types of moving images demonstrate that the fragmented images of cities and architecture shot through a myriad of fixed shots are being replaced by the smooth continuous sequences of movement films by the cameras that never get tired of walking through

³⁶⁸ Bela Tarr, unpublished interview by Hamid Khalili, 2018.

³⁶⁹ Slow TV (*Sakte-TV* in Norwegian) is a genre of popular television program in Scandinavia. In *Sakte-TV* programs, journeys of moving cameras, mounted on a train or a car, captures the experience of movement through various corridor like structures is an extremely long take (up to nine hours). There is not specific event in Slow TV programs other than a camera passing through thresholds, landscapes, roads, etc. See Nathan Heller, "Slow Tv Is Here," *The New Yorker*, accessed October 15, 2020, <https://www.newyorker.com/culture/cultural-comment/slow-tv>. For an example of Slow Tv videos see "Train Journey to the Norwegian Arctic Circle," Slow TV Relax & Background, October 15, 2020, <https://www.youtube.com/watch?v=3rDjPLvOShM>. In Canada, Night Walks and Night Rides are the equivalent of the Scandinavian Slow TV programs. Unlike Slow TVs in Scandinavia that usually take place in the roads, the natural environments and in travels between cities, in Night Walks streets and urban environments are usually the settings of the show. See "Night Walk: Ep 4 (2019) Toronto Slow Tv 4k [10 of 10 in Series]," My Night Walk, October 15, 2020, <https://www.youtube.com/watch?v=6ospkMVklzI>.

corridors of different types and scales. Although they were absent in the dominant culture of the moving image in the past, and their images were regarded as minor, or even useless, corridors as spaces hosting movement and the act of moving through them is becoming an important image in our culture.

In this chapter, the connection between the notion of movement (*currere*) and the space of the corridor was discussed. It was shown how the defining elements of a corridor influence its use and experience. An in-depth analysis of the history, architectural features and spatial experiences of corridors led to discussions about two crucial characteristics of corridors: the dramatic organizational feature of corridors and the fact that they have the potential to be sites of encounter and confrontation in film.

The second part of the chapter examined how the architectural features of corridors adopted by filmmakers respond directly to the architectural features of this species of space. Different types of corridors, including interior corridors, streets and roads have the potential to be utilized as devices for organizing a spatial narrative and dramatic encounters.

In terms of image-making techniques and filming methods, there are specific types of tracking shots that are linked to corridors. The difference between P.O.Vs and third-person over-the-shoulder tracking shots was analyzed in the chapter. It was argued that the tracking shots that entail human figures (in their foreground or middle ground) are more effective in generating a seamless and haptic experience of corridors and the activation of the background and the movements in the area of peripheral vision are other factors that enhance the experience of movement in the tracking shots and give rise to a more tangible experience of moving through corridors. In summary, the chapter demonstrates that certain cinematic techniques and methods used for filming corridors stem from a rich historical and cultural background. Therefore, transferring these techniques into other fields where the representation of the experience of movement

through architectural spaces is at the core of the practice results in an improvement in the quality of the moving images.

5 ACT 4

5.1 Application: Studio 35mm; Film, Architecture and Species of Spaces

The first premise of this thesis is that by studying how the species of spaces are filmed in cinema, a series of cinematic techniques and strategies will be elicited which can be used in making architectural films and animations. The second premise of this thesis was that the film-architecture matrix, as a proposed toolbox for designing and analyzing film, has the capacity to facilitate the process of filmmaking for architects. This chapter attempts to tackle the second premise and employs the film-architecture matrix for the purpose of designing architectural films. This research started its journey with the aspiration to make a contribution to the practice of architectural filmmaking with the support of its theoretical inquiries. As ACT 3 (chapters of species of spaces) served to analyze the relationship between the film form and the species of spaces and put the analytical potential of the film-architecture matrix into the examination, this section ACT 4 aims to interrogate the practicality of the film-architecture matrix for designing films and animations.

In order to observe the effectiveness of the film-architecture matrix, two university courses were proposed and taught at the Melbourne School of Design by the author of this thesis: a Master of Architecture design studio and an undergraduate design workshop. In the undergraduate course, students used the film-architecture matrix for a couple of weeks and made a short film as group work. In the postgraduate level design studio, the entire course was devised based on the structure of this thesis. This chapter discusses how the film-architecture matrix and the concept of species of spaces performed as the principal component and the framework of an architectural filmmaking design studio.

Although there are examples from the undergraduate course that are mentioned in the chapter, the main focus of the discussions of the chapter is on the design studio

taught at Masters level. The observations made during *Studio 35mm; Film, Architecture and The Species of Spaces* are prioritized simply due to the fact it took place at a higher level and students were equipped with basic architectural knowledge from their Bachelor of Architecture coursework.³⁷⁰ In addition, the studio followed the same method as proposed and practiced in this thesis for an entire semester.³⁷¹

The appendix of this thesis which is presented as a separate volume includes the catalogs of all the films that are discussed in this chapter. Moreover, the films in question are uploaded on a Youtube channel and can be found in the footnote where the films are analyzed. All of the films are organized as a Youtube playlist based on their order of presentation in this dissertation.³⁷² Apart from the films, other documents such as studio exercises, studio rubrics and the studio outline are included in the appendix.

5.1.1 Structure and Components

The design studio, called *Studio 35mm; Film, Architecture and Species of Spaces*, was conceived as a studio-based course with the aim of improving the architectural

³⁷⁰ The master of architecture students who took Studio 35mm were equipped regular CAD software packages knowledge. For example, Rhinoceros was on of the applications students learend. During the design studios, students started learning film editing software packages such as Adobe Premiere and After Effects as well as animation making applications such as Unreal Engine and Unity, through online video tutorials. An introduction to camera and lenses was also provided by the author of the thesis and after that students continued working with camera by the help of online tutorial and experimenting with cameras.

³⁷¹ See version 1 of Studio 35mm (https://edsc.unimelb.edu.au/graduate/subject-options/msd-studios/architecture-studio-c-d-and-e/2018_sm2-studios/studio-25), version 2 of Studio 35mm (https://edsc.unimelb.edu.au/graduate/subject-options/msd-studios/architecture-studio-c-d-and-e/2019_sm1-studios/studio-29), and version 3 of Studio 35mm (https://edsc.unimelb.edu.au/graduate/subject-options/msd-studios/architecture-studio-c-d-and-e/2019_sm2-studios/studio-29). The outline of the design studio is included in the appendix of this dissertation.

³⁷² The playlist of the videos of the chapter can be found here <https://www.youtube.com/watch?v=saBmkmkeZWg&list=PLChIJ4g3b-6onn3feqyGN-9beOxO0FAel>.

filmmaking skills of students.³⁷³ In *Studio 35mm*, each student was meant to choose a species of space in the first week of the subject. The definition of the species of space was left to the students and led to diverse selections. For instance, some of the species of spaces were basic architectural elements such as door, window and fireplace while others were discrete types of spaces, corridor, bedroom and bathroom. There were urban elements such as bridges and laneways as well as more conceptual cases such as shaded spaces, surveyed spaces or mobile architecture amongst the chosen species of spaces by students.

In the first phase, students were asked to research the architectural features and the role of a species of space in cinema. Students were instructed to present the research carried out in the first phase as a video-essay. In second phase of the studio, students started to work on their final projects, which was a final film. Students utilized the concepts deciphered in the research phase and presented this in video-essays, which also served as the basis of the narrative for their final films. In terms of format and genre of the films and animations, students had the freedom to choose a direction that suited their projects. While most of the students chose to make an animation (3D or 2D), some students were encouraged to create real films, hybrid formats (a combination of animation and film) and VR (virtual reality) films.

In this process, the film-architecture matrix was the main basis of the production of films and animations, serving as an analytical means to dissect examples from cinema but, more importantly, performing as the principal design toolbox for *Studio 35mm*. Non-mainstream filmmakers such as Tarr and Angelopoulos, which were not familiar to students, were emphasized in teaching film techniques and were recommended to students as the cases of studies of film form analysis.

³⁷³ The duration of each semester at Melbourne School of Design is 12 weeks. Three iterations of *Studio 35mm* were run and 41 students were trained at *Studio 35mm*.

There were two parallel teaching components that assisted students as they ventured toward their final films: filmmaking exercises and the film-architecture diary. Students were to learn film techniques in a series of purposefully designed exercises. The accentuation of the exercises was on film editing and cinematography. Notions such as framing, continuity editing, 180-degree-rule, depth of space, camera movements (pan, tilt, gimbal and Steadicam) were all practiced in the exercises.³⁷⁴

The film-architecture diary functioned as a journal in which students were to reflect on the exercises, readings, analyzed examples and the process and concepts of their final films. Students were asked to document their use of the film-architecture matrix in the form of diagrams and sketches in the film-architecture diary. Moreover, commenting on the impact of the film-architecture matrix and its components was one of the tasks that was meant to be included in the film-architecture diary. The comments made by students on the film-architecture matrix are one of the sources of data utilized in the analysis of the film-architecture matrix as a pedagogical tool.

This chapter discusses how each component of the film-architecture matrix contributed to the films made by students. For each film mentioned in the chapter, there is a catalog in the appendix of the thesis which includes the summary of the design process of the film and a Youtube link to the film.

³⁷⁴ See the section of Exercises in Appendix. Columbia University Film Language Glossary defines 180-degree rule as a film grammar convention "of shooting and editing that keeps the camera on one side of the action." Based on the 180-degree rule "the camera stays on one side of the axis of action throughout a scene; this keeps characters grounded compositionally on a particular side of the screen or frame, and keeps them looking at one another when only one character is seen onscreen at a time." This technique allows for a seamless connection between screen and off-screen space. See Columbia Film Language Glossary, "180-Degree Rule," Columbia University, accessed October 15, 2020, <https://filmglossary.ccnmtl.columbia.edu/term/180-degree-rule>.

5.1.2 Time-scale Diagram and Other Timing Design Tools

Filmmaking, as a time-based practice, requires awareness about the methods through which time can be handled. From the very first moments of *Studio 35mm*, it was observed that one of the most difficult elements of filmmaking for students to comprehend was the notion of time and how it plays a role in the quality and the experience generated by a film. In the preliminary exercises that mainly focused on practicing filmmaking techniques, it was revealed that there are two basic issues related to the temporal design of films that most students face: an unbridled fast pace (short duration of shots) and difficulty in managing multiple shots to construct a seamless narrative (designing chronological order and narrative structure).

In Exercise 1, all the shots recorded by students were inappropriately quick in a way that the shots were not able to establish a sense of space and did not provide a sufficient amount of time for an audience to see the content of the shot.³⁷⁵ A fast pace editing with short shots can be useful for specific types of scenes. However, in this case, the shots were filmed and edited without any consideration about the pace and duration. Furthermore, the sequences and the chronological order of the shots were composed indiscriminately without a profound design to set different shots with different scales and durations after one another

A disregard or ignorance regarding the design of pace, editing and sequence of the spatial narrative is usually observable in architectural animations, walk-throughs and fly-throughs produced by professional architectural firms as well.³⁷⁶ Therefore, the problem calls for a temporal design device that tackles both duration and chronological order seems to be critical to any architectural filmmaking toolbox.

³⁷⁵ See appendix for Exercise 1. In Exercise one students experimented with editing a series of fixed shots.

³⁷⁶ See Introduction. In the section Significance of Research this issue and its historical background is discussed in detail.

Throughout the studios, the time-scale diagram (presented in ACT 2) was introduced to students to deal with the problems regarding timing and temporal planning of films that students encountered during exercises. The diagramming device enabled students to design for and deliberate on the duration of the shots (and scenes) of their films. Moreover, the time-scale diagram provided an overall view of how scenes and/or shots respond to and fluctuate between different scales of cinematic frame sizes (close-up, medium shot and long shot).

The visual structure of the diagram allowed variant types of annotations such as the placement of transitions and other notes related to shots, locations and narrative (Figure 116-Figure 117). Students were encouraged to experiment with the diverse types of annotations when necessary. The annotations indicate the way the temporal progression of the film relates to the shot scales and manifold cinematic aspects such as sound, actions, spaces, events, turning points of a narrative as well atmospheres and ambiances of specific scenes.

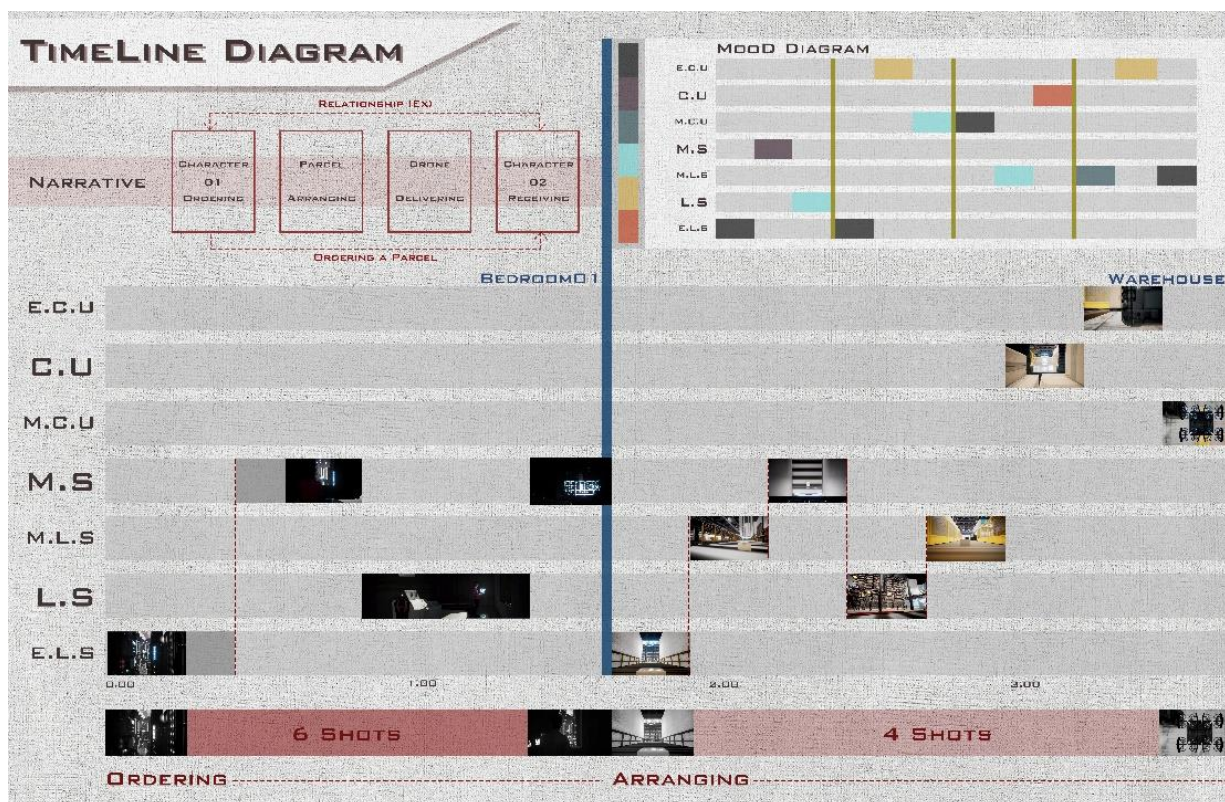


Figure 116. Time-scale diagram with annotations (Part 1 – the image continues in the next figure). By YuChie Tseng.

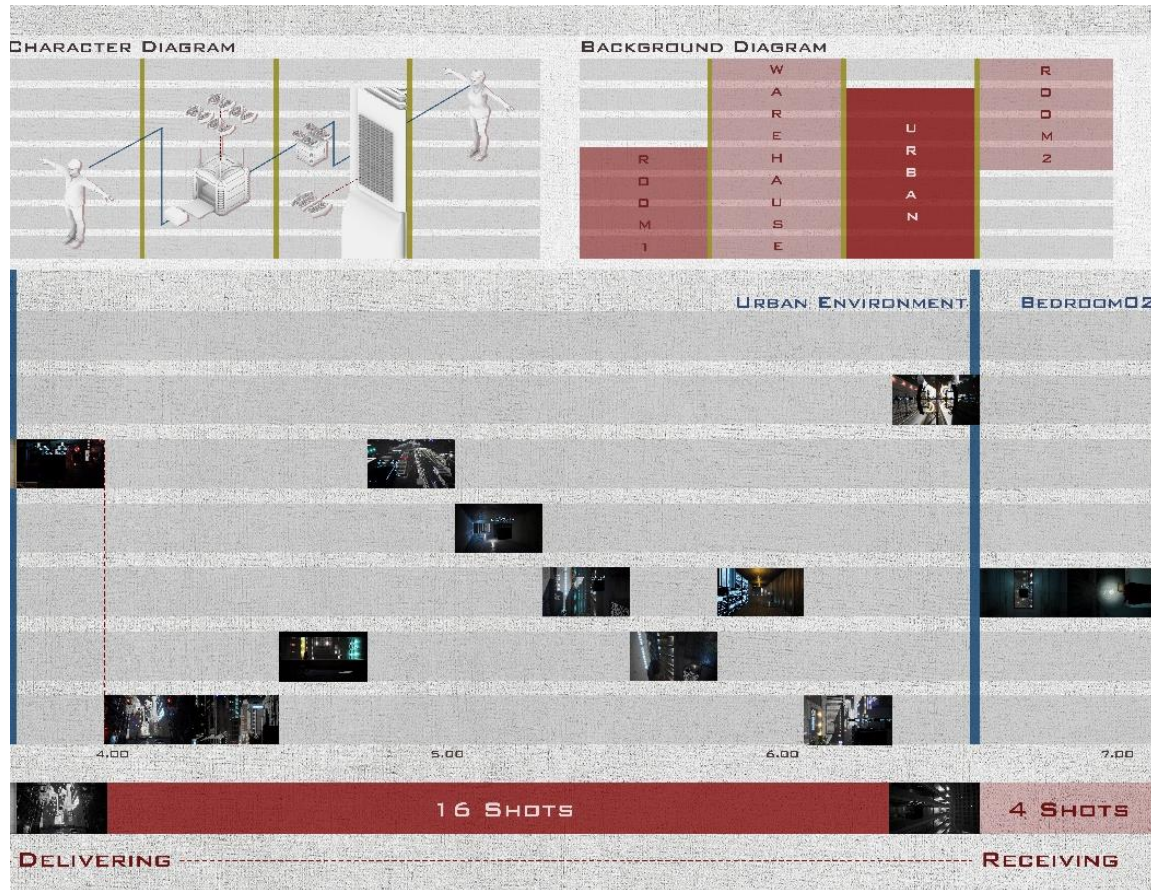


Figure 117. Time-scale diagram with annotations (Part 2). By YuChie Tseng.

The time-scale diagram was presented to students to be employed in every film including the short film exercises and the final films. The time-scale diagram was used as one of the fundamental steps of designing a film and benefited students at several levels. This tool was deployed for the purpose of structuring and programming of films. Marissa Wong, one of the students of *Studio 35mm*, in her film-architecture diary stated that the time-scale diagram worked as a “temporal site plan” for her film. For her, as well as for other students, the time-scale diagram illustrated the manner in which the major parts of a film are juxtaposed. And, more importantly, the time scale diagram

maps out the relationships of the scenes as major parts of a film and at the same time shows how the constituent elements of the scenes and shots are configured.

In the studio, students began using the time-scale diagram with broader narrative divisions such as introduction, conflict and ending. Then the next stage was to design and infuse the scenes into the narrative parts and subsequently the shots into the scenes (Figure 118Figure 124). The fact that the time-scale diagram allows students to observe the fragmented components of a film (shots) and the major parts and scenes of their films simultaneously, makes the diagramming method beneficial as a structuring tool. The diagram illustrates the relationships, the overall chronological order and the length of scenes, the shots within a scene and the connection between the last shot of one scene to the first shot of the next scene.



Figure 118. Students sketching the overall time-line of the events, spaces and actions of their films. Photo by author.

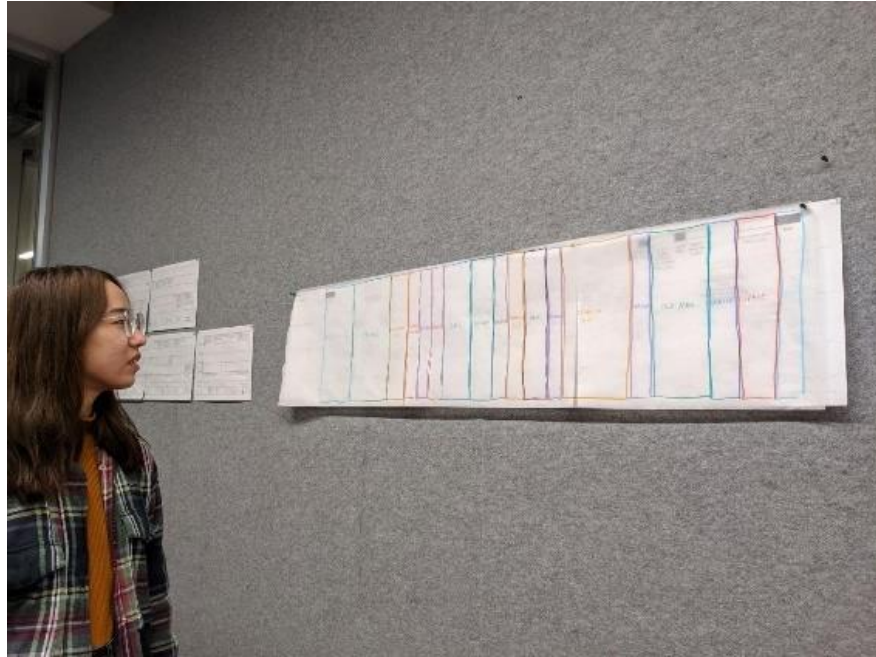


Figure 119. The diagram of main parts of the narratives of a VR film is pinned up on the wall and discussed by students. Photo by author.

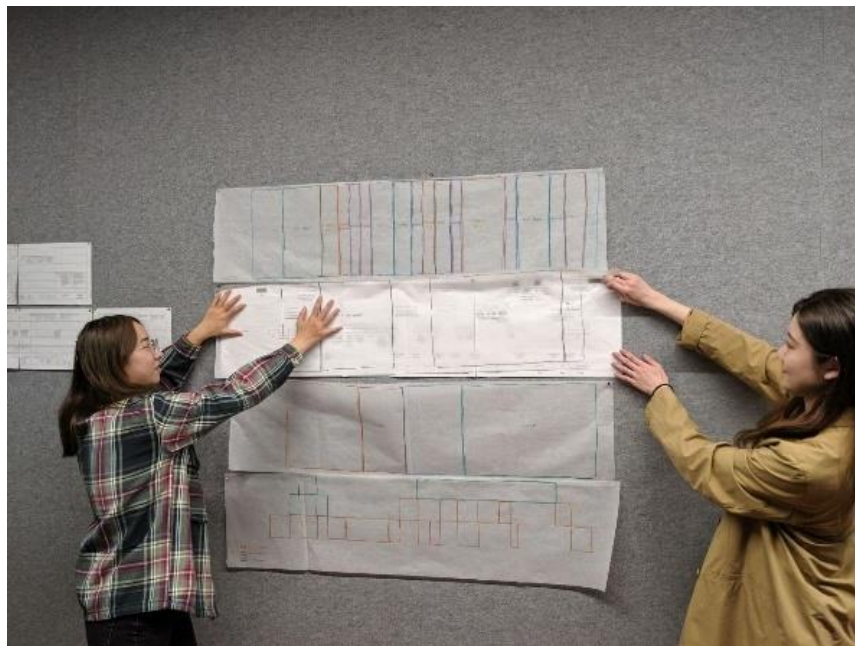


Figure 120. The photo shows the divisions of the main part of the narrative being discussed by students. Photo by author.

Storytelling & Structure

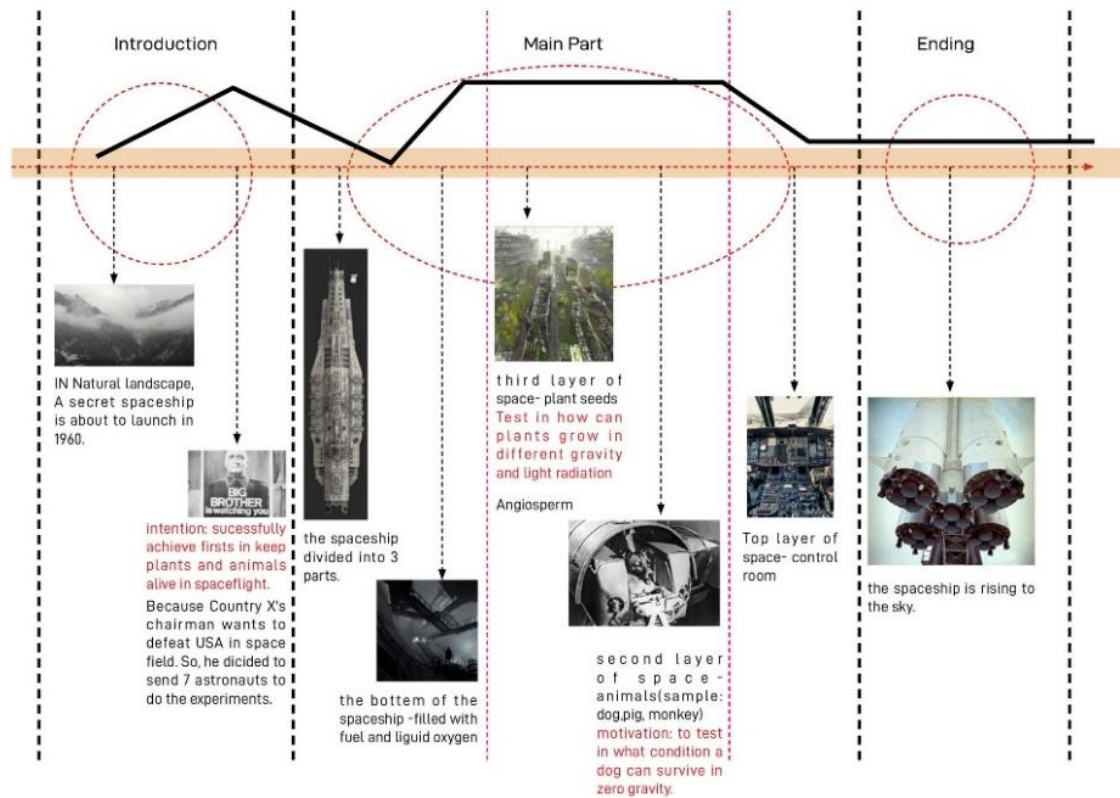


Figure 121. Temporal diagram and the narrative structure. By Kelvin Lou.

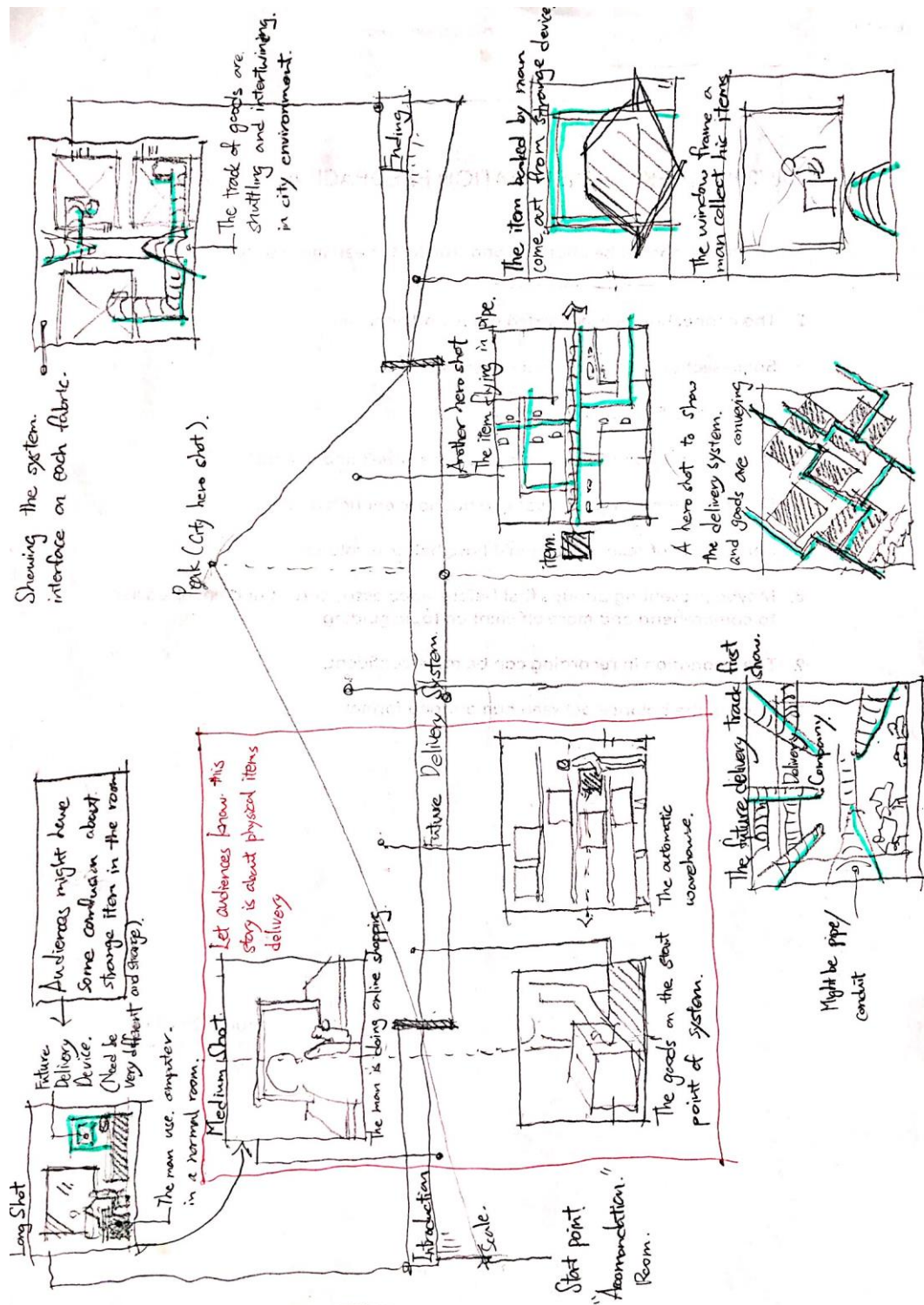


Figure 122. A sketch for temporal of the narrative structure. By YuChie Tseng.

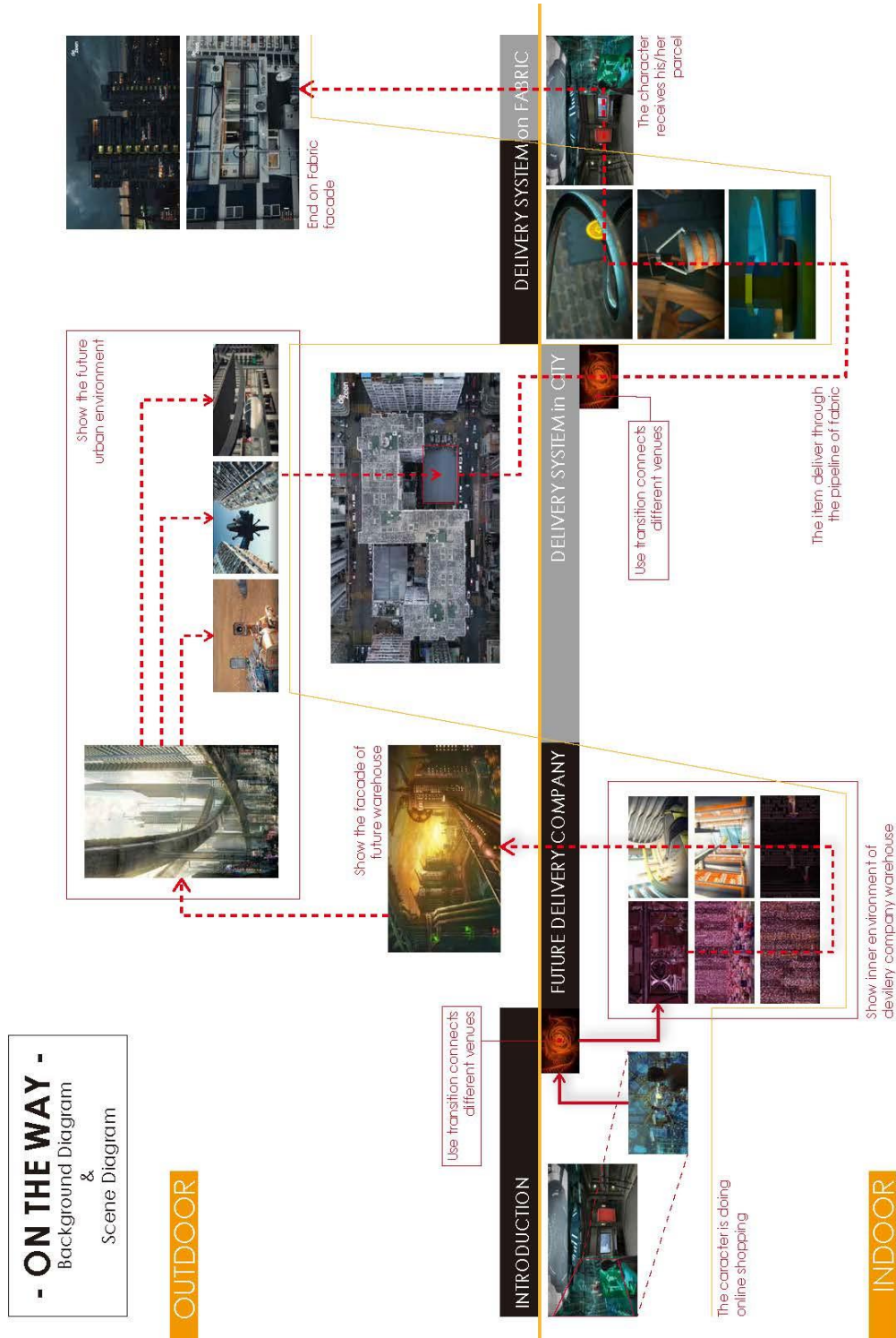


Figure 124. Temporal diagram addressing locations, indoor-outdoor and themes. By YuChie Tseng.

The time-scale diagram in the early stages of designing films functioned as a means of structuring by placing scenes in the diagram. In the next stage, the diagram offered the opportunity to shuffle, prolong and manipulate the main parts of the film. Once a decision was made about the overall structure of a film, students started to break down and divide the major parts of the temporal diagrams into the elements that inform them. The act of dividing the major parts into constituent elements was mostly based on two parameters: the length of the shots and the shot scales indicated on the right side of the diagram.

For example, in one of the short films made by undergraduate students, it was noticed that the repetition of the medium-long shots in the middle part of the film is undermining the pace of the film. Based on the observation, the last part of the short film was broken down into several close-ups and extreme close-ups with shorter durations to balance the part with repetitious long and medium longshots (Figure 125). In another example, the director of *Urban Below* decided to break down the opening scene of his animation into multiple close-ups and medium shots of the architectural elements to reinforce the revealing effect of the next scene filmed through a long shot.³⁷⁷

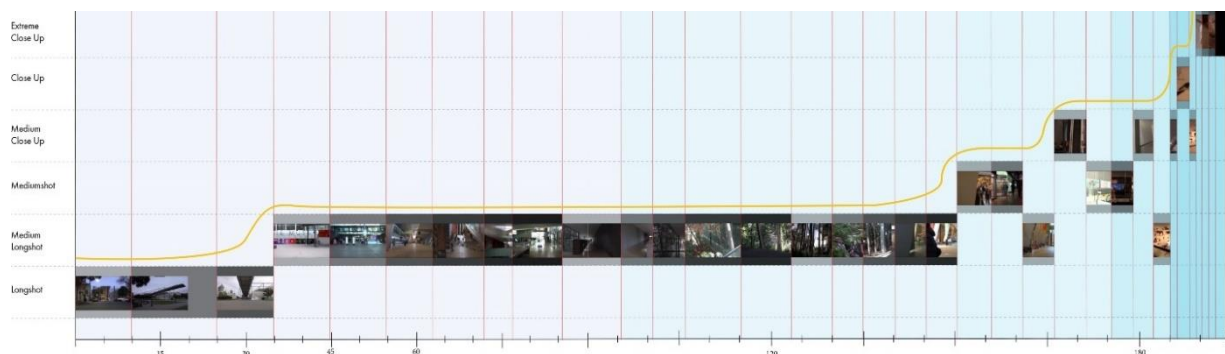


Figure 125. The last part of the film was broken into smaller shots to counterpoint the consistent rhythm of the first and middle part.

³⁷⁷ See appendix A¹.

In addition to the aspects pertinent to the sequence of narrative at a macro and a micro level, the diagram made students deliberate on the number of cuts placed in each scene (shot frequency) and the length of each individual shot which was one of the issues in the preliminary exercises.³⁷⁸ In the example of *Urban Below* mentioned earlier, the introductory section of the film was designed as a scene with multiple medium close-ups of objects with similar shot lengths. The multiplicity and repetition of the shots with similar cinematic nature (close-ups of objects) were to engender a sense of anticipation and curiosity (Figure 126). The series of close-ups subsequently led to a scene consisting of the shots counterpointing the close-ups (utilized in the opening) in terms of scale and duration. The first part – close-ups with shorter shots – was meant to prepare the audience and the second scene – long shots and longer durations – was to disclose the unusual space of the film. The composing elements of each scene were designed carefully through the features highlighted in the time-scale diagram.

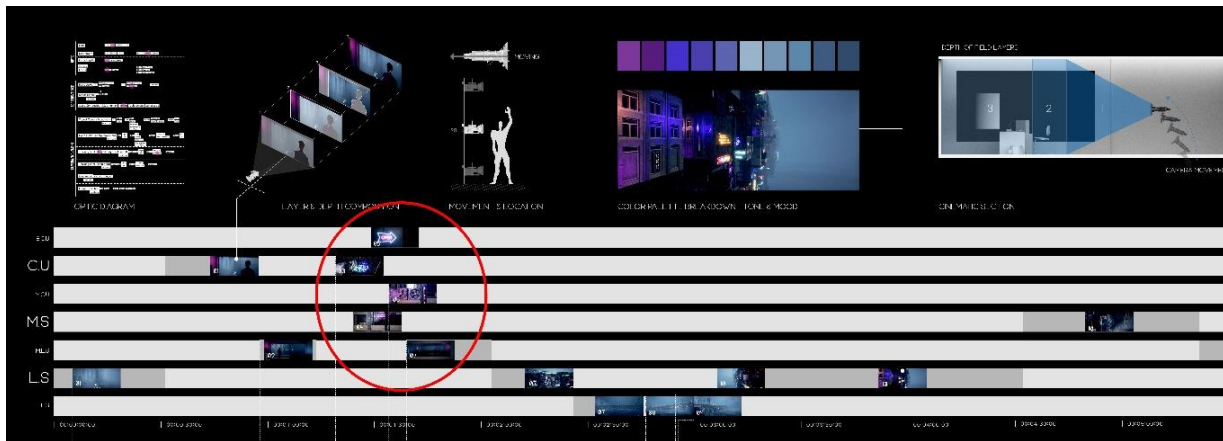


Figure 126. The close-ups on the left side (red circle) are to prepare an audience for the subsequent longshots.

The time-scale diagram was also adopted to ensure the balance of the scale shots in a film. Once the shots were arranged and put into the diagram, the balance and

³⁷⁸ Barry Salt calls this shot frequency and considers it as one of the important factors that influences a film/filmmaker style. See Salt, *Film Style and Technology*, 77.

distribution of shots scales was reviewed. In the short film *Corten Effect*, the middle part of the film was designated for the close-ups and details of architectural spaces to balance the recurrence of the long shots and extreme long shots dominating the rest of the film.³⁷⁹ Through the balancing technique, the time-scale diagram encouraged students to fluctuate between cinematic scales. This attribute results in even and equal treatment for architectural details and tactile qualities of spaces and assisted students to overcome the common flaw of architectural animations that are mostly concerned with general shape and form of spaces which is mostly depicted in long or long-medium shots. The same emphasis on architectural details and haptic qualities of spaces was exercised and applied in the animations *Archway; Odysseys' Enigma* and *The Rooftop Escape* that were suffering from the repetitious long shots and the lack of detail shots.³⁸⁰

Another benefit that the time-scale diagram offered to the architectural films was that it enabled students to design space and time concurrently and in response to one another. The ambiguous nature of the notion of time makes it difficult to effectively design timing in relation to space. In several cases, students struggled to conceive a suitable temporal structure for the spaces that were instrumental to their narratives. In other words, the issue was that the length of the scenes in which the main space, the climax, or a critical part of the film was shown was not sufficient in comparison with less crucial scenes.

For instance, at the stage of designing the timing of the animation *6PM*, it was observed that the required accentuation on the main scene in which the relationship of the protagonist and the dining table is articulated was weakened due to the short amount of time spent on the chief space of the film. To put it simply, the temporal design

³⁷⁹ *The Corten Effect*(<https://www.youtube.com/watch?v=saBmknkeZWg>).

³⁸⁰ See *Archway; Odysseys' Enigma* (<https://www.youtube.com/watch?v=KWHjRZ4Ie78>) and *The Rooftop Escape* (<https://www.youtube.com/watch?v=ZY0F0wUD2l8>).

of the film was not proportionate to the importance of the space that was the main topic of the film. Hence, it was concluded that the length of the main scene should be prolonged significantly. Then, the next step of decision making was to infuse several close-ups, detail shots and extreme close up, into the scene to depict the emotional connection between the protagonist and the spatial element (the dining table).³⁸¹ This example demonstrates how the temporal and narrative sections of the films were sequenced in response to spaces. Furthermore, this example shows the way dividing scenes into desirable shot scales and increasing the number of detail shots and close-ups reinforces the emphasis on the emotional and tactile effects of a scene.

³⁸¹ See Appendix A and *6PM* (<https://www.youtube.com/watch?v=IvP4Nr-UpKM>).

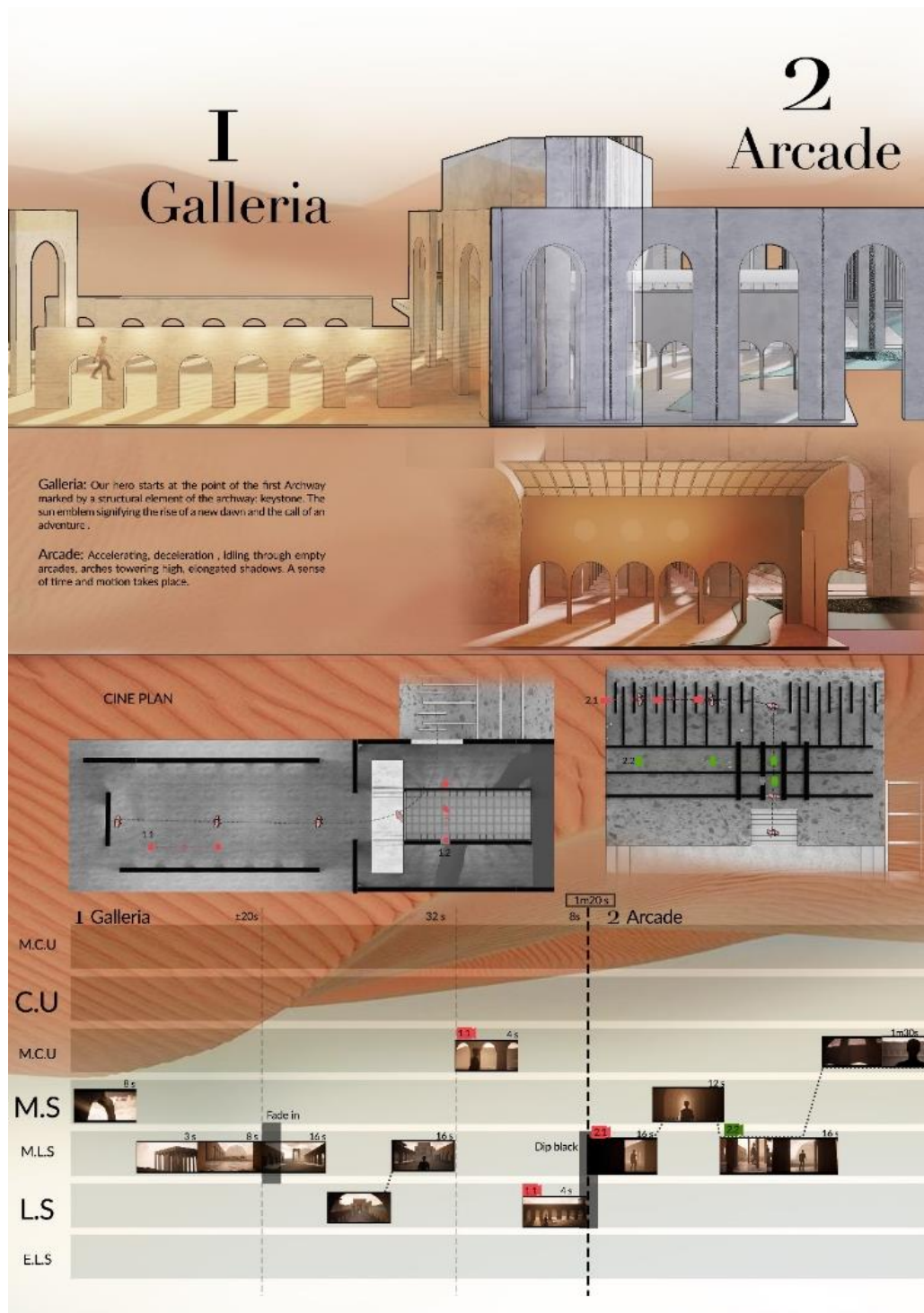


Figure 127. The time-scale diagram of *Archway; Odysseys' Enigma* shows how the timing was designed taking into account spaces. By Marissa Wong.

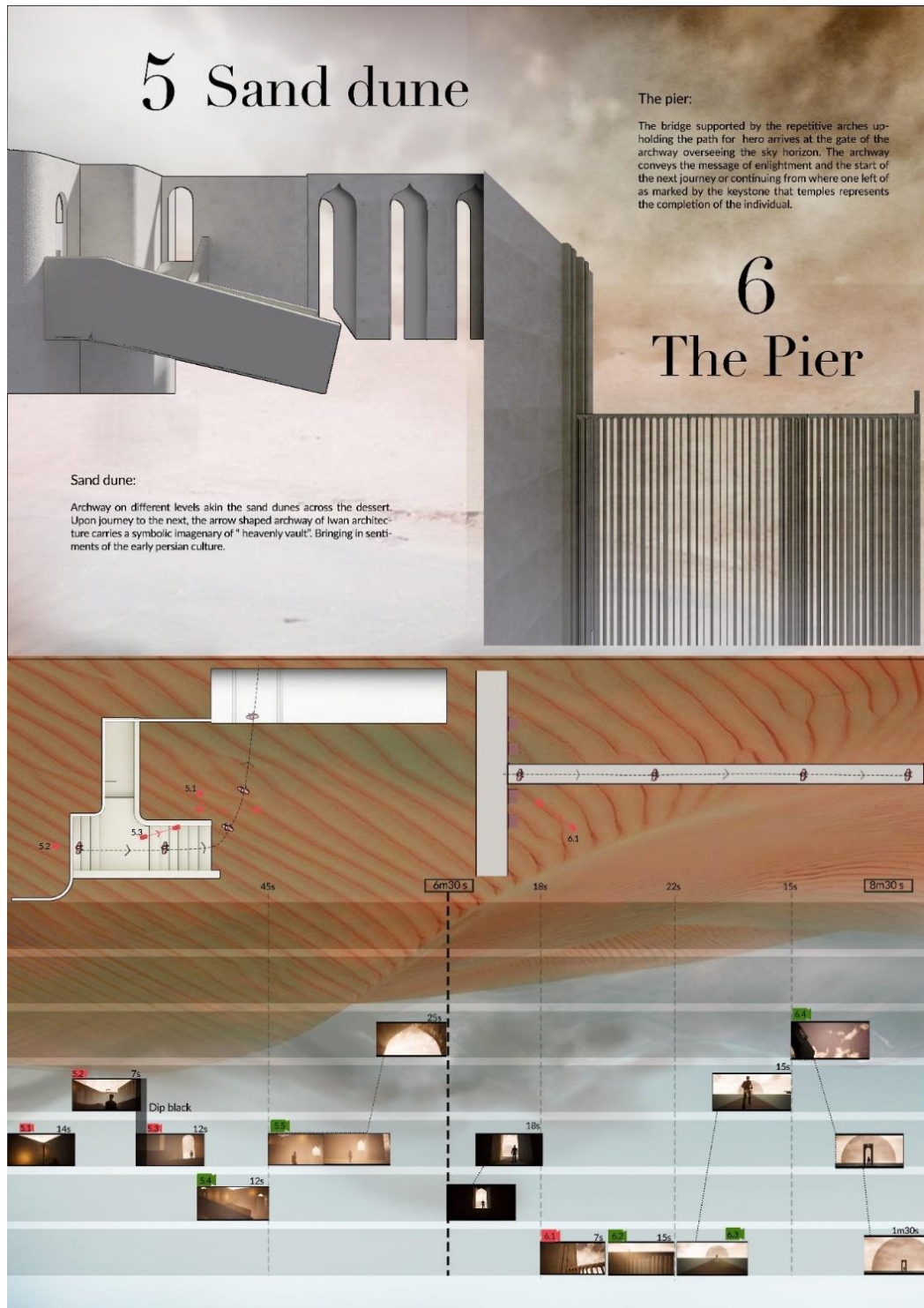


Figure 128. The time-scale diagram of *Archway; Odysseys' Enigma* shows how the timing was designed taking into account spaces. By Marissa Wong.

In the majority of the films including *Archway; Odysseys' Enigma* (Figure 127Figure 128), *The Alley* and *The Window* the sequence of the film was arrayed based on the space that the camera was exploring through its journey.³⁸² The opportunity of simultaneously controlling the spatial design and temporal design, at the same time, that facilitated through the juxtaposition of the time-scale diagram and cinematic plans/sections of space, resulted in a successful spatio-temporal progression that leads to the climax of the film. Taking into account the spaces of a film while working with the time-scale diagram was not limited to the act of ordering location and spaces or reviewing the amount of time dedicated to each space. Assembling and sequencing shots and scenes on the basis of spatial concepts such as inside and outside, or atmospheres and events taking place within spaces was rendered possible by the annotations added to the diagram.

³⁸² *The Window* (https://www.youtube.com/watch?v=9C0WAtKKd_A), *The Alley* (<https://www.youtube.com/watch?v=5sw9UEFYeBk>), *Archway; Odysseys' Enigma* (<https://www.youtube.com/watch?v=KWHjRZ4Ie78>). For a more detailed description of the films see Appendix.

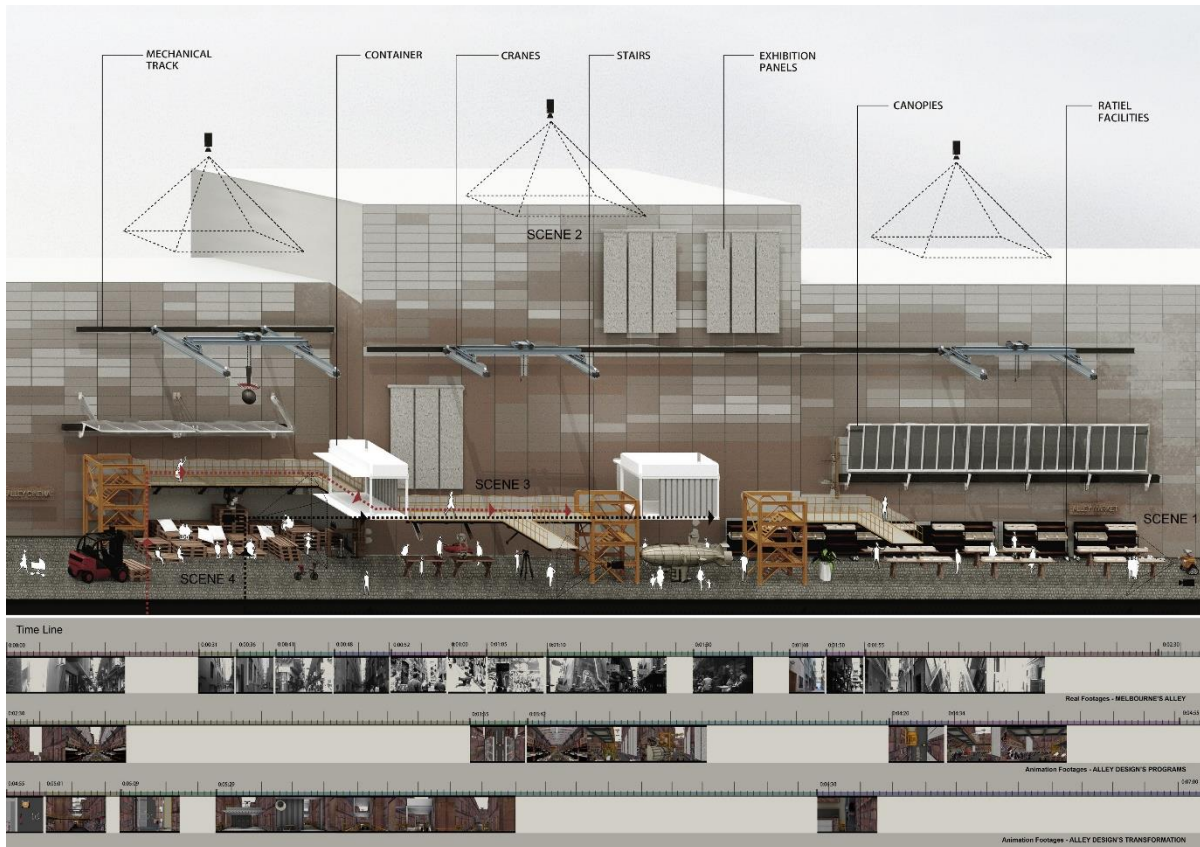
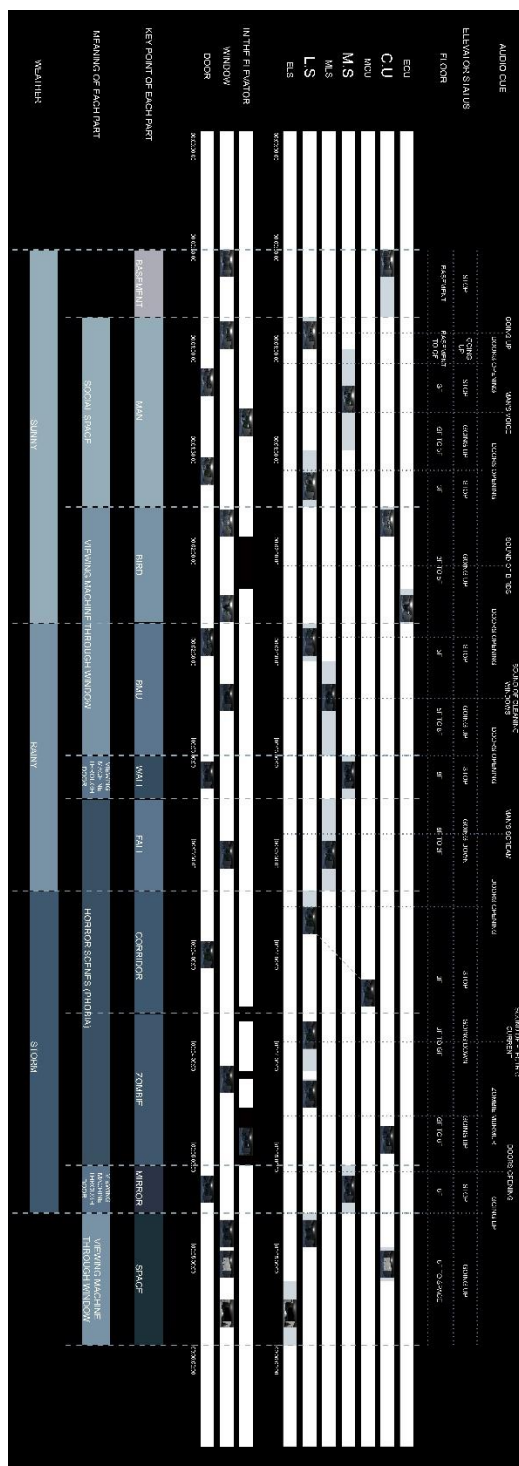


Figure 129. A time-scale diagram by Li Liu in which the spatial progression of the animation designs in parallel with the temporal progression of the film 'The Alley'.

In another example, *The Window*, the sequential order and the length of the shots of the film were diligently arranged by taking into account the way in which the camera traversed the boundaries of inside and outside. This feature — designing the timing based on spaces and spatial conditions — in the time-scale diagram was even more useful for the VR films produced in the studio. During work on the VR film *The Elevator*, it was unveiled that a deliberate temporal design (in terms of both sequence and length), as well as shot scale design, is more critical for VR films.



In the VR film, *The Elevator*, the length and the sequence of the actions of the narrative of the film were designed through a temporal diagram (Figure 130Figure 131). It might seem that the classical shot sizes of cinema are not applicable in the case of a VR film, but it turned out that accurate planning for the distance between the camera (VR user) and spaces and events unfolding in a VR film is extremely fundamental. When characters, objects or spatial elements are closer to the camera (VR user) it can be interpreted as a close up, when they stay further it becomes medium shot and long shot. *The Elevator* was processed through different steps of designing the temporal length of events, actions and spaces that a VR user looks at as well as the shot scales (closeness) of situations he/she experiences. At times the attention of the VR user was drawn to the images seen through the window of the lift in the outside in longshots and at times the VR user was encouraged to gaze at the elements that were closer to the camera representing the VR user, such as characters entering the lift and standing close to the VR spectator.



Figure 131. A detail from the time-scale diagram for *Elevator* depicted in (Figure 130).

All the films produced in *Studio 35mm* went through a process of temporal justification at discrete layers. Narrative sections, scenes and shots scales were tested against each other. However, the foremost effect of the time-scale diagram is that the diagramming method empowered students to design the narrative and timing based on spaces. The Time-scale diagram was a component of the film-architecture matrix and functioned more effectively when intertwined with the cinematic plans and sections as it was discussed in the example of *Archway; Odysseys' Enigma*. The next section discusses the observations regarding cinematic plans.

5.1.3 Cinematic Plan and Similar Diagramming Methods

As discussed in Chapter 2, both architects and filmmakers employ plans as a means of design and analysis. Orthographic top views are frequently used in film grammar texts for teaching and analyzing *mise-en-scene* and camera staging techniques. Moreover, several film directors have been outspoken about the use of top views drawings in the process of designing of their shots.³⁸³ Drawing cinematic plans functioned as a prime part of film design in *Studio 35mm*, where students were to communicate the following characteristics of a scene: the form and scale of space, the location of the camera, camera movement as well as the location and the movement of actors. Salient observations on cinematic plans are discussed in the succeeding sections.

5.1.3.1 Directionality

Using cinematic plans as a design tool revealed diverse advantages and helped students to cope with sophisticated tasks during the design process. The complexity of the notion of directionality in film is one of the motives that necessitates the existence of a sort of visual two dimensional orthographic — and not perspectival — design tool. The direction of movement and viewing are two types of directionality that have always been one of the obsessions of filmmakers and even led to specific cinematic rules such as the 180-degree rule.

By sketching on a plan one can imagine how a camera moves from one specific location in space to another location. The trajectory of a camera and its geometry can be accurately designed and imagined by using the top view drawings. For example, a camera moving forward directly toward a subject generates a different effect from a camera that, after traveling a curved shape movement, encounters a spatial element.

³⁸³ The importance of cinematic plans in the history of cinema is thoroughly discussed in Chapter 2.

Therefore, the cinematic plans gave an opportunity to concentrate on the direction, starting/ending points of a movement and the moving pattern of a camera.

The student work, *In Search of the Soul*, is a rewarding example that represents a short film that is planned along a complex route of a character and a camera following it.³⁸⁴ For the animation, configuring the direction of different phases of the character's spatial journey was only possible through designing and manipulating the path of the character on a floor plan. In the design process, once the journey of the character was finalized, the shots of the film and camera positions were specified and tested on the same floor plan that included the journey of the character. In the case of *In Search of The Soul*, due to the high number of shots and the diversity of shot scales and spaces, the usage of the floorplan was necessary to ensure a correct direction and a seamless movement from one shot to another. It can be concluded that in the scenes and films where an architectural space is introduced through the journey of a character in space, designing both the camera movement and character movement on a cinematic plan is easier and at the same time more effective. A similar approach was utilized in *The Road Not Taken*, *Re-flect*, *Princes Pier* and *A Visit to The Shrine of Remembrance*; in all the films the use of plan was crucial to the process of designing the directionality of shots (Figure 132Figure 135).³⁸⁵

³⁸⁴ *In Search of the Soul* (<https://www.youtube.com/watch?v=YjXfWuP7ICA>).

³⁸⁵ See Appendix A. See *The Road Not Taken* (https://www.youtube.com/watch?v=XKXiHv_p_4Y), *Princes Pier* (<https://www.youtube.com/watch?v=nssbsFIwbZg>), *A Visit to The Shrine of Remembrance* (<https://www.youtube.com/watch?v=vPhi7y4J2m4>).



Figure 132. A cinematic plan showing the overall camera staging and spatial narrative of a short film (one of the exercises). By YuChie Tseng.

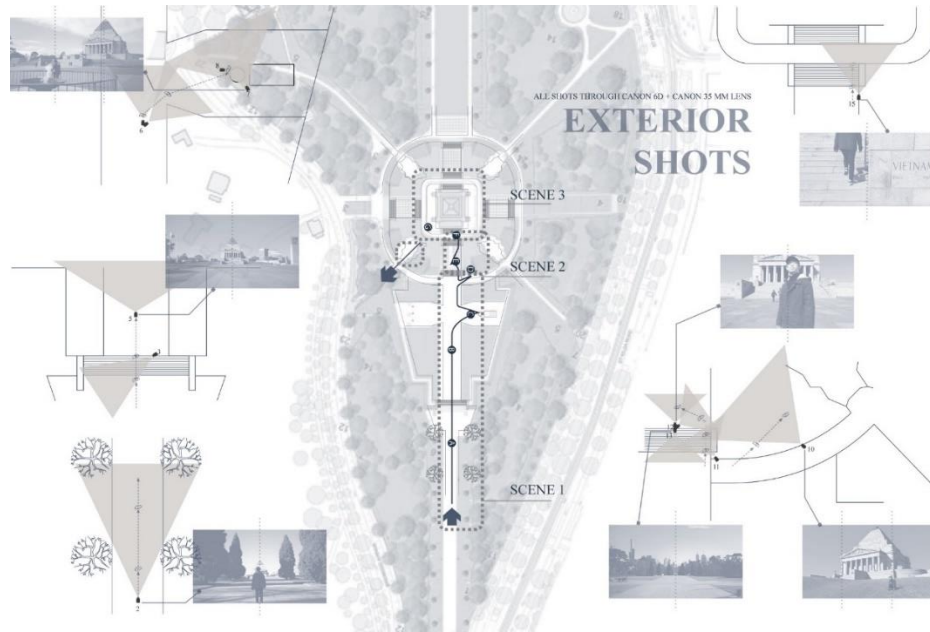


Figure 133. A cinematic plan showing the overall camera staging and spatial narrative of a short film (one of the exercises). By Hao Lin.

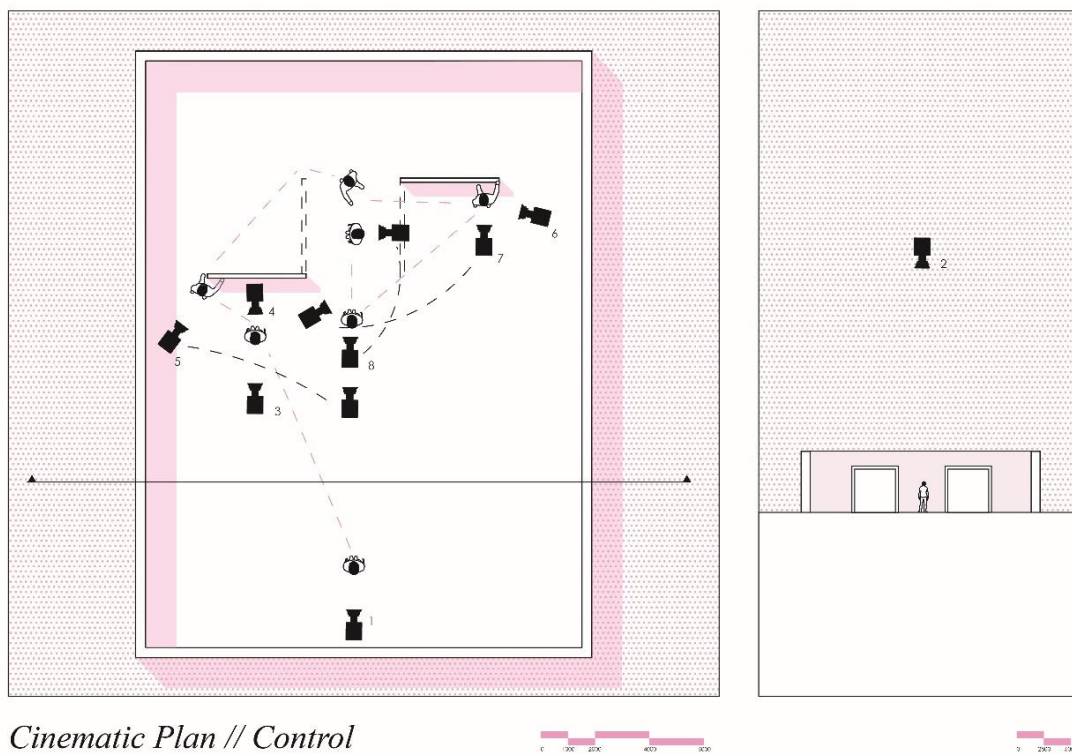


Figure 134. Cinematic plan sketches of a scene by James Gledhill.

The direction of the gaze was another parameter practiced on plans, which included both the directionality of the view of the camera (what a camera looks at) as well as the direction of the gaze of what a character (a protagonist captured in the frame) is seeing. Quite unexpectedly, one of the most challenging tasks ascertained during the studio was working with the direction of the gaze. The first encounter of students with filming (Exercise 1) entailed managing and controlling the direction of the gaze, and the results of this assignment had shown that a rigorous design tool was required to resolve the issue.³⁸⁶ In practice, it was difficult for students to cut from a shot showing a character to another shot depicting what the character is looking at (a building for instance); and this challenge was not only limited to handling the 180-degree rule.

After introducing the cinematic plan and the way the direction of the gaze can be mapped by working on camera angles on a plan, the problem gradually disappeared from the exercises completed by students, and indeed, it developed into a design potential for the final films (Figure 135). Working with cinematic plans assisted students to design and consider various angles of gazing by positioning cameras on a plan. Exercise 1 was re-done by students for the second time utilizing the cinematic plans and as a consequence, the editing issues and the confusion regarding the mismatching of directions were fixed for most of the students.

³⁸⁶ Appendix Exercise 1.

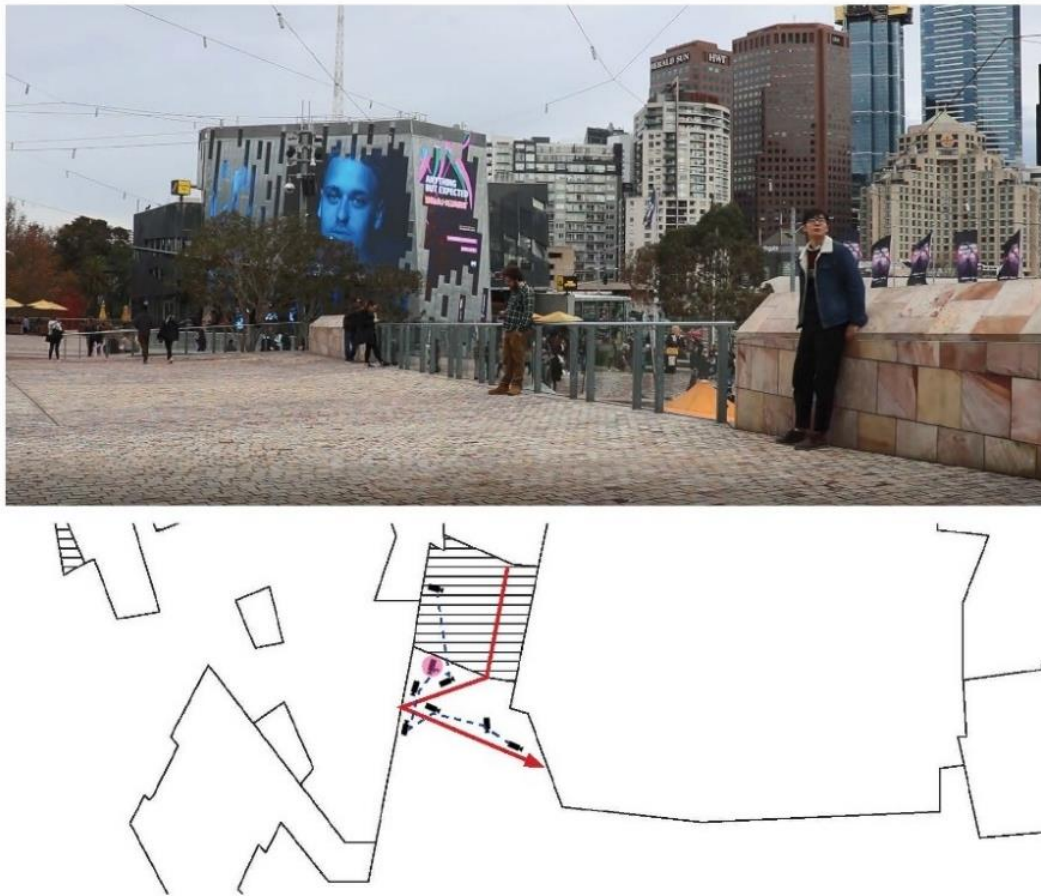


Figure 135. Cinematic plans used for designing direction at Federation Square, Melbourne. by Song Chen.

The capacity of shifting the viewing angles was deployed in final films. The last scene of *The Window* was designed on the foundation of the shifts taking place between the directions of viewing and *Urban Below*, 6 PM, *The Portal Bowl*, *Elevatoria* and *The Rooftop Escape* entail critical scenes that are crafted out of a sophisticated oscillation between the angles of viewing.³⁸⁷

³⁸⁷ *The Window* (https://www.youtube.com/watch?v=9C0WAtKKd_A.) *Urban Below* 6PM
 (<https://www.youtube.com/watch?v=fLTvtGvRdFg>),
 (<https://www.youtube.com/watch?v=IvP4Nr-UpKM>)

5.1.3.2 The Complexity of Spatially Designed Narratives

Cinematic plans were devices implemented to also cope with diverse types of complexities. The intricacies of camera movements with complex changes in choreographies were manageable only when translated into two-dimensional lines on a plan. The process of camera movement design was more daunting to deal with where the camera movements needed to respond to the movement of a character in space.

Learning the lessons gained from Exercise 1, camera movements were practiced by designing movements on a plan for Exercise 2.³⁸⁸ In Exercise 2, students were to make short films with Gimbals and Steadicams. Although the movements designed on plans were not reliable unless tested through shots, the movements were more successful when they were drawn (as arrows showing the direction and the path of a movement) on a plan at the first stage. After testing the movements through filming, the movements were revised on plans and were re-filmed. The process of planning, or more precisely drawing on a plan, and testing trained students to adopt the same method for final films. Precedent study and analyzing the camera movements of other filmmakers through cinematic plans was the most efficient way to teach camera movement design. Camera movements of film directors who, as part of their style use longer takes and wandering camera works, were more useful cases for students to analyze.

In the course of designing final films as well as exercises, it was noted by students that as the movement of a camera is not limited to the movement of the body of the camera, having other diagrams that can communicate changes in the height of a camera are necessary as well. In filming real spaces, thanks to new machines such as drones, Steadicams, glide-cams and Gimbals, as well as the virtual worlds of animation and VR,

The Portal Bowl (<https://www.youtube.com/watch?v=nfICMuRm34I>), *Elevatoria* and *The Rooftop Escape* (<https://www.youtube.com/watch?v=ZY0F0wUD2l8>).

³⁸⁸ See Appendix, Exercise 1.

movements with unfamiliar angles and directions and with more sophisticated geometries and patterns are facilitated. As a result, working with different orthographic or perspectival angles will be of benefit for designing smooth and natural camera movements.

Cinematic sections and axonometrics were drawn and functioned in parallel with the cinematic plans. While cinematic plans are not able to convey how a camera might fly and dive in different heights and angles, cinematic sections were employed to articulate those aspects.³⁸⁹ Directors of *Archway*; *Odysseys' Enigma*, *The Window* and *Urban Below* were encouraged to canvas on cinematic sections and cinematic axonometric drawings (Figure 136Figure 138). Orchestrating camera movements through orthographic drawings (plans, sections, elevations and axonometrics) can improve aesthetic aspects such fluidity and smoothness of movements since these drawings enable architects to configure the movement and adjust its shape in response to the form of space, actions and what appears in front of the camera. Utilizing a plan or a section also allows one to imagine what camera will capture on every single location with a specific angle and height along the path of the movement.

³⁸⁹ From a technical point of view, the drawings that are called cinematic sections here, in some cases are elevations. Nevertheless, as the architectural technicality of the drawings is not concerned here, the umbrella term 'section' is given to them. Also, as per architectural drawings sections show more technical details, here the drawings are called cinematic section as well; simply because they reveal the cinematic technical details of shots. Therefore, calling all of this drawing section is just a metaphorical act.

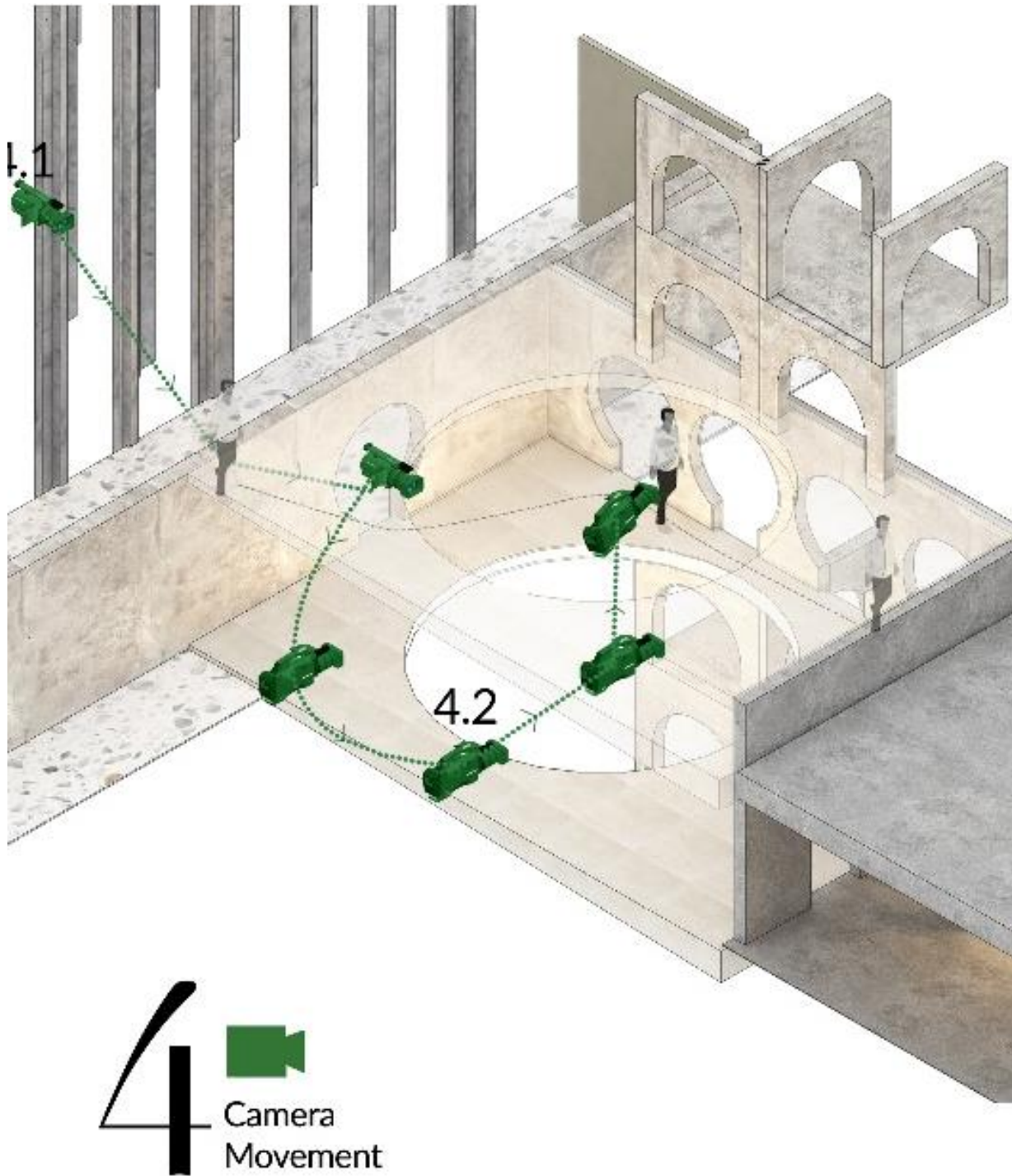


Figure 136. A cinematic axonometric. By Marissa Wong .

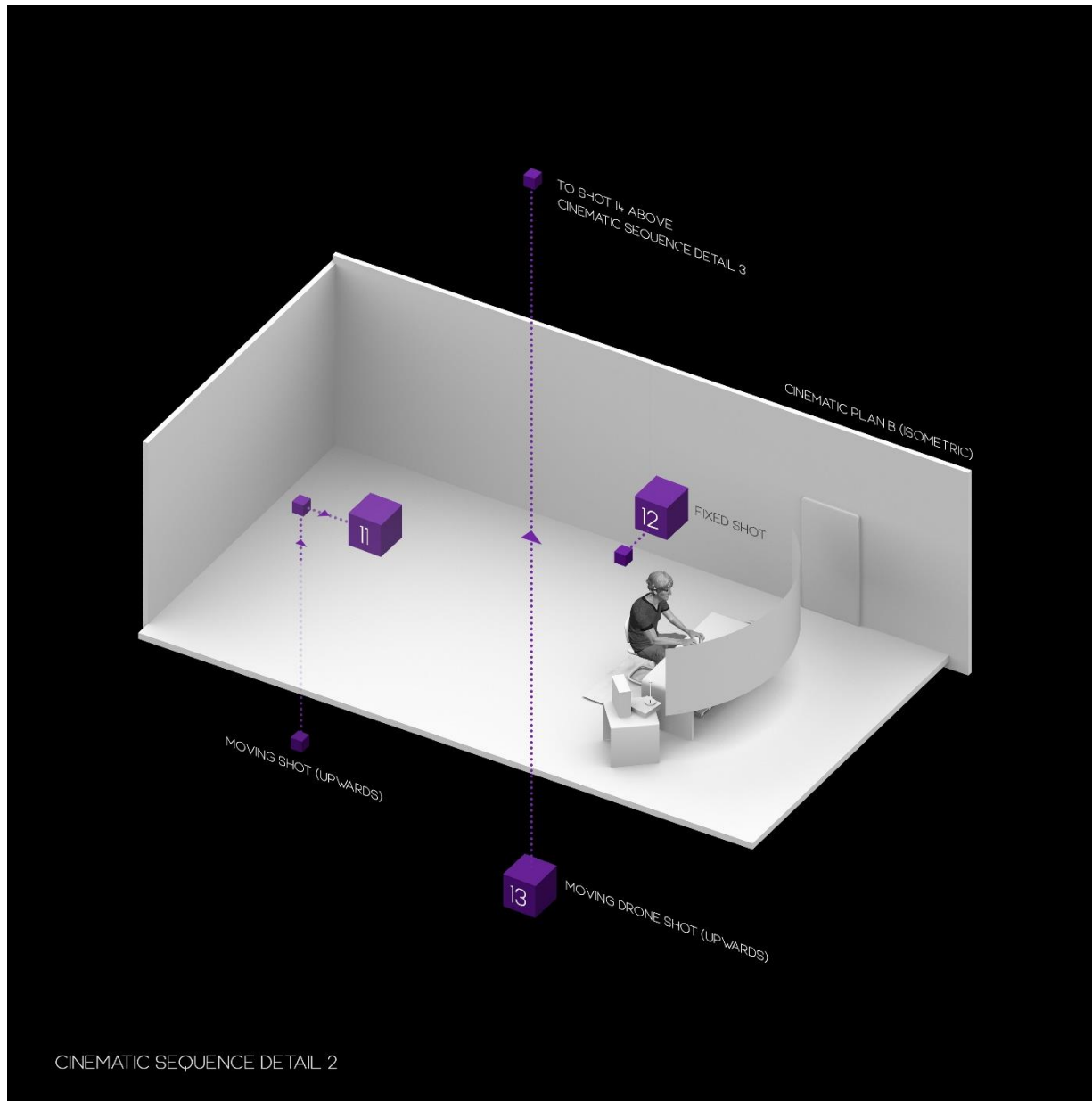
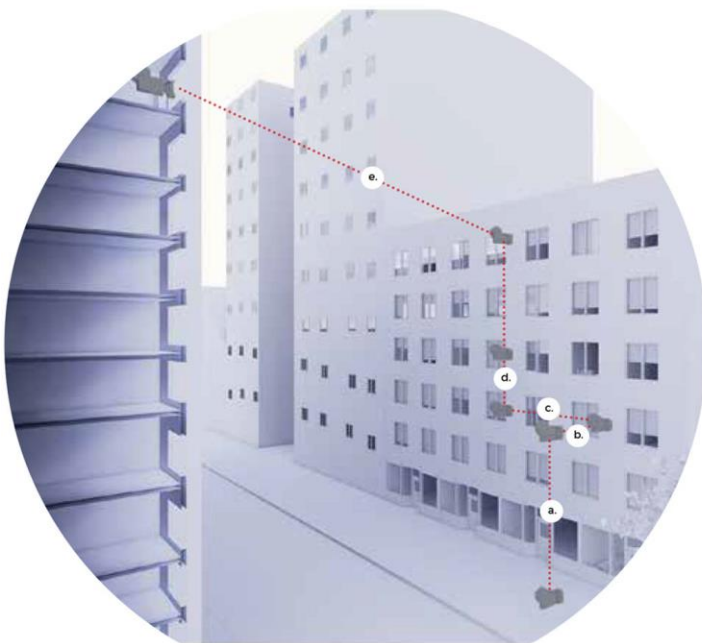
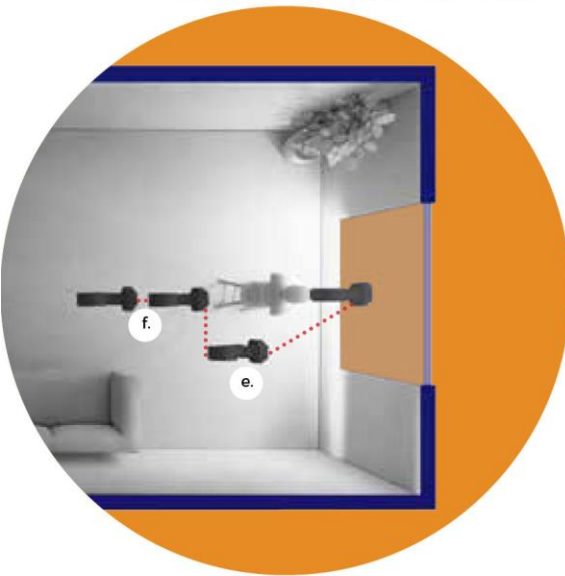
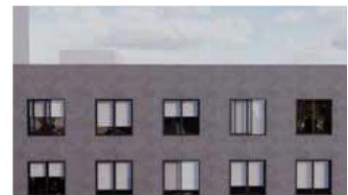


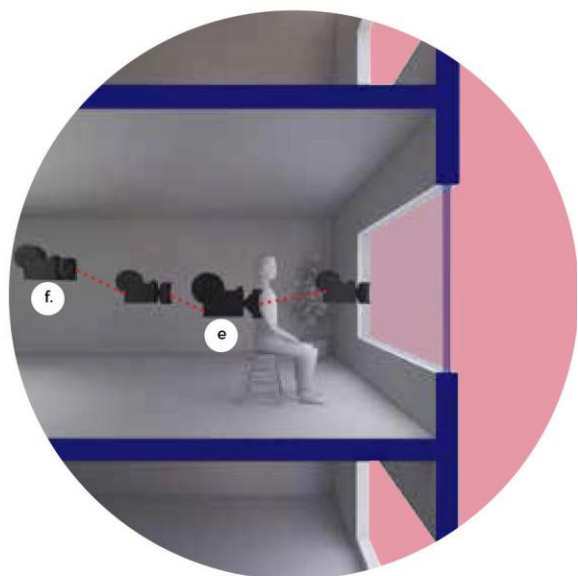
Figure 137. A cinematic axonometric by Han Wu.



SHOT 1: Sectional Perspectives



SHOT 1: Plan



SHOT 1: Section

Figure 138. Cinematic section Jia Pin for the film *The Window*.

From a practical standpoint, the diagramming technique served as an apparatus for spatial organization. For instance, in long takes with tortuous camera movement where numerous actions or spatial conditions unfolded before a camera one after another, programming on a plan or a section rendered viable the management of the complexities of a scene. The cinematic orthographic drawings were useful at two levels. Firstly, cinematic plans contributed to the planning of the physical sequence of a shot and how a camera moves in space (from where to where) based on what it captures at the beginning, end and middle of the route.

Secondly, by working on drawings such as a plan or a section, a narrative transcends from being a sheer temporal entity and elevates itself to a spatially designed system consisting of multiple spatial units. By designing a narrative through sections, plans and axonometric drawings, a narrative that is mostly conceived as a temporal notion, becomes a temporal and spatial thing. The animations *In Search of The Soul*, *Urban Below* and *Hide and Seek* were all organized based on the progression of the camera through various spaces of a narrative. When a narrative is organized based on the space and how a camera moves through various spatial units and conditions, it does not only capture what happens, when it happens and after/before the event occurs, it also involves the locations and spaces making them contribute to the development of a narrative. Hence, the cinematic plans and sections, on the one hand, assisted students to handle the complexities of camera movements and, more significantly, on the other hand, the drawings helped students exploit the potential of spatially organized narratives.

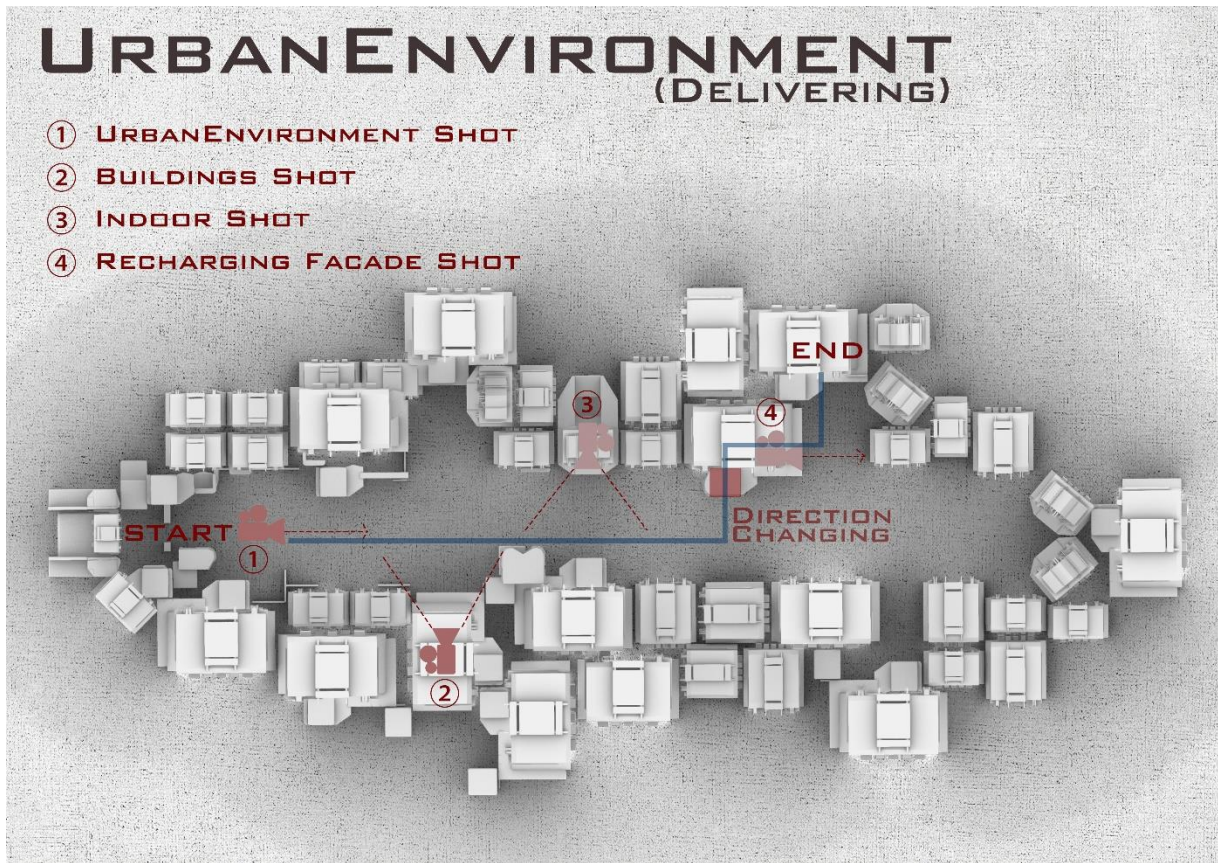


Figure 139. Cinematic plan for programming as a means of programming a scene. By YuChie Tseng.

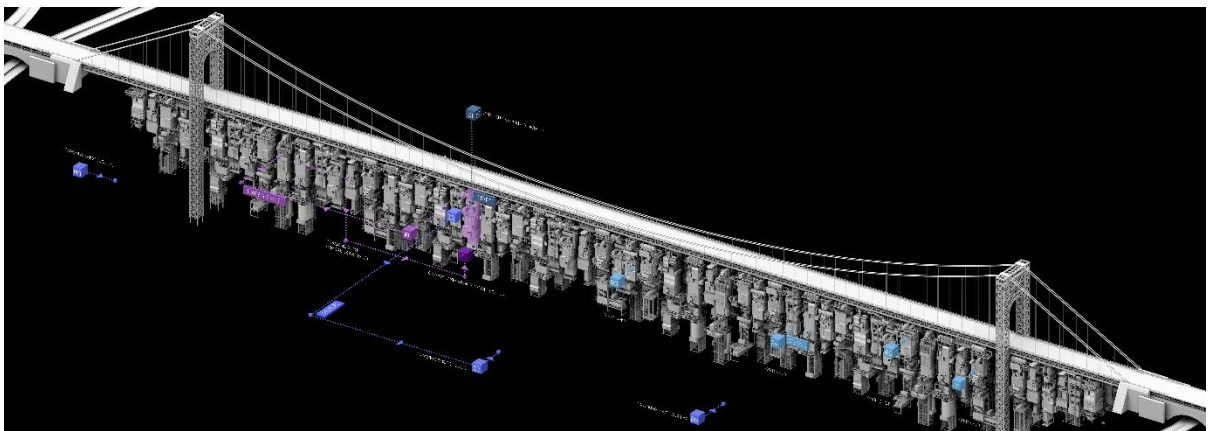


Figure 140. Axonometric programming of *Urban Below*. By Han Wu. A closer view of the diagram is shown in the next image (Figure 141).

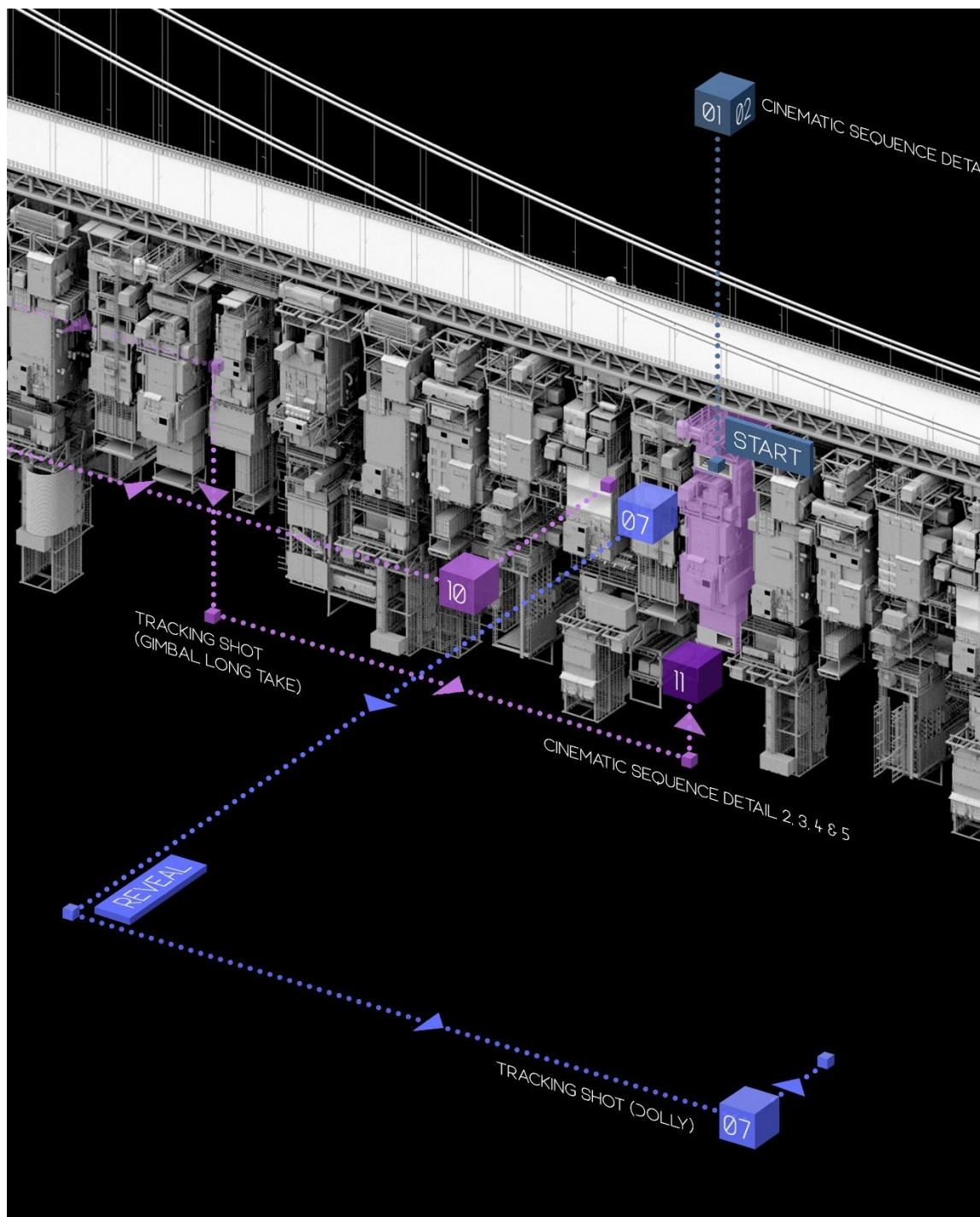


Figure 141. A detailed view of the axonometric programming of the *Urban Below* (Figure 140). By Han Wu.

5.1.3.3 Cinematic Plans and the Reverse Design Processes

One of the aspects that emerged from working with cinematic plans and sections was the possibility of a reverse design process. The plans and sections made it possible to design the camera work first, followed by designing spaces that were going to be depicted in the shots. In the case of animations, cinematic plans allowed for designing spaces for camera movements and not camera movements based on spaces. This process was opposite to what often happens in filming real spaces, nevertheless, it was remarkably convenient and timesaving for animations. By setting the camera choreography on a plan and highlighting needed spaces and spatial elements, students only had to model and render what was going to be captured by the camera and not the whole space.

In most of the animations of the studio, both 2D and 3D, the reverse design process was applied. Once the spatial path of the narrative and camera positions (and movements) were decided, species of spaces such as thresholds, enclosing walls, corridors and other required spatial elements were put on desirable points along the camera movements. In the 3D animation *In Search of The Soul*, the narrative illustrates the development of character as he goes through multiple spaces of the animation (Figure 142). In this case, the specific stages of the narrative were decided, the general shape of the journey of the character and camera positions were defined and then the spaces of the narrative were placed on the planned locations along the narrative path. In another example, *Elevatoria*, the overall space of the city was designed but the details of the city were designed just in the parts that were meant to be specifically filmed by the camera. In *Archway; Odysseys' Enigma*, as the journey of the character of the film was mostly horizontal and there were moments in which the main camera work consisted of changes in camera height, sections and axonometric drawings were deployed to design the camera choreography of the film (Figure 143). Subsequently, all the archways and

thresholds and experiences depicted in the film were designed in response to the camera movements.³⁹⁰

³⁹⁰ See Appendix A for more details regarding the three films.

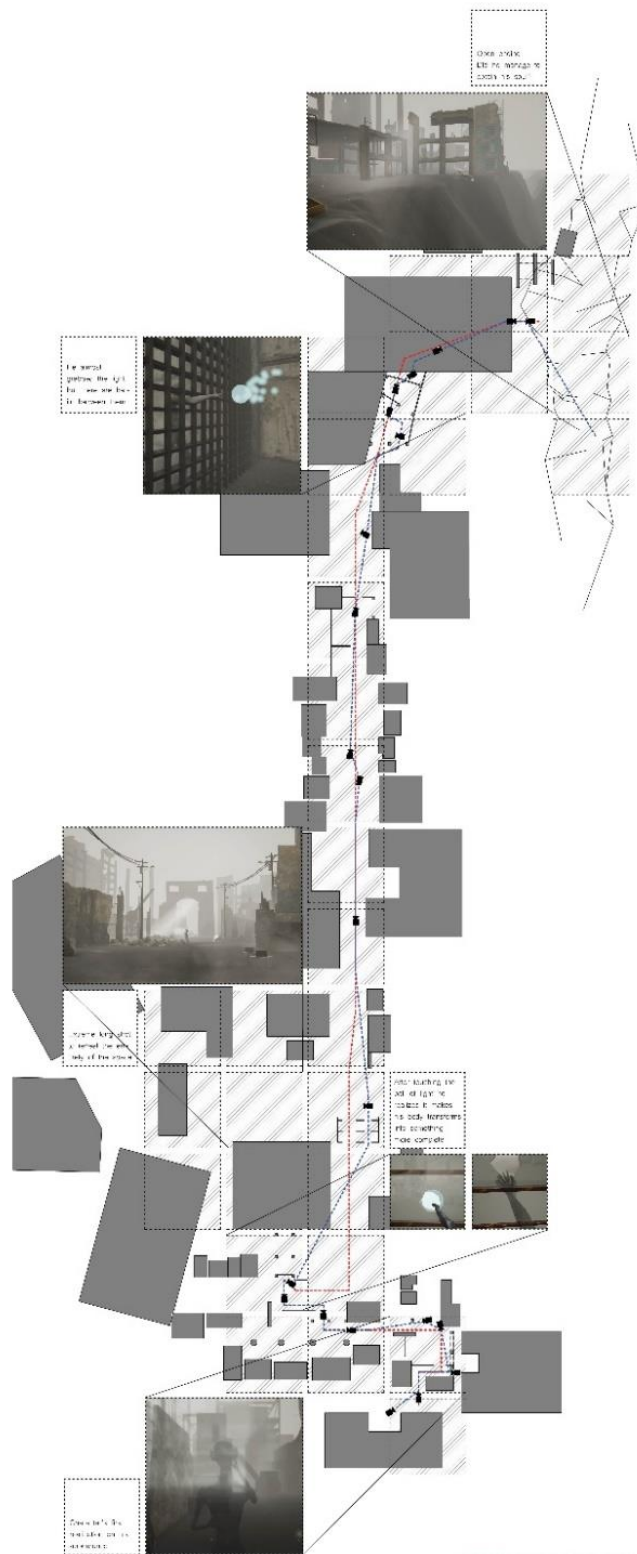


Figure 142. The overall floor plan of *In Search of The Soul*. By Jessica Livia Darmali

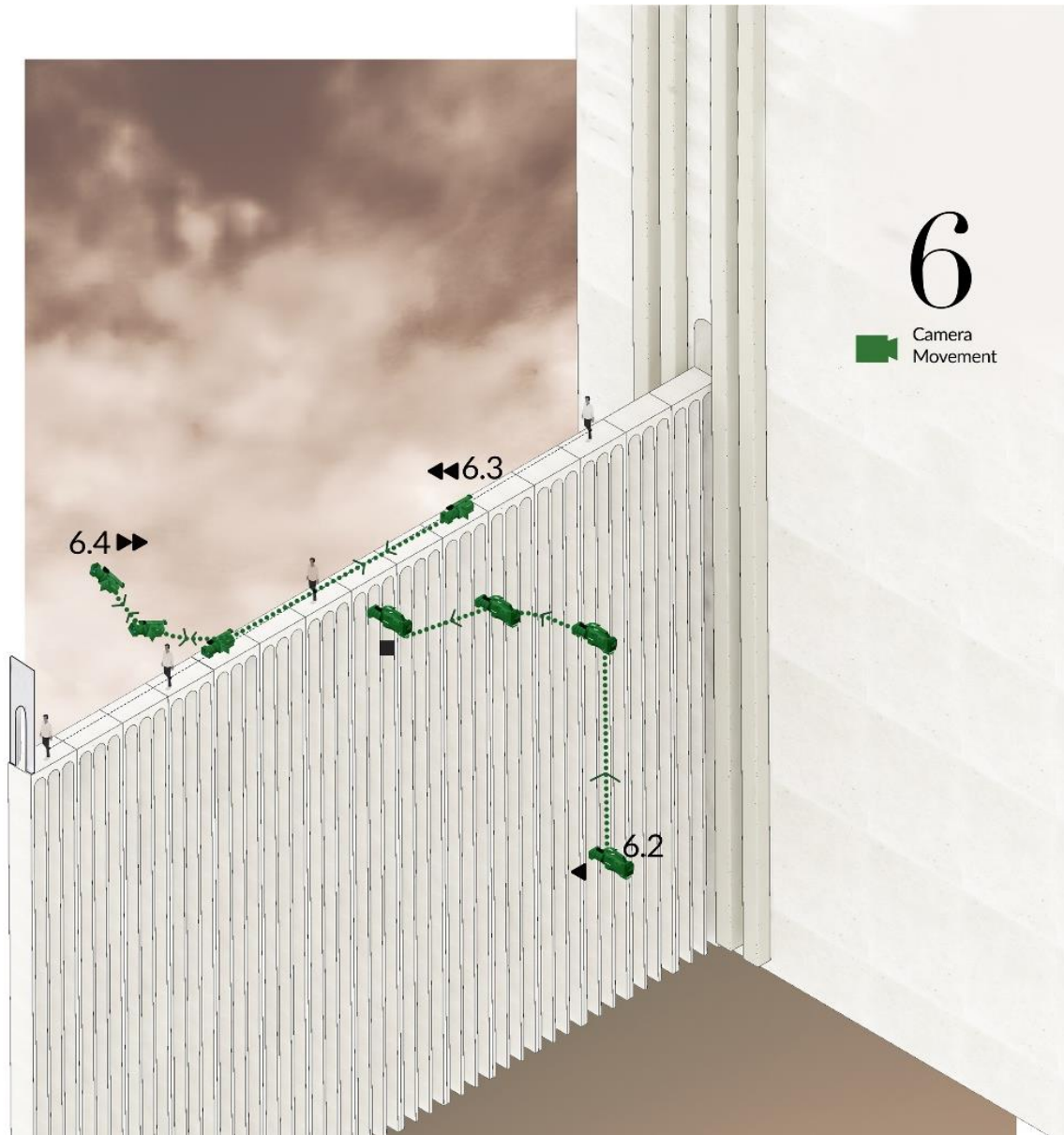


Figure 143. An axonometric view of the camera journey for *Archway; Odysseys' Enigma*. By Marissa Wong.

In 2D animations, the reverse design method of designing a scene-based camera positioning on the cinematic plan or section was even more critical. For the 2D animations *Portal Bowl*, *The Window* and *6PM*, the plan and spatial layout and camera positions were designed and then the compositions of spaces were tested on plans or

sections around them (Figure 144-Figure 145). As an example, in the Roman bathroom scene in *Portal Bowl*, as the first stage, the plan of the layout of the scene was arranged and camera positions were highlighted, and the number of necessary shots was defined (Figure 145). As the second phase, the spaces were designed according to camera staging and only necessary parts that were meant to be in the frame were drawn.

Similarly, in *The Window* and *6PM*, all of the spaces were designed based on the camera stagings marked on a plan. In *6PM*, the concept of the film was heavily built on the form of the location of the film, and therefore all the spaces were arranged on the basis of what was born out of sketching camera views on plans. A conclusion can be drawn that in the case of 2D animations, where a considerable time was spent on drawing the layers of the shots, working with plans facilitates the design process. When the cinematic plan of the camera work was accurately defined, as the next step, spaces around the camera positions and consequently perspectival images were drawn.

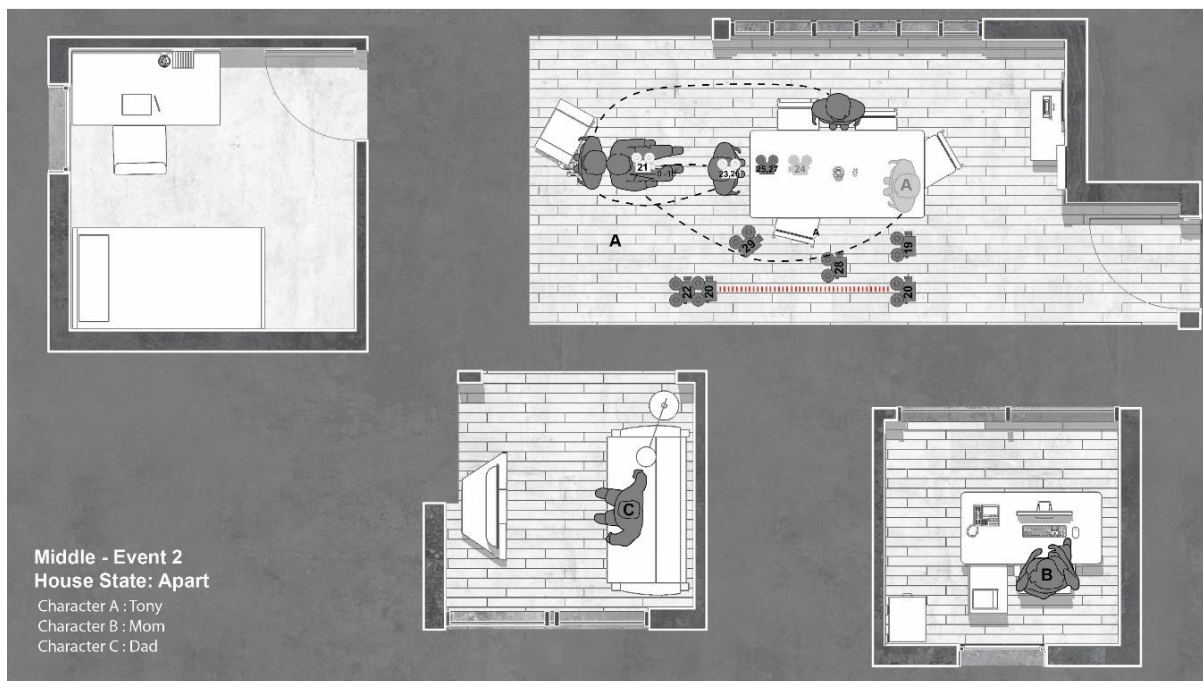


Figure 144. Cinematic Plan of *6PM*. By Su Ki.

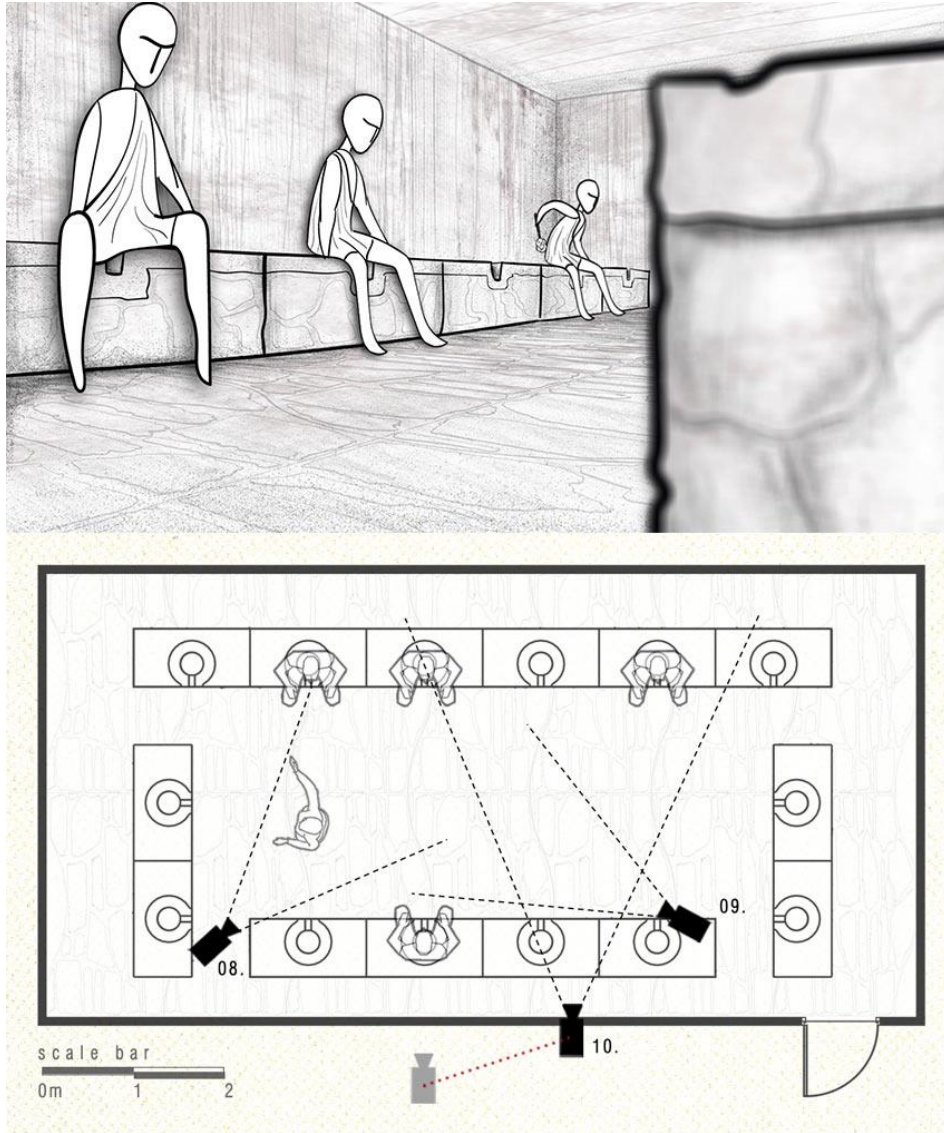


Figure 145. Cinematic Plan and a shot of *Portal Bowl*. By Rayyan Roslan.

Although small adjustments took place to the perspectival views (shots), the act of finalizing camera positions and journeys first on cinematic plans and then arranging spaces around them minimized the modeling and drawing time. What happens in this method — designing the camera movements/positions and installing the spaces and spatial elements around them afterward— is, in effect, opposite to the traditional techniques of storyboarding.

5.1.3.4 In Praise of Orthographicity

Over the course of *Studio 35mm*, working with two-dimensional drawings such as cinematic plans and sections always happened *before* the phase of storyboarding. Cinematic plans functioned as parallel components accompanying every stage of design. One of the most recognizable advantages of working with cinematic plans before the phase of storyboarding is that cinematic plans and sections are devices that abstract complex spatial arrangement of three-dimensional space and translate them to effortlessly legible drawings and simplified geometric forms.

In cinematic plans, the complex three-dimensional relationships engendered in the perspectival view of shots are abstracted to something flat, simple and manageable. Spatial elements on a plan or a section are flat representations of the geometric form of spaces, placement and movement of protagonists and cameras. Any change in the mentioned elements on a plan results in a dramatically different image in a shot. A plan, section or an axonometric reduces and abstracts the uncontrollable aspects of three-dimensional spaces filmed by a camera to the simply modifiable geometries.

Observations during the tutorials of *Studio 35mm* proved that it will be more helpful to design certain spatial experiences on plans and sections rather than through storyboards. The consequences of changes applied to parameters such as distances between spatial elements and camera, camera angles and camera movements can be better predicted and controlled when it is designed on a plan or section. A cinematic plan or a section can ensure that spatial layouts and camera positions result in a conceived image.

By planning scenes and shots through a plan or section entailing the position of a camera and the layout of a space, a designer endeavors to imagine how the spatial condition, as a process shown on a plan, results in a cinematic image. In contrast, when a designer is creating a storyboard, they first imagine a final product, such as a shot in the way it will be seen through a camera viewfinder/screen. In the next phase, the

student creates the spaces according to a storyboard. The difference between storyboarding and designing through plans is the difference between designing through a process and designing by modifying a product. Shots are the final products that are going to be seen on screen and drawings such as cinematic plans function as processes through which a shot (product) can be achieved. Therefore, starting with a cinematic plan is an attempt to generate a product (a shot) through controlling its generative process.

The problem emerges when in many cases, by having a product, a shot or a storyboard, the process that leads to it cannot be mounted. When the geometric forms of spaces, their relations and how a camera is going to move through them is considered from the beginning on a plan, it is more achievable to configure the spatial arrangement of a scene in a manner that causes a desirable final product in a shot. In storyboarding, however, the spatial arrangement of camera and spaces that engender a particular view is not considered and cannot be realized on all the occasions. In cinematic terms, by producing the storyboard of a shot, filming conditions that generate the shot might be physically and cinematically unachievable.

Cinematic plans, as a stage prior to storyboarding, were successful due to the fact that the plans abstract and geometrize the overwhelming process of scene-blocking, camera staging and spatial design. In addition, through the cinematic plans, the whole spatial narrative of a scene or even a film can be visualized on single a drawing. Cinematic plans and sections show a spatial narrative as a whole and offer the option of manipulating each part of the spatial narrative individually. Even for long camera movements, using a cinematic plan assisted students to design the complete path of a movement and simultaneously imagine every single moment during the movement as a separate frame.

In other words, cinematic plans and sections rendered it possible for students to observe the scenes and films in their entirety on one drawing, a plan. For instance, the

cinematic plan from *Frame the Dream* demonstrates that the way the construction of the scene and camera staging is designed and, on the other hand, shows how shots relate to one another. The cinematic plan also illustrates how the camera is staged for every shot as indicated with different shot numbers (Figure 146). Visualizing the overview of the construction of a scene and on the same image illustrating microelements is not attainable by any other tool.

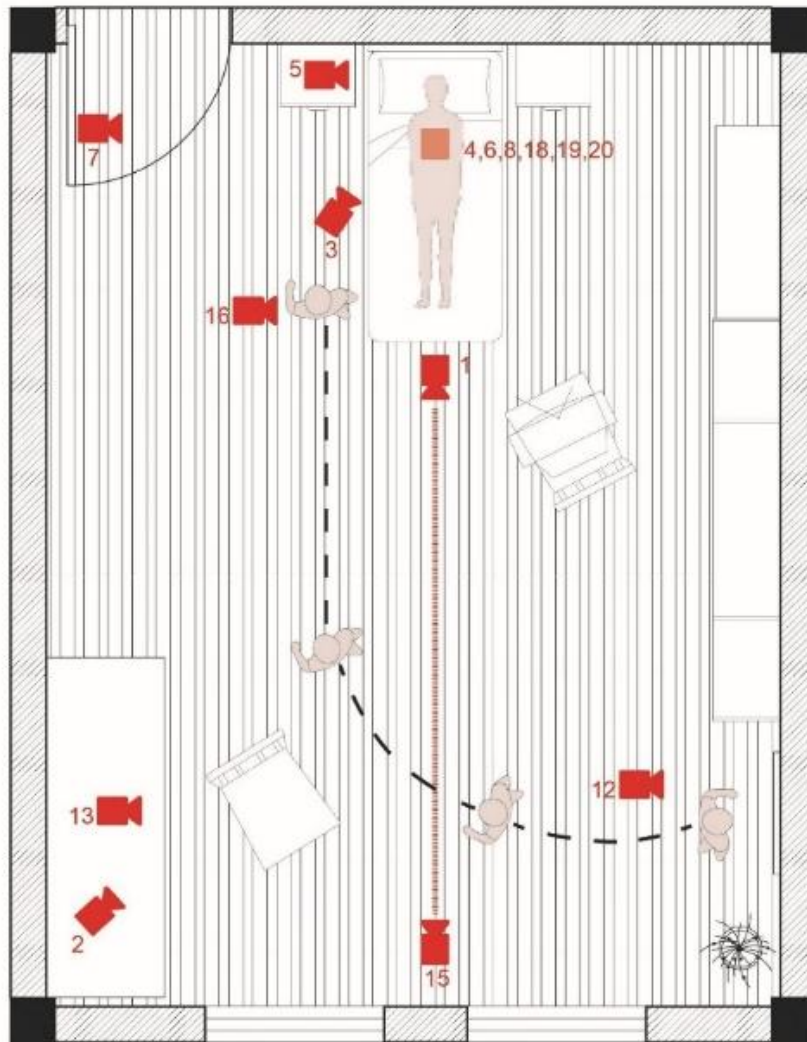


Figure 146. Cinematic plan as a programming technique for *Frame the Dream*. By Tang Enquan.

Jessica Darmali, the student director of *In Search of The Soul*, writes in her film-architecture diary that through working with the cinematic plans she was convinced to think about how “narratives of spaces” can be crafted: “having the cinematic plan of my film as a whole, made me tweak my camera features based on my spaces and my spaces based on my camera work several times. I changed the angle and the type of my camera work as well as the spaces that were filmed by my camera for the shots I had in my mind.”³⁹¹ The reflection by Jessica Darmali showcases that it was through working with cinematic plans that students perceived filmmaking as a spatial practice and not as a collage of a series of images.

Shots as the outcomes of this spatial practice depend on the physical location and the physical movement of the body of a virtual or real camera in space. The interaction between camera and space can be planned and controlled through an engagement with orthographic drawings. In this sense, a purely visual tool such as storyboarding that does not reflect the complex process behind every shot is an adequate tool for designing architectural films and animations.

Usually, in the methods introduced in the sources discussing the relationship between film and architecture as well as in the teaching methods of design studios that deal with the topic of architectural filmmaking, cinematic plans are completely abandoned, and, in turn, storyboarding is heavily celebrated.³⁹² Arguments supporting this tendency advocate that spatial experiences and three-dimensional conditions cannot be clearly expressed on a two-dimensional projection. This claim appears to be

³⁹² See for example Graham Cairns, *The Architecture of the Screen*, 172. Investigating the methods taught at Unite 24 at the Bartlett was part of the field work of this dissertation and it was realized that methods of diagramming similar to cinematic plans were not used at any stage of their design. To the knowledge of the author of this thesis there is no paper, book or a university subject that employs diagrams similar to cinematic plans. The cinematic plan (or so-called overhead views) are mostly utilized in film school and film directing books.

accurate, nevertheless, what is neglected in this argument is the fact that the two-dimensional projections such as plans and sections are meant to illustrate the process and its configuration through abstraction and geometrization.

These orthographic drawings are not representational tools that communicate atmospheres and experiences. In Bela Tarr's terms, the tools are only for communicating "information" about the processes and construction of a scene, not atmospheres and experiences. As David Leatherbarrow, architectural theorist put it, plans and sections work in the same vein as x-ray images. These orthographic visualizations provide a precise picture of the geometry of the space that is being analyzed or constructed.³⁹³ The experience of *Studio 35mm* disclosed that designing through plans, sections and axonometric drawings is more effective than designing through storyboarding. What was observed in *Studio 35mm* demonstrates that, unlike what is often advocated in the scholarship within the field of film and architecture, and the design methods proposed by them, storyboarding is a beneficial method only if it is utilized *after* or *in parallel* with cinematic two-dimensional projections such as plan or section. Resorting to storyboarding as the main design tool can lead to misleading situations where the shots drawn in storyboards are not achievable in the cinematic process. In other words, designing through storyboards might make designers neglect the sophisticated and accurate construction process that will result in a specific shot.

The film director Carlos Reygadas states that his filmmaking process resembles exactly what an architect does in the sense that he draws "detailed blueprints" of every scene. He emphasizes that "the more you plan the better you can improvise".³⁹⁴

³⁹³ David Leatherbarrow, "Architecture Is Its Own Discipline," in *The Discipline of Architecture*, ed. Andrzej Piotrowski and Julia W. Robinson (Minneapolis: University of Minnesota Press, 2000), 89.

³⁹⁴ Criterioncollection, "Carlos Reygadas on Storyboarding and Scripting Japón," *Criterioncollection*, accessed October 15, 2020, <https://www.youtube.com/watch?v=zovvxouEpg8>. In this interview, in the way it is edited it seems what Reygadas is referring to as "blueprints" is more akin to storyboards. However, in the book *Luz* that is a selection of his storyboards there are numerous cinematic plans and

Similarly in *Studio 35mm*, the cases that had detailed cinematic sections and plans of a scene were, in the end, able to improve the shots. Although in film and architecture texts storyboarding is promoted as a firmly established method amongst filmmakers, some prominent filmmakers harshly criticize storyboarding yet, interestingly, praise cinematic plans. For instance, Werner Herzog calls storyboards “the instruments of the cowards” and when Bela Tarr was asked about storyboards, he bluntly responded: “I hate them, they (storyboards) don’t belong to the language of cinema”. Both Tarr and Herzong have mentioned that cinematic plans were used in the course of designing their *mise-en-scenes*.³⁹⁵

There are filmmakers who do not draw cinematic plans. However, cinematic plans are used in principal film directing texts and play a significant role for filmmakers who accentuate the spatial experience of their scenes and/or have complex camera movements and *mise-en-scenes*. In big productions with sophisticated technical requirements and VFX, cinematic plans are indispensable for the construction of scenes. For architects and architecture students that lack insufficient professional filmmaking experience but possess the skills of designing through orthographic projections, plans, sections and axonometric drawings are useful design tools.

5.1.3.5 Change of Scale and Cinematic Plans

During the tutorials of *Studio 35mm*, several examples from the scenes of feature films and short films were watched and students sketched the time-scale diagram of the scenes. *The Gaze of Michelangelo* (2004) a short film by Michelangelo Antonioni that

sections. Specifically, in the case of complex scenes and camera movements he has designed through cinematic plans and sections. There are examples in the book that there is no storyboard a cinematic plan.

³⁹⁵ Werner Herzog is one the filmmakers that are opposed to storyboarding. In one of his interviews he states that “storyboards are the instruments of the cowards.” See Werner Herzog, “Werner Herzog on Masterclass, Filmmaking, and Why He Abhors Storyboards” [interview by Steve Weintraub], *Collider*, October 15, 2020, <https://collider.com/werner-herzog-masterclass-interview>. Bela Tarr, unpublished interview by Hamid Khalili, 2018.

depicts the journey of a character (Antonioni himself) in the *Saint Peter Church* was one of the case studies. Other examples shown to students included the last scene of *Eclipse* by Antonioni, the murder scene in *Psycho* by Alfred Hitchcock and multiple explosion scenes in action films. *The Gaze of Michelangelo* and the last scene of *Eclipse* is a rewarding example of shifting between long, medium and close shots of a single space to describe its architectural features.³⁹⁶ The murder scene in *Psycho* is a clear case that demonstrates the way actions can be cut into shots and angles in order to increase pace and enhance the psychological effect of a scene.³⁹⁷ And, explosion scenes show the manner in which an action even as short as a one or two-second explosion can be prolonged into more than twenty seconds by cutting it into manifold shots and different angles.³⁹⁸ In studying the examples, there were three lessons for students: how to take a camera through different scales of a space, how to subdivide a scene into shots from different angles and how to design the timing of the shots in relation to the space of a scene.

5.1.3.6 Movement in Space and Changes in Shot Scale

The fluctuations between the scales and angles of a single reality do not always happen through cutting. A camera can change the scale and fluctuate between various shots scales through a camera movement, changing the focal length and, at times, shifting focused areas through the depth of an image.³⁹⁹ Four scenes from *The Turin Horse* were employed as examples to show how the editing of the shot scales can occur within a

³⁹⁶ Examples from Antonioni's film were used for this exercise as he was one of the film directors who paid a particular attention to the changing of scales of viewing in cinema (discussed in Chapter 2).

³⁹⁷ See John Tindell, "Rhythm in Film Editing," accessed October 15, 2020, <https://www.youtube.com/watch?v=WOVroZM6NCo>. In the video essay, John Tindell, film scholar, shows how Alfred Hitchcock in the famous shower scene in *Psycho* divides a single action to multiple points of view to increase the pace, tension and to emphasize the action.

³⁹⁸ See <https://www.youtube.com/watch?v=guOmJM8xvHA>.

³⁹⁹ This technique was discussed in the chapter where the film-architecture matrix is introduced (Chapter 2).

single take and without cutting only by moving a camera from the close up of one object to the long shot of a room and then to the medium shot of a character.

Students attempted to analyze the scenes from *The Turin Horse* by making use of the time-scale diagram and sketching the scales of the shots and approximate length and order of the shots. Through the examples, students realized how a scene can be cut into different shots scales only by moving the camera and changing the focal length or zooming, in other words, without cutting. This technique of introducing disparate scales of a space by moving the camera or zooming (changing the focal length) was further utilized by some of the students in their films.⁴⁰⁰

Throughout the exercise of using time-scale diagrams for the purpose of analyzing the scenes, a need for adding cinematic plans to the process was observed by students. It was highlighted that camera movements will result in a change of scale (for example from medium shot to long shot) and the direction and path of movement cannot be drawn on the time-scale diagram, but they can be well articulated on a cinematic plan or section. Therefore, cinematic plans were considered instrumental elements to the process that should work in parallel with time-scale diagrams.⁴⁰¹

In addition to the movement of the camera in space or movements such as pan/tilt that were meant to be visualized on cinematic plans or sections, focus racking and changing the focal length of the lens (zooming) are other factors that can influence the scale of the shot.⁴⁰² For instance, students studied the scene from *The Turin Horse* where

⁴⁰⁰ *Frame the Dream*, *Urban Below*, *The Window* and *Rooftop Scape* were the films that employed the technique in their animations.

⁴⁰¹ Sybil Zhang in her reflections in her film-architecture diary bluntly reflects: "it is such a waste of time to do time-scale diagrams without cinematic plans. Because what we design in the cinematic plan such as camera movement will directly impact the scale of the shots."

⁴⁰² Changing focus from background to foreground or vice versa is known as focus pull or focus rack in film culture.

the camera changes its focus from the character in the foreground to the background.⁴⁰³ In the scene, the scale of the shot changes from medium close up to a long shot. The same occurs when the focal length changes while a camera is shooting. For example, when a camera zooms out, the scale will be shifted from a close up to a longshot. The mentioned changes in scale take place through manipulations to the optical characteristics of a lens, focal length and focus when a camera is static.

This type of change of scale cannot be articulated through the time-scale diagram, but it is possible to be shown on cinematic plans. The oscillations between the three main shots scales are the results of changes that are not possible to be shown on the time-scale diagram but can be visualized on a cinematic plan or section. The changes of shot scales are to be visualized on the time-scale diagram are consequences of one of the four acts: changing the camera position (cutting to another shot filmed from another angle or from the same angle with a different lens), moving the camera while filming, pulling focus or changing the focal length (zooming in/out).

Camera movements and cutting to another angle are physical changes that are applied to the spatial arrangement of a scene. These physical changes are ideal to be depicted by a cinematic plan. The focus pull technique and zooming, on the other hand, can be marked on a plan as well. These aspects that are not possible to visualize on a time-scale diagram but can be indicated through a plan triggered a discussion in class. In the end, it was concluded that the time-scale diagram appears to be incomplete without the accompaniment of cinematic plans.

⁴⁰³ This example is also discussed in the Chapter 2 of this thesis where the scale through zooming is explained.

5.1.3.7 The Reciprocity between The Cinematic Plans and Time-scale Diagrams

The analysis into the scenes through time-scale diagram and cinematic plans simultaneously helped students understand how the physical and non-physical modifications (focus and zoom) in a scene will result in a change of scale. Considering cinematic plans and time-scale diagram as correlated elements and working on both at the same time provides an accurate picture of the outcomes of design decisions. Modifications to camera positions or moving a camera through a scene on a plan generates changes in shot scales, and the way the changes of scale responds to time can be designed through the time-scale diagram.

As the time-scale diagram provides an overall image of the temporal distribution of timing and scales in a scene, it can be used as a tool to ensure that a sufficient amount of time is dedicated to important spaces and actions. On another level, the time-scale diagram reveals if there is an adequate number of a specific shots scale, close-up for example, in a scene. The fact that close-ups have the power to draw the attention of spectators to haptic qualities and details of spaces was usually neglected in the first attempts made by students. In most cases, at early stages, scenes were only filmed through longshots capturing a specific action and, as a result, the haptic qualities of spaces and details were mostly ignored. In this sense, the time-scale diagram was always a practical tool to assess and review if details and haptic qualities are included in the films.⁴⁰⁴

In the films made by students, close-ups and medium shots were useful devices to capture human reactions to architectural spaces. Close-ups and medium shots of characters were asserted to be ideal shot scales to demonstrate the encounter of a

⁴⁰⁴ It happened to all of students with no exception that at the beginning the scenes were only a series of longshots and lacked a diversity of scales. The scenes were put into the time-scale diagrams and medium shots and close ups were infused into the process.

character with space. In *Rooftop Scape*, *MagLev City*, *Uprising* and *Mubaraq Manzil* adding the close-ups in the middle of a series of long shots emphasized emotional aspects of the scenes and accentuated characters' experiences in those scenes.⁴⁰⁵ Kushagara Jhurani, student director of *Mubaraq Manzil* in his film-architecture diary stated: "although animating characters and finding a good frame for the ugly animation characters from Mixamo is very difficult, showing a space from over-the-shoulder and cutting to the medium shots of the character always revitalizes scenes that might get boring after a series of repeated long shots."⁴⁰⁶

In the process of designing the films, the need to insert a close up or medium shot (a shot with a smaller scale compared to the main scale of a scene) was always identified through a time-scale diagram. Once the place for a closer shot was pinpointed on the timeline, the way a closer shot was to be filmed was designed on a cinematic plan. Conversely, temporal aspects including the duration of a shot and where (on the time-scale diagram) the shot was inserted in the sequence of the timeline as well as the indicative scale of it (medium, close up or extreme close up) was decided through the time-scale diagram.

For example, there is a scene in *Voyeurism; the Contemporary Panopticon* when the protagonist of the film turns on his drone and flies it to another building which he is furtively observing.⁴⁰⁷ While working on the time-scale diagram of the scene, it was decided that in order to put an emphasis on the drone, a series of close-ups or medium shots are required to be placed in the scene (Figure 147). The final decision was to insert

⁴⁰⁵ *MagLev City* (<https://www.youtube.com/watch?v=pTnPAUcUgrM>), *Uprising* (<https://www.youtube.com/watch?v=rUsjzTnBZP4>), *Mubaraq Manzil* (<https://www.youtube.com/watch?v=CLD3vc8NCYY>).

⁴⁰⁶ Mixamo is a free online platform that provides its user with free rigged animation characters and actions.

⁴⁰⁷ See Appendix A4 and *Voyeurism; the Contemporary Panopticon* (https://www.youtube.com/watch?v=pI_Q0kkzXv0).

three close-ups of the moments when the character turns on the drone and makes it fly. Then, as the second stage, the distance between the camera and the drone, angle of the camera on the cinematic plan (in parallel or angled toward the table), and the juxtaposition of the objects before the camera were planned (Figure 148).

The method of utilizing time-scale diagram and cinematic plans together assisted students to gain an understanding of considering temporal aspects and spatial aspects simultaneously. Temporal aspects were designed within the framework of the time-scale diagram and the spatial features of a shot were arranged by resorting to cinematic plans. The time scale diagram visualizes the temporality of a scene in its entirety and demonstrates how various shots of scenes relate to one another. The holistic image that a time-scale diagram offers helps its users change the scale of shots and increase or decrease the number of shots and their duration purposefully when necessary. In effect, observing all the shots and the manner in which the shots (components of a scene) construct a whole on the timeline and then making changes to the spatial collocation of a scene saves a designer from falling into the trap of making alterations to both time and space without a specific purpose.

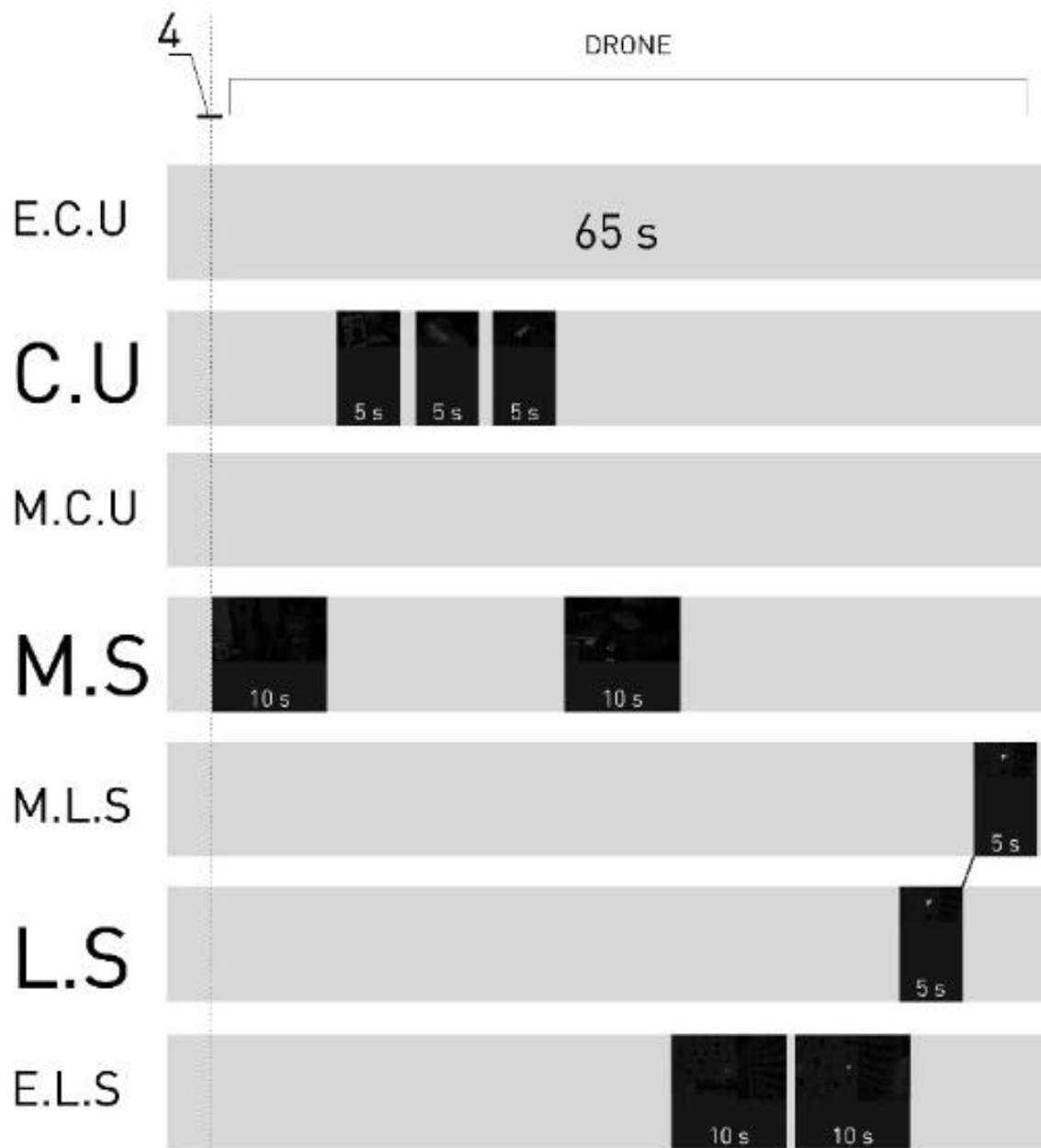


Figure 147. The time-scale diagram shows the three close-ups inserted into the scene. By Tristan Wong.

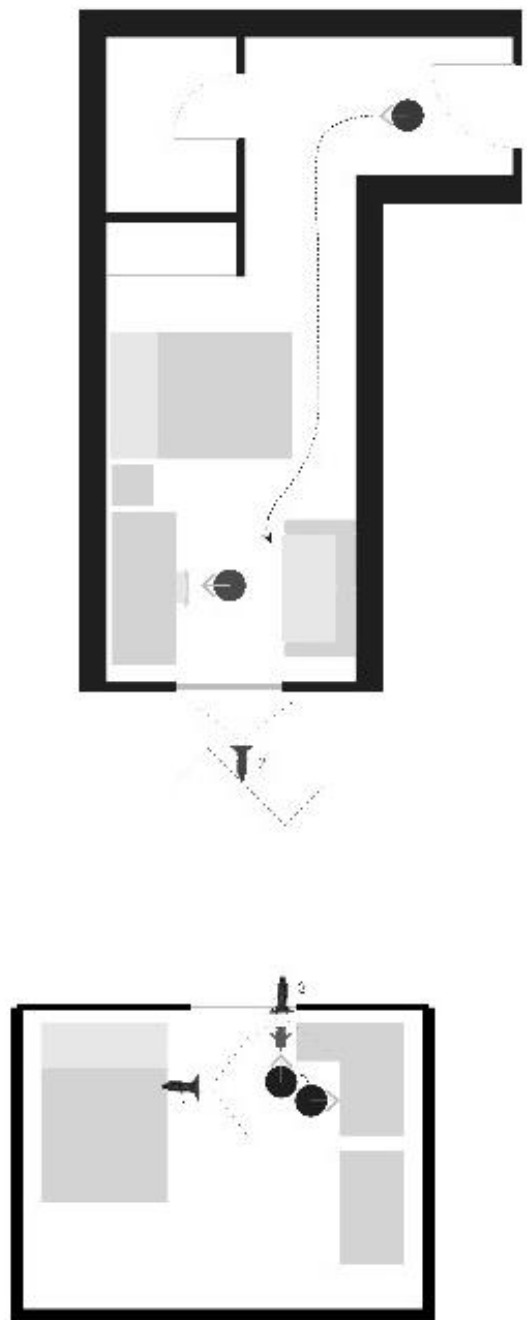


Figure 148. Cinematic plan demonstrating how the three close-ups are filmed. By Tristan Wong.

5.1.4 Deep Spatial Layers

Bela Tarr repeatedly laments the fact that the images of contemporary cinema are losing their spatial depth. He states, “I don’t like the new films; everything is too flat. Actors are put too close to the background walls”.⁴⁰⁸ Not long after the birth of cinema, in the 20st century, the invention of Walt Disney’s Multiplane Camera was an attempt to surmount the flatness of the screen in order to achieve “more realistic and deeper” images.⁴⁰⁹ From classical filmmakers such as Hitchcock and Orson Welles to the more recent cases, there are copious examples of the filmmakers who experimented with the depth of images and various spatial layers within one shot. Andre Bazin, filmmaker and film theorist believed that independent of the content of an image, a deep focus and multiple picture planes make images more realistic. In Bazin’s view, the depth “brings the spectator into a relation with the image closer to that which he enjoys with reality”.⁴¹⁰

The notion of depth of space becomes even more crucial in architectural shots. As Bazin and other film theorists suggested, crafting images with visual permeability and spatial layers contributes to the realism of shots. Furthermore, deep images convey a stronger sense of three-dimensionality which is vital to architectural images. Shots with elements arranged along the depth of the image provide an opportunity to show spatial relationships within a shot.

It is through the act of creating deep images that the third dimension of a screen becomes used and activated. Brian Hatton, architect and architectural theorist, sees the depth of space as one of the lessons that should be learned from filmmakers and should be infused into the process of architectural image-making. As discussed in Chapter 2,

⁴⁰⁸ Bela Tarr, unpublished interview by Hamid Khalili, 2018.

⁴⁰⁹ See Disney Family, "Walt Disney Introduces the Multiplane Camera," accessed October 15, 2020, https://www.youtube.com/watch?v=kN-eCBAOW60&lc=UgwbewSj1wV3_9RqZIF4AaABAg.

⁴¹⁰ Bazin et al, *What is Cinema?*, 78.

other architectural theorists such as Francois Penz and Penelope Haralambidou argued that the multiple spatial layers add additional narrative layers to an image.⁴¹¹

5.1.4.1 Exploded Diagrams and Depth of Space

As a component of the film-architecture matrix, the exploded diagram of spatial layers was designed to help students analyze and more importantly design shots with multiple spatial layers. Similar to other components of the film -architecture matrix, the technique of exploded diagram was introduced to students in one of the exercises. Due to the importance of the technique, an entire exercise was dedicated to it.⁴¹² In the exercise, students were asked to film deep shots with at least three spatial layers (foreground, middle ground and background). Students who utilized the exploded diagram technique all had an architectural background and were equipped with the skills of three-dimensional design and CAD digital software. Nevertheless, the manner in which the three-dimensionality of the spatial layers in front of a camera can be constructed was not understandable to some of them. Employing more than two picture planes (spatial layers) seems to be banal and obvious but when it comes to practicing it, was not comprehensible for everyone.⁴¹³

Analyzing shots from films was not adequate to clarify the technique and its application for students (Figure 149). It was only by the repetition of the exercises and applying the exploded diagram to each shot of the exercises that students start to comprehend how the technique can be useful to the shots of their films. For the exercises each student was meant to draw the exploded diagram of the shot beforehand, then,

⁴¹¹LJMU Architecture, "Film, Space & Architecture: Why Architects Should Watch Movie," accessed October 15, 2020, <https://www.youtube.com/watch?v=EcKm-GrLguo>.

⁴¹² See appendix for the full description of the exercise.

⁴¹³ As mentioned earlier in the example of Bela Tarr, there are also filmmakers and film educators who criticize that many filmmakers and filmmaking students do not have the spatial intelligence to apprehend and apply the notion of depth of space.

after shooting students were to dissect and to re-draw the exploded diagram of the shot (Figure 150).

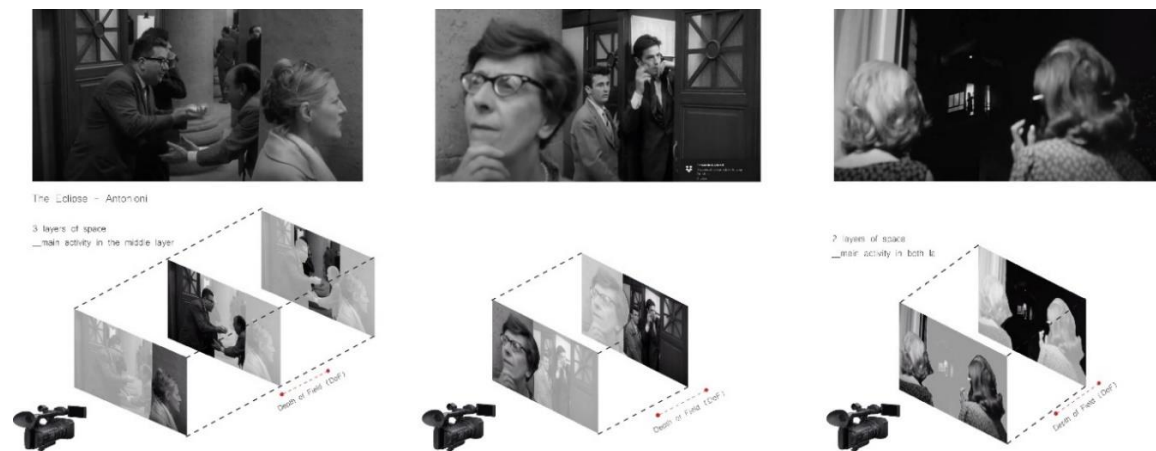


Figure 149. Analysis of the spatial layers of the shots from *The Eclipse* (1962- Michelangelo Antonioni). By Jessica Livia Darmali.

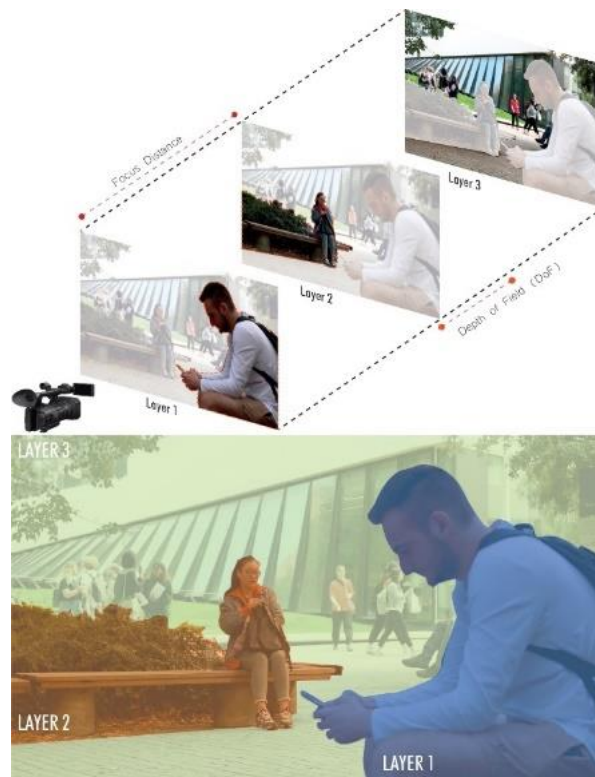


Figure 150. An example of an exercise with three spatial layers. By Jessica Livia Darmali.

It was noticed that combining the exploded diagram with a rough sketch of the cinematic plan of the scene makes the process more fruitful (Figure 151Figure 152). Su Ke in her film-architecture diary wrote:

I really enjoyed working with the exploded diagrams. I designed how I attract the attention of my viewer to the background of my image (ACCA museum) which is the main thing in my shot. I reckon, the spatial layer diagram works better with cinematic plans. When I was doing my exercise at ACCA I figured out that putting human characters and elements in a zigzag way makes the shots more interesting and I realized that by working with both plans and exploded diagrams. Putting everything in a plan based on a straight line makes the frames boring and less interesting. But when I look at the exploded diagram that has a zigzag composition on a plan it is definitely more exciting.⁴¹⁴

⁴¹⁴ From the reflectoins of Su Ke's in her film-architecture diary.

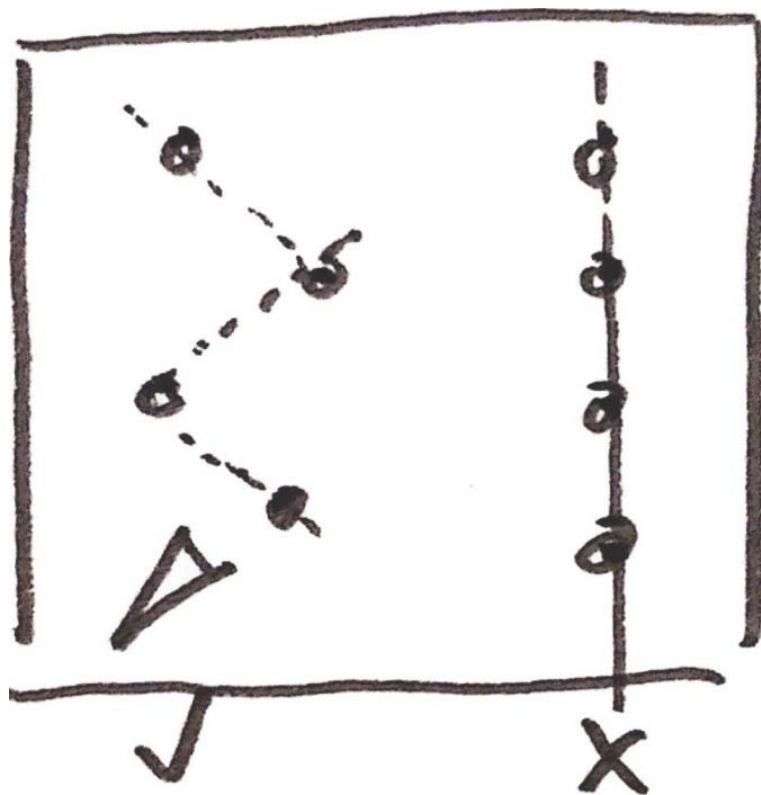


Figure 151. Su Ke's diagrammatic plan accompanying her exploded diagram.



Optic
 Lens: *Tele* | *Normal* | *Wide* |
 Depth of Field: *Shallow* | *Normal* | *Deep* |
 Focus: *Fixed* | *Change* |

Composition
 Shot Type: *ELS* | *LS* | *FS* | *MLS* | *CS* | *MS* | *MCU* | *CU* | *C* | *ECU* |
 Other:
 Space Layer: 1 | 2 | 3 | 4 | 5 | 6 |

 Camera Movement (fixed shot for this exercise)
 Tripod Height: *Low* | *Normal* | *High* |
 Camera Angle: 



Figure 152. Exploded diagram by Su Ke.

As it is encapsulated in the reflection written by Su Ke, using cinematic plans along with exploded diagrams leads to more creative compositions. Changing the parameters that are visible on a plan such as the distance between characters, spatial elements and the camera as well as angles — being in parallel or angled in relation to picture plane — between camera and other elements of a scene generates different solutions and, as a consequence, new configuration on a exploded diagrams. Therefore, sketching on a cinematic plan and testing the results on an exploded diagram opens up new possible arrangements for spatial elements across the depth of space.

There were a series of techniques explored by students to create a sense of depth through juxtaposing different elements on different layers. The techniques included staging objects or ledges in the first layer of the image, employing over-the-shoulder shots and filming a scene through openings such as doors and windows.

Adopting over-the-shoulder shots or types of shots in which a human figure is a closer layer to the camera was one of the techniques that was utilized by students. One of the guest lecturers invited to *Studio 35mm* was Nick Stath, architect, concept artist and illustrator who focused on various methods of arranging multiple planes in an image with a human figure in the foreground.⁴¹⁵ Borrowing examples from his work, Stath talked about various possibilities of staging a figure in the foreground of an architectural image. Examples of the methods are over-the-shoulder, full human figures in the foreground and silhouette figures. Tristan Wong, reflecting on the guest lecture wrote that “organizing a figure in the foreground of an image generates a sense of sympathy for an audience. It puts the audience in a situation that he sympathizes with the character that is in the first plane of the image. As if the audience is the same as the person in the first plan of the image.” As highlighted by Tristan Wong, utilizing an exploded diagram in designing images with layers is not only a visual technique. It impacts the perceptual encounter of an audience with a shot and its narrative.

Another technique that was employed by students was staging an opening such a door or window in front of the camera that divides a single space into two parts through the depth of an image. Inserting an opening into the middle ground or foreground of an image, in addition to enhancing the spatial relationship between what is before a screen (an audience) and what is in front of a camera (inside screen), infuses an additional inside-outside relationship into the frame. Multiple picture planes within a frame, apart from their impact on the notion of depth of space, can act as a technique that makes the

⁴¹⁵ See <http://www.nickstath.com/>.

gaze of an audience move between the layers of the image, leaping from one layer to another. By designing the layers of images through the exploded diagram, architects and filmmakers are able to engender a sort spatial dialectic and constant interaction between the elements that are arranged with different distances and angles in relation to the camera.

Practicing with the exploded diagram encouraged students to think about and design for spatial relationships. In films produced by students, there are several instances that a shot is designed by adopting the exploded diagram and with a human character (over-the-shoulder composition or full shot) staged closer to the camera. The spatial layers of the shots are not simply different layers of space, rather the layers represent broader architectural concepts. The relationship between the foreground character and background demonstrates the relationship between the character and context. The deepest layers of an image (background) do not only make the image less flat they contextualize a situation.

The relationship between the layers can also be about the human-architecture encounter; the way a protagonist confronts the magnitude of an urban space or how a character faces an uncanny architectural space can be emphasized through the exploded diagrams as well. *In Search of The Soul*, deeper layers of the shots function as elements that guide the directionality of the scenes in a way that all the deep and far layers of a shot are the spaces that the character visits in the following moments of the narrative (Figure 153Figure 154).

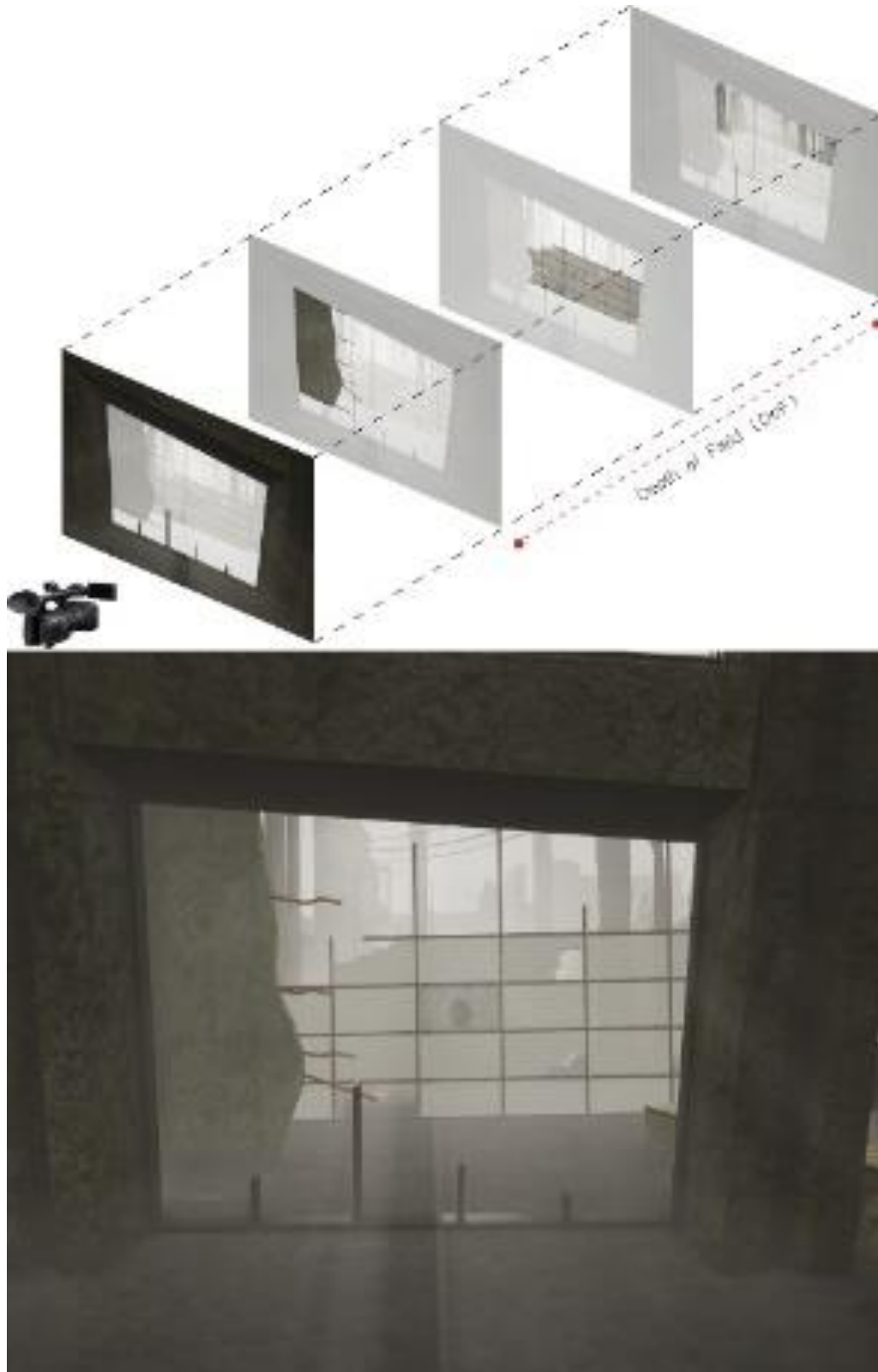


Figure 153. *In Search of The Soul*. Exploded diagram of the shot, by Jessica Livia Darmali.

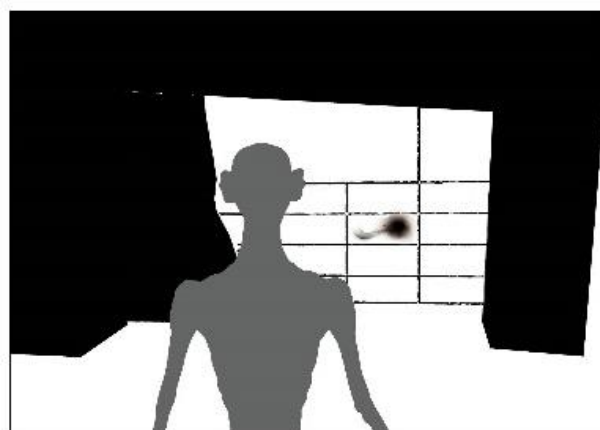
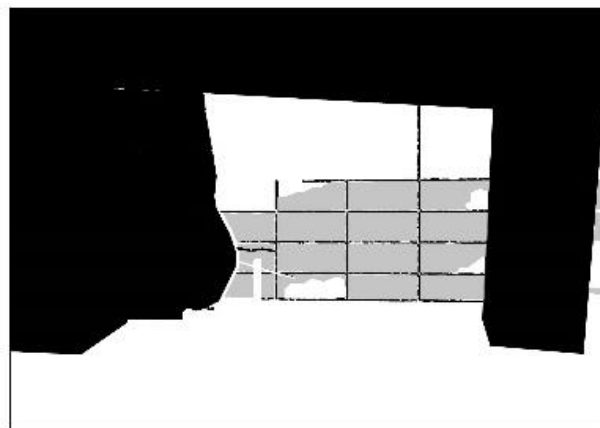


Figure 154. *In Search of The Soul*. Placement of the protagonist in the shot. By Jessica Darmali.

In some of the films and animations made by students including *Mubaraq Manzil*, *Rooftop Scape*, *MagLev City* and *6PM* notions such as adjacency and distance are articulated through the depth of space and multiplicity of spatial layers of exploded diagrams. In the mentioned examples, the closest space (*here*) acts as the main settings of the story, where the camera is located, and the narrative takes place and far spaces (*there*) is a distant but impactful space. In *Mubaraq Manzil*, for example, the Taj Mahal is always depicted in the second or third layer of the image. This decision was made by designing the shots through exploded diagrams (Figure 155). At a symbolic level, the layers demonstrate how the ever-present image of the Taj Mahal in the background leaves has a strong presence in the background of the abandoned building 'Mubaraq Manzil' that was meant to be a new Taj Mahal in the narrative of the film.⁴¹⁶ Or in another example, in *MagLev City*, the layers informing the depth of space signify the irreconcilable inside-outside relationship (Figure 156). In the interior shots, the layers of background and foreground illustrate the sharp contrast between the living capsules and uninhabitable outside which is the main concept of the film.

⁴¹⁶ See Appendix A¹² for the whole story line.

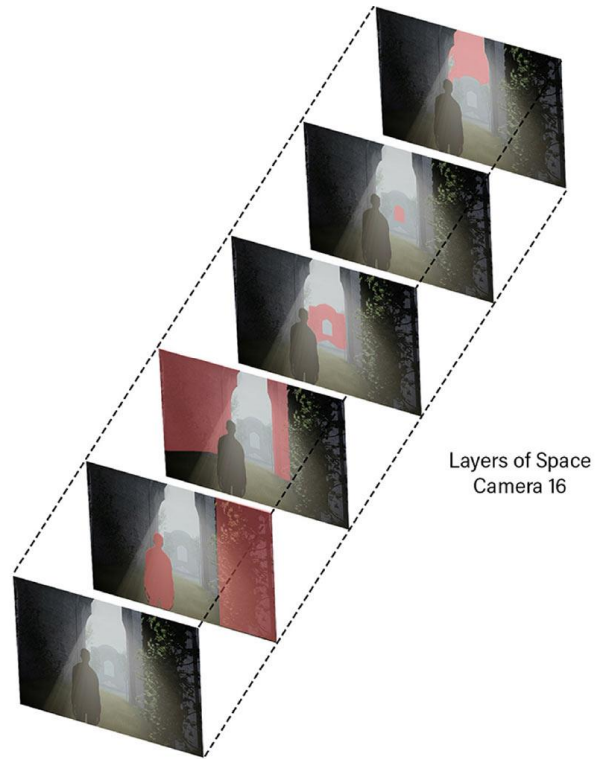


Figure 155. Exploded diagram by Kushgara Juharani for the animation *Mubaraq Manzil*.

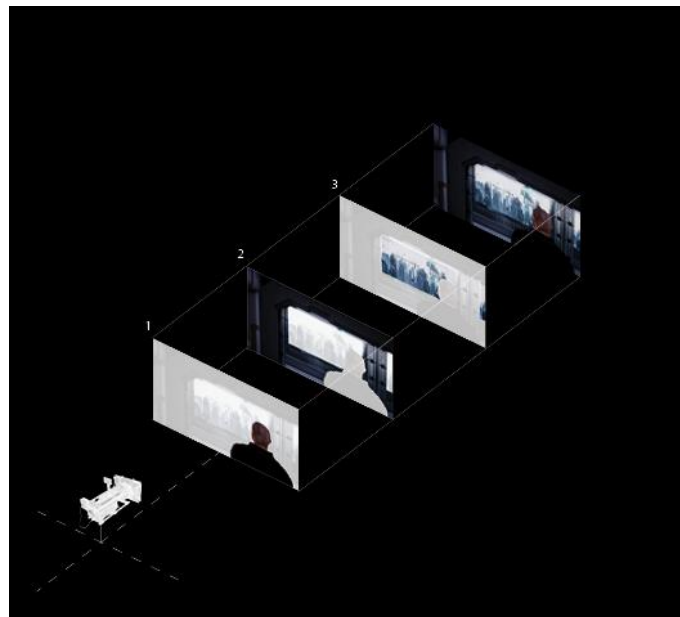


Figure 156. Exploded diagram for *Mag Lev City* by Jayang Chen depicting inside-outside relationship.

It can be concluded that the exploded diagram proved to be a useful tool for enhancing the depth and three-dimensionality of images. Moreover, working with the exploded diagram assisted students to generate spatial relationships within the depth of an image and utilize the opportunity that the depth of screen offers.

5.1.5 The Shot Dissection Template and Abstract Diagrams

The shot dissection template has three components: optic, compositional notes, and camera movement. In the optic section of the checklist, students were to consider the use of the lens and focus in a specific shot. The selection of a lens will impact the focus of a shot, its depth of field as well as its optic depth.⁴¹⁷ The second component of the checklist is compositional notes in which the type of perspective, the location of vanishing points within a frame and the number of spatial layers in a shot need to be marked. The third component of the checklist relates to the movement of the camera in the shot. A diagrammatic visual representation of camera height and angle was meant to be shown close to the camera movement part of the checklist.

The shot dissection was not used as a tool for designing shots. This checklist was invented to encourage students to consider the fundamental parameters that shot dissection template entails. By taking into account the parameters mentioned in shot dissection template, students made decisions with regard to the type of optical and compositional features as well as the type of camera movement and appropriate gear for the camera movement. In other words, the checklist, in contrast with other components of the film-architecture matrix, does not visualize the precise method of filming through which shot is filmed nor does it show how the final result of a shot would look on a screen. The checklist informs an initial idea of the execution strategy of a shot in a summarized checklist.

⁴¹⁷ These parameters are thoroughly discussed in Chapter 2 where the film-architecture matrix is presented.

In terms of the workflow, the shot dissection template was always employed before the principal design tools of the film-architecture matrix such as cinematic plans or exploded diagrams. For example, on the basis of a required depth effect, perspective and visual range of a lens, the type of lens was the first parameter to be decided upon. After defining the type of lens by using the checklist, the cinematic plan was the next major step in designing a shot.⁴¹⁸ The number of spatial layers of a shot, how they are put in focus, and the number of times that a focal point of a shot might change between spatial layers were other parameters of the shot dissection template. The mentioned parameters, in the next phase, were precisely designed by working with the exploded diagram and cinematic plans. The checklist was only utilized at the stage of ideation and choosing a strategy and was not a tool for designing and visualizing. The most crucial function of the checklist was to prompt students to carefully consider the visual strategies such as optic, composition and camera movement.

For instance, the type of camera movement and a suitable filming gear for a shot was meant to be chosen through the shot dissection template before designing the path and the form of movement on a cinematic plan or section. Prior to the act of designing a movement, students were to contemplate on the appropriate strategy (and why the strategy is suitable) by considering the items suggested on the checklist.

In the case of camera movements, the decisions related to camera movements were made at the phase when students were to work on the shot dissection template. The decisions at this phase were limited to the type of movement (pan, tilt, dolly in) and the

⁴¹⁸ Aside from changing the visual range of a shot, changing the type of lens affects the distance and angle between a camera and a filmed subject. It should be noted that to achieve the same shot size, a shot can be filmed from a farther distance with a telephoto lens or, alternatively, from a closer distance with a wide lens — obviously, it affects the perspective and the optic depth of a shot too. Since the type of lens influences the distance and angle the checklist was often used before or alongside cinematic plans and other matrix components such as exploded diagram. For example, when a telephoto lens is changed to a wide lens a modification needs to be applied to the cinematic plan; the camera should be staged farther, and this modification is shown and conducted on the cinematic plan.

gear selected for the type of movement (tripod, monopod, Steadicam or Gimbal).⁴¹⁹ The compilation of all the checklists acted as a preparational document encompassing all the gadgets and conditions that are necessary for shooting. From a planning perspective, the shot dissection template was a valuable document if not an indispensable component of the film-architecture matrix.⁴²⁰

A gear utilized for a camera movement is critical since camera movement tools have their own aesthetics and visual language. A pan or tilt on a static tripod, a handheld shot, a camera that smoothly travels on a Gimbal or Steadicam or a drone that freely flies toward different directions generate completely disparate experiences of viewing architectural spaces. Moreover, in filming real spaces, the taken strategies regarding camera movements, lens and compositional aspects are important for the phase of planning as well as the shooting process. These decisions influence the technology used for a shot, its budget and its shooting time.

Even in the case of animations and filming three-dimensional digital models, the checklist was utilized. In animations such as *Urban Below*, *Contemporary Panopticon*, *Archway*; *Odyssey Enigma* and *On The Way* camera movements and other shot characteristics such as lenses were primarily planned through the shot dissection templates. This helped to prepare digital cameras of animation software according to the checklist and generate the same visual and kinaesthetic effect as we witness through a drone, Steadicam or crane shots in the real world.

⁴¹⁹ In filmmaking sometimes, the difference between some of the camera movements are not very clear and some of these movement types refer to the type of gear utilized for the movement. Therefore, the sample checklist provided for students was just an example and students were encouraged to add other parameters if necessary.

⁴²⁰ In film industry there is document called 'shot list' that is quite similar to the checklist in terms of its function. Shot list are usually prepared by director and/or director of cinematography and are given to the assistant director and producer to provide the necessary gears.

In *Urban Below* and *Contemporary Panopticon* there are two scenes where the whole scene is narrated through a drone camera.⁴²¹ For both scenes, it was a burdensome task to program the animation camera in a way that it imitates the movement and visual characteristics of a drone camera. Similarly, in *Archway; Odyssey Enigma* programming the virtual camera of the animation software in a fashion that resembles Steadicam and crane shots was a major part of the process. Nevertheless, it was feasible to deal with a realistic movement design process within the software because the type of movement and how it should be produced was predicted in the first place and was not left to the stage of filming and rendering.

5.1.5.1 Two-dimensional visual analysis

While the shot dissection template was a component mostly concerned with technical aspects of a shot, abstract two-dimensional diagrams were designed for a different mission. The prime purpose of the abstract visual diagrams is to help handle the juxtaposition of purely visual elements put together inside the frame of a flat screen. By turning the visual elements of a shot into the abstract visual elements such as surfaces, dots and lines, the abstract visual diagrams aim to make the visual elements involved in a shot more manageable at a preliminary stage. For example, by transforming the human figures of a shot into colored surfaces and the forms and geometries of space into lines the visual integration of human figure and enclosing spaces of shot can be studied and modified.⁴²²

This technique of diagraming acted on two distinct levels. Firstly, it demonstrated the dominant visual feature of a composition. By reducing a frame to its constituent lines and surfaces, the abstract diagrams can show the key visual strategy designing a shot.

⁴²¹ *Urban Below* (<https://www.youtube.com/watch?v=fLTvtGvRdFg>) from in 7:32. *Voyeurism - The Contemporary Panopticon* (https://www.youtube.com/watch?v=pI_QOkkzXv0) in 3:33.

⁴²² Similar to other components of the film architecture matrix this abstract visual diagram was used in previous chapters extensively.

Secondly, the abstract diagrams can showcase the way in which a specific visual property of a frame is executed. For example, notions such as perspective, overall dynamism, the direction of gaze and the dominant direction of a movement within a shot can be mapped through the diagramming method (Figure 157Figure 158).

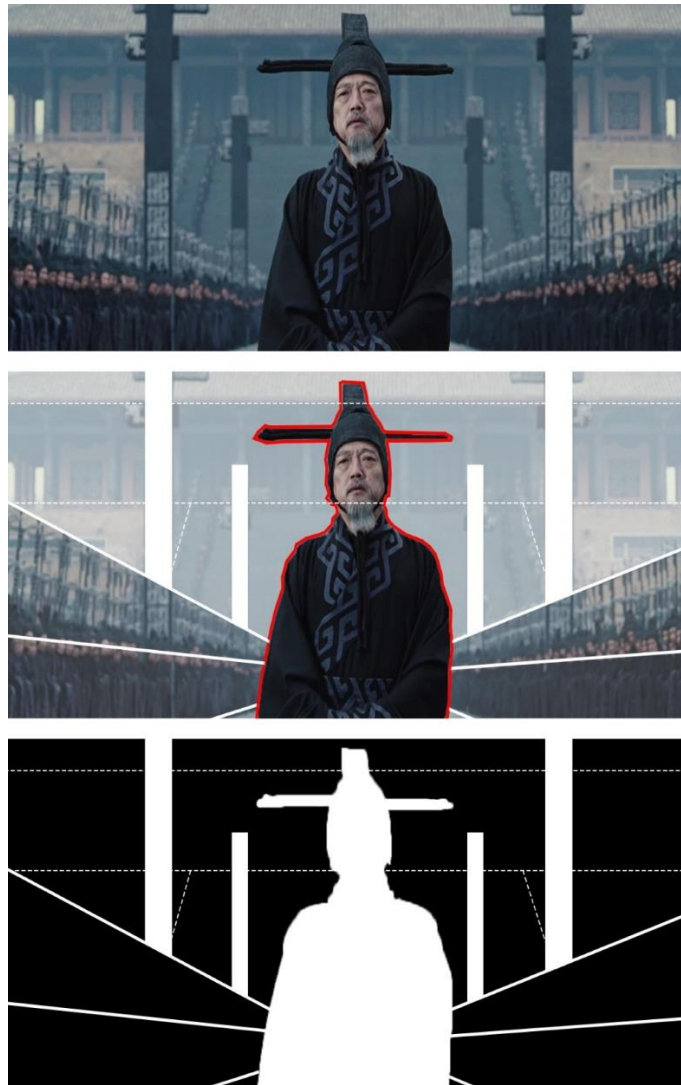


Figure 157. Compositional study through abstract diagramming by Qiyu Chen.

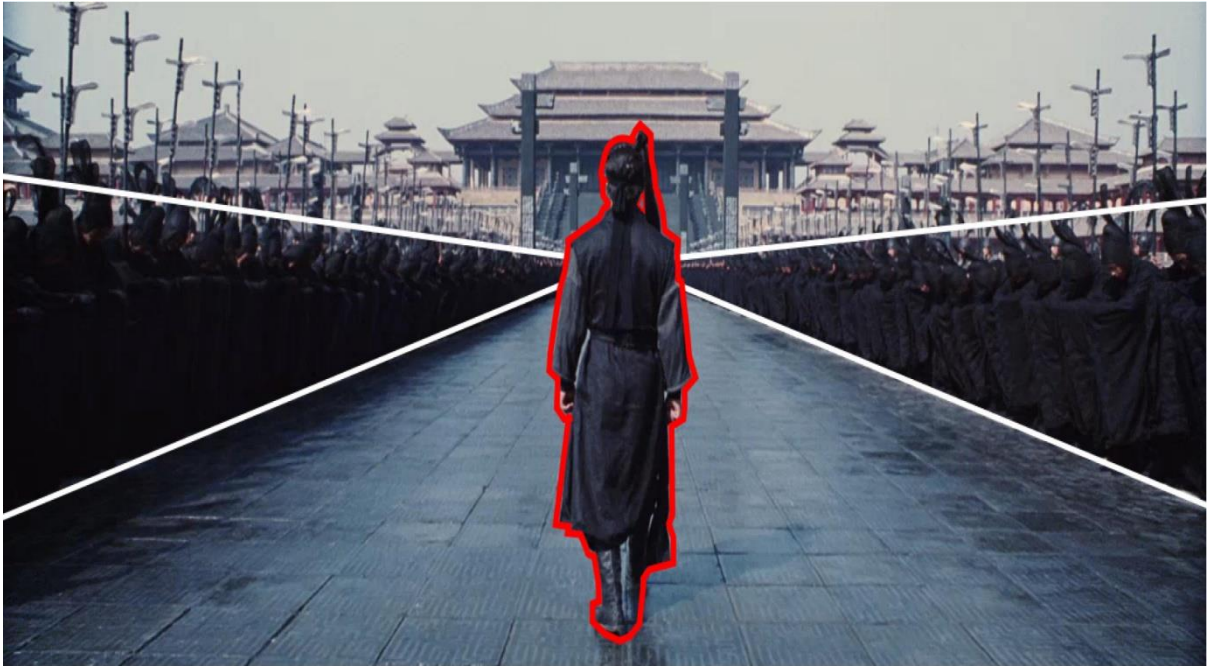


Figure 158. Compositional study through abstract diagramming by Qiyu Chen.

As for other components of the film-architecture matrix, the abstract diagramming technique was used for both purposes of analyzing and designing. This diagramming technique was utilized by students to study features such as perspective, rule of thirds, the direction of gaze in the frames of other filmmakers as well as in other visual arts. For example, Qiyu Chen examined the direction of the gaze of the human characters and how the headroom of the frame is arranged. It was through studying the compositions and framing techniques in different visual arts, that students realized that an idea or, more ideally, a set of organizational ideas for the whole composition should underpin the arrangement of a frame (Figure 159). These ideas can stem from various sources and have different aesthetic and conceptual backgrounds.



The Youth of Bacchus, William Bouguereau, 1884

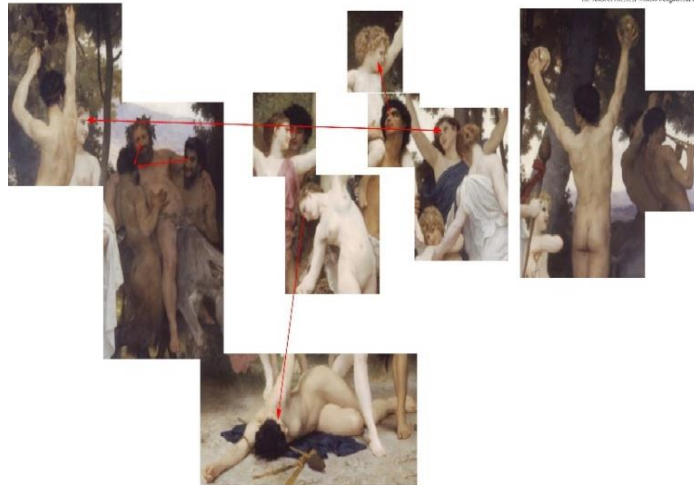


Figure 159. Compositional visual analysis into *The Youth of Bacchus* (1884 -William-Adolphe Bouguereau). By Qiyu Chen.

Abstract diagrams assisted to study and discover how other artists handle the composition and framing. Then, the technique of abstraction for designing a frame by modifying its compositional elements was experimented. In practice, the abstract diagrams served at three stages and for three purposes: studying and learning underpinning ideas about the compositions of other artists, designing through the abstract diagrams, and, finally testing the outcome of the shot through the means of abstraction. Working with abstract diagrams it convinced students to avoid arbitrary compositions. Moreover, it demonstrated that the visual and compositional strategies employed by other artists can function as a rich source to be utilized in architectural films and animations made by themselves (Figure 160Figure 161).



Figure 160. A visual study into a frame with one-point perspective and the vanishing point located outside the frame. By Clement Chen.

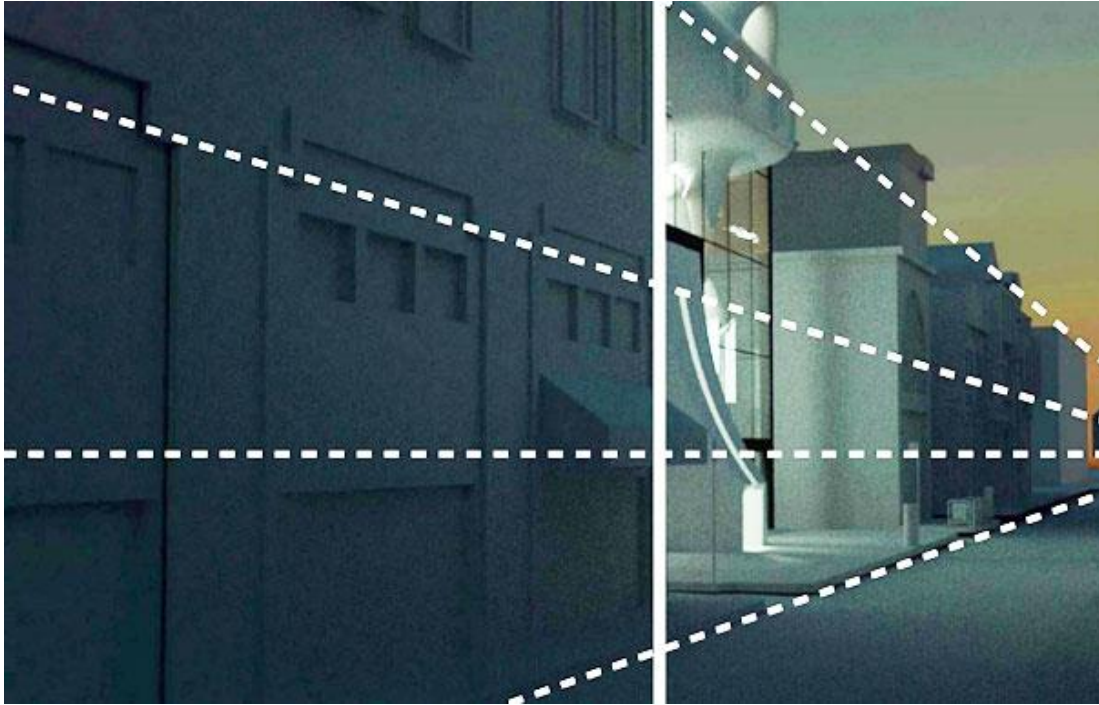


Figure 161. The application of one-point perspective with the vanishing point located outside the frame to shot in an architectural animation. By Clement Chen.

5.1.6 Conclusion

Although it is acknowledged that responses from students to the film-architecture matrix were different, the impact of the film-architecture matrix was evident not only in changes that occurred in the outcomes but also in the way students approached the practice of architectural filmmaking.

Some of the components of the film-architecture matrix might seem too banal and some of its components might appear to be self-evident parts of any act of filmmaking. However, it should be emphasized that the film-architecture matrix was designed based on, firstly, the lacking qualities of architectural films and animations and, secondly, for a target group that has to self-teach filmmaking without professional training and

within a short time period.⁴²³ Temporal, spatial and movement design features that were stressed as qualities addressed in the components of the design matrix may not be as fundamental to conventional narrative films as they are to architectural films. The response from the students of Studio 35mm reveals that the film-architecture matrix can be effective for architects and architecture students.

The main mission of the film-architecture matrix was to sensitize architecture students to the issues that are commonly neglected in the films produced by architects. This film-architecture matrix can be considered neither a teaching method nor a design method by itself. It operates as a guiding mechanism promoting certain considerations that make an architect or architecture students move through guiding frames of thinking that a successful filmmaker might automatically take into account.

During *Studio 35mm*, students were not forced to strictly follow the components of the film-architecture matrix. They were asked to understand the components of the matrix and then re-define the components according to their own demands. There were even other components designed by students that were added to the film-architecture matrix. As it was discussed within the chapter, for instance, the cinematic section and axonometric drawings and various methods of annotating time-scale diagram were devised by students. While students exercised all the components of the film-design matrix, on the basis of the characteristics of their projects, they were engaged actively in utilizing some of the components more than others.

Components such as cinematic plans (and other orthographic projections) and time-scale diagrams are more instrumental to the matrix, nonetheless, it was the properties of the projects that guided students to become involved in practicing one of the components more than others. For example, for films with sophisticated editing

⁴²³ At the Melbourne School of Design the length of a semester is only twelve weeks.

structures, the time-scale diagram was more crucial and films that were designed based on rigorous spatial narratives and complex camera movements resorted to cinematic plans more than other components.

Architects, after years of exercising visual arts and drawing, mastered the techniques of two-dimensional static image-making and have become capable of producing high-quality digital images by any visual standard. In other words, architects historically came to the belief that these important representational materials (drawings and images) are design products themselves and are required to be designed in a professional and highly curated manner. The film-architecture matrix, by demystifying the process of architectural filmmaking, has attempted to convince students to consider architectural films and animations as independent design products — in the same way that architects prioritize drawings and renders; spending a remarkable amount of time and effort on them. It is only through a rigorous matrix that frames the process of designing architectural films, that film and animation can become part of contemporary architectural representations.

This matrix, however, can function only as a toolbox that incorporates interrelated tools. The most successful form of this film-architecture matrix is when a film scene is designed through diverse components. A successful spatial design needs to be complemented by the time-scale diagram, and the time-scale diagram as a temporal device needs to be tested through cinematic plans. In other words, by seeing the matrix as a system of interconnected parts, various aspects of a scene or even a film can be designed in relation and response to each other. Individual shots and frames should have an independent, convincing design as single units but their relationship to bigger encompassing parts such as scenes and a film must be assessed through time-scale diagram and cinematic plan. Therefore, this film-architecture matrix operates fruitfully when its components with disparate characteristics work catalytically and its parts interact with the other parts and the whole system.

The story of the film-architecture should not end here. The film design matrix can become more complex and, at the same time, a more efficient tool by adding more components to it. Indeed, digitalizing the components of the film-architecture matrix and turning it into a software package with the capacity to accommodate more components and preset templates for the components of the matrix that match each other will improve the effectiveness of the matrix and will facilitate the way it can contribute to the field of architecture.

6 Ending

Reviewing the initial intents of this thesis, this chapter attempts to summarise and underscore the principal research activities and contributions of this dissertation. This thesis set out on its journey by problematizing the poor cinematic execution of the prevalent architectural animations produced by architects and architecture students. By examining the literature of the field of 'film and architecture', it was discerned that studies into 'film form' is not the central subject in the field. Film techniques and strategies that are used for filming architecture in cinema are not the primary focus in previous studies and, as a result, film form, has become a relatively unexploited source of knowledge that should be systematically transferred to the discipline of architecture. Due to the research gap regarding film form in the field, in most cases, the films and animations that architects make are not able to represent an effective, narrative and accurate cinematic image of real and virtual architectural spaces. Rather, as Pasolini has remarked, the architectural animations in the form of walkthroughs and fly-throughs, undermine, "shatter, spoil and disfigure" the image of architecture.

To fix the problem two possible interconnected solutions were identified and were set as the assumptions of the thesis. First, architects need to analyze film form, learn the cinematic techniques and strategies, and apply them to architectural film and animation; for this purpose, a film form analytical toolbox that assists the process of analysis is indispensable. Second, to produce communicative architectural animations, architects need a design toolbox that facilitates the process of filmmaking for them. Along with the two assumptions, it was also proposed that a selection of suitable cinematic case studies as well as innovative research frameworks can potentially contribute to the outcome of the dissertation.

With the raised issue and assumptions in mind, this research was organized around four ACTs through which a set of notable contributions are offered.

In **ACT 1** this research introduced a toolbox called film-architecture matrix. The premise of this dissertation was that by gathering all the necessary tools in one the film-architecture matrix, this set of tools that are arranged together systematically in the matrix can be used for two purposes: analysis and film design. This matrix was employed for the purpose of analysis in ACT3 and was used for designing film in ACT 4.

ACT 2 presented two filmmakers, Bela Tarr and Theo Angelopoulos, that despite their potential were well-known and critically examined within the field of film and architecture previously.⁴²⁴ Throughout this act, ACT 2, it was argued why the two filmmakers can be useful case studies for design research into cinema within the discipline.

ACT 3 of this dissertation looked into three architectural elements, termed in this research as 'species of spaces'. Within ACT 3 the intention was to study architectural and cinematic features of each of three species of spaces (windows, doors and corridors). More importantly, ACT 3 investigated the cinematic strategies that were used in the films of Tarr and Angelopoulos for filming each species of space. Another objective for this chapter was to employ the film-architecture matrix as an instrument for analysis cinematic strategies utilized for filming the species of spaces.

In **ACT 4** the theories discussed in previous acts were put into practice. The chief intent of ACT4 was to test the film-architecture matrix for the purpose of designing architectural films. The film-architecture matrix was adopted as the foundation for an

⁴²⁴ In recent years, a few scholars in the field of architecture started to pay a attention to Tarr's films. Thorsten Botz-Bornstein, the philosopher who wrote several books on architecture published *Organic Cinema* about the relationship between what organic architecture and what he calls organic cinema represented by Tarr's films. Francois Penz, in his new book *Cinematic Aided Design* uses Tarr as a case study in several cases. Architect and architectural theorist, Michael Tawa, in his last essay 'Consilient Discrepancy' shows a remarkable interest in Tarr's tectonic strategies.

architectural filmmaking design studio. The chapter of Application (ACT3) presents the challenges, opportunities throughout the process of application of the film-architecture matrix.

The first two acts (1 and 2) of this thesis operate as the foundations of the research. ACT 1 puts forward an analysis and film design toolbox and ACT 2 suggests two cinematic case studies. ACT3 and ACT 4, on the contrary, can be seen as *responses* to the first two acts that were laid as the bases of the dissertation. Alongside these two ACTs notion of species of spaces worked as the framework of analyses in ACT 3 and also served as the pedagogical framework of ACT 4 in which the capacity of the film-architecture matrix as a film design tool was examined.

The following sections discuss the contributions this dissertation makes through these 4 ACTs and shows how ACT3 and 4 respond to ACT1 and 2.

6.1 Contributions

6.1.1 Tarr, Angelopoulos and Slow Cinema

A key issue identified in the studies conducted into the relationship of film and architecture was that these investigations are often restricted in their approach as well as in the selection of cinematic cases. This limited view to the world of cinema will lead – if it already has not led – to a situation where original knowledge will not be produced in the film and architecture field anymore. The lack of novelty in the selection of cinematic case studies might be a result of the unfamiliarity of architects with the changes that have occurred in practice, theory and technology of cinema in recent years. An obsession with the early examples of cinema is also observable, which does not leave much room for the recognition and introduction of new cinematic approaches, films and film directors.

Recently, however, there are a few scholars in the field of architecture who have noted the significance of filmmakers such as Bela Tarr and Theo Angelopoulos.

However, this dissertation is the first academic attempt that analyzed the spatial aspects of the work of these filmmakers in detail and systematically theorized why they are useful case studies for the discipline of architecture (in Chapter 3). Through the presentation of Tarr and Angelopoulos, this dissertation makes a number of contributions to the discipline.

This thesis, by introducing Tarr and Angelopoulos, has tried to open up the topic of slow cinema for the discipline of architecture. The investigation into the cinema of Tarr and Angelopoulos is an invitation to the exploration of 'slow cinema', the method of filmmaking that the two filmmakers represent. Several theorists have pointed out that studying architectural spaces through the lens of slow cinema is a rewarding theoretical exercise.⁴²⁵ In striking contrast with mainstream cinema, in which spaces and architecture are a backdrop to the ping-pong of dialogues and actions of a storyline filmed in medium shots, slow cinema grants an audience more time to observe spaces and architecture; a filmmaker, subsequently, has more time to articulate and foreground spatial qualities and experiences.

The act of opening up the topic of slow cinema benefits the discipline of architecture in two ways. First, slow cinema, through the slow-paced editing and camera movements, represents architectural spaces and how they are used in real life more accurately. By emphasizing the notion of space, slow cinema provides a more reliable visual source compared to the mainstream cinema for architectural studies. Secondly, slow cinema suggests a representational method that can be adopted not only in architectural filmmaking but also in any type of architectural image-making. Slow

⁴²⁵ See Botz-Bronstein, *Organic Cinema*, 24-26; Francois Penz, "Film, Space, Architecture (Part2/3)," AA School of Architecture, accessed October 15, 2020, <https://www.youtube.com/watch?v=pjL51GibT5A>. The argument has been proposed within the ACT2 as well as in the ACT4 (Application).

cinema as a method of filmmaking with the utility to architecture has not been explored by any architectural study.

Highlighting filmmakers such as Tarr and Angelopoulos is an introduction to a broader field with noticeable potential for the studies into cinema within the realm of architecture. Presenting slow cinema to the field of film and architecture is one of the contributions that this dissertation has attempted to make. The theoretical facets of slow cinema were discussed in ACT 2, the chapter 'Why Tarr and Angelopoulos'. Although it was not the main intention of this dissertation, the experience of *Studio 35mm* (ACT 4) directly responded to ACT 2 and confirmed some of the theoretical questions and assumptions proposed throughout ACT 2. The observations made during ACT 4 demonstrated that engagement with slow cinema has a direct effect on architectural films and animations.

Unlike filmmakers, architects concentrate on the concept of form and space and are rarely trained to consider time and temporality. In the section of Significance of Research and the Introduction chapter, it was debated that one of the key problems in fly-through and walkthrough animations made by architects is the fast tempo of the animations. Those animations are made of a series of moving shots flying in spaces at the highest possible speed in which an audience is not given a proper amount of time to see and experience spaces in the extremely high paced camera movements.

It was observed during ACT 4 that dealing with slow cinema can fix this issue to some extent. In ACT 4, and during *Studio 35mm*, students were encouraged to look at the works of alternative filmmakers and specifically filmmakers representing the movement of slow or contemplative cinema, filmmakers such as Bela Tarr, Theo Angelopoulos, Pedro Costa, Carlos Reygadas, Nuri Bilge Ceylan, Tsai Ming-Liang, Apichatpong Weerasethaku and Bi Gan. Slow cinema changed the way the notion of time was understood and treated by them.

Slow movies prompt architects to slow down and consider the impact of timing on a viewer in their films and animations. While architectural animations do not need to imitate an identical aesthetics of slow movies, slow cinema reminds us that a sufficient amount of time should be given to the camera to record the spatial qualities of architectural spaces. As Alvar Aalto suggested, the material world of spaces “speak[s] slowly” and the cinematic representations of architecture need to slow down to capture the words of this slow language.⁴²⁶ Accordingly, as a broader conclusion, and based on the observations of (ACT 4), it can be construed that engagement with slow cinema can cure the problem of fast camera movements and editings in architectural animations to an ample extent.

Apart from the usefulness and direct practical benefits of slow movies for architects, the imprint the films leave on the aesthetic understanding of architects have the capacity to be looked into in another study. The alternative culture put forward in slow films can have a strong effect on how architects deal with the act of observing, designing and communicating architecture. The films might not contain extraordinary architectural spaces. Nonetheless, the contemplative nature of slow movies offers authentic and unprecedented aesthetic, socio-political and experiential perspectives to architecture.

Furthermore, slow movies present spatial effects and experiences that are not common in mainstream films. In the scenes of slow cinema, the clear emphasis on spatiality turns the films of slow cinema into an untapped source of novel spatial techniques and experiences. For instance, the creation of the complex spatial relationship through the use of shadow, light and negative spaces in the films of Nuri Bilge Ceylan, Bela Tarr and Pedro Costa was noted by some of the students taking part in the experiment of ACT 4. Thandi Lane, one of the students of *Studio 35mm*, took

⁴²⁶ Alvar Aalto, *Synopsis - painting, architecture, sculpture* (Basel: Birkhauser), 267.

inspiration from how Pedro Costa amalgamates light, shadow and textures and made a short film by animating more than three hundred printed hand-drawn pieces of drawing. In her short animation, she tried to generate negative spaces similar to Costa's "oceans of darkness" in which spaces and characters float.⁴²⁷

In conclusion, studying slow movies can influence the field of architecture in two possible ways. First, watching and investigating these films will affect films and animations made by architects and architecture students in a positive manner. Second, the space-oriented nature of slow films can function as a rich and aesthetic source of spatial ideas, techniques and inspirations. Both of these types of effects can be the topic of independent research.

6.1.2 Film Form & Matrix

As it was delineated in the Literature Review section, there are two main tendencies within the scholarships of film and architecture. First, studies that investigate spaces and locations portrayed in films — buildings, urban spaces and 'architecture in film'. And, second, the theoretical attempts that examine film techniques in order to use them in design processes, form-making, and spatial programming to generate a sort of architecture that entails cinematic characteristics, a 'cinematic architecture'.

It was highlighted that there are studies within this field that pay attention to elements and features of film form and how film techniques and strategies play a key role in capturing and communicating spatial conditions and atmospheres. Nonetheless,

⁴²⁷ Thandi Lane, in her film-architecture diary, stated that films by Costa, especially *Horse Money* (2014), made her think about how shadows can engender negative space and enriched the experience of architecture. Some architectural theorists have noted the unique spatial experiences and techniques that slow cinema offers too. For example, Michael Tawa sees *Werckmeister Harmonies* (2000) as a rich source of spatial techniques that can be adopted by architects. He compares the filmic spaces of *Werckmeister Harmonies* with the buildings of the Spanish architectural firm, Flores and Prats. Tawa, "Consilient Discrepancy".

the set of film techniques and strategies, known as 'film form', as a vital element of the knowledge of filmmaking that should be recognized and learned, is an area that has the potential to be further explored in the studies of film and architecture in a more methodical manner. This thesis underscored the notion of 'film form' as an independent and useful subject of interrogation that is to be studied, grasped and transferred to the discipline of architecture.

The recognition of the notion of film form as an angle of investigation has certain positive consequences. It is through the act of studying film form that architects and architecture students start to learn film techniques and strategies, and consequently, use them in their own films and animations. Effectively, concentrating on film operates as a shortcut for learning camera movement, editing, mise-en-scene, framing and composition. In addition, the learned film techniques and strategies from the rich source of cinema can be used not only in architectural films but also in other types of visualizations such as architectural photography and digital renderings.

Another contribution of this dissertation is the formulation of the film-architecture matrix presented in ACT 1. The film-architecture matrix was designed for the purpose of demystifying the complexities of film form. The initial premise of this thesis was that the film-architecture matrix can dissect and unveil the sophistications of filmmaking that will remain otherwise unnoticed for unprofessional filmmakers. Within ACT 3 and ACT 4 this thesis responded positively to this premise.

In ACT 3 (the chapters of the species of spaces), the film-architecture matrix functioned as a pivotal analytical instrument. A large proportion of the discussions and significant points made in the chapters of species of spaces were developed with help of the film-architecture matrix. Conversely, in ACT 4, based on the comments and observations from *Studio 35mm*, the practicality of the matrix as a useful analytical tool for studying film form was proven. As discussed within the chapter dedicated to ACT

4, in *Studio 35mm*, analyzing film form was one of the main pedagogical tools and proved to be remarkably beneficial.

The matrix provides an opportunity to look at the process of cinematography and editing of the scene as a whole. More importantly, it renders it possible to analyze the composing elements of a shot. For example, elements such as movement, editing, composition, perspective, and even the lens and optic of the camera were analyzed through the tools of the matrix as single individual elements. On the other hand, observing the components of the matrix in relation to each other in a bigger picture offered a more strategic view to how a shot is filmed. The film-architecture matrix magnifies the features of a shot that will be glossed over by simply *watching* the shot. It makes a researcher go through each of the seemingly minor, but in reality, crucial aspects of a scene/shot one by one.

At this stage, if we return to the metaphor of the “wild horse” used by Werner Herzog to describe the movie camera, it can be stated that the film-architecture matrix helps to understand how film directors manage to ride this wild horse.⁴²⁸ The film-architecture matrix uncovers the details of how other film directors move their camera, edit their shots, organize their compositions and, in short, are able to harness the power of the Herzogian wild horse, the camera.

There are three additional points to be taken into account in relation to the film-architecture matrix.

First, as it is discussed in ACT 1, some of the components of the film-architecture matrix such as ‘cinematic plan’ were used by other scholars in the studies carried out prior to this thesis as single elements. What makes the matrix original is the fact that this

⁴²⁸ See the Chapter of Intruduction, the section of Significance of Research: Why Film Form Matters? The following quote from Werner Herzog is included in the chapter: “and this fucking camera is like a wild horse, if you do not have a clear plan about how to achieve what you want, it will dislodge you.”

thesis put the components together in a novel assemblage. Film form should be seen as a complex system consisting of a myriad of interrelated elements. In the proposition of the matrix, and its components are structured in a formation that is new and unprecedented in the previous studies of the field.

Secondly, this film-architecture matrix is designed for architects who intend to produce film and animation. In the design of the matrix, the issues observed in walk-through and fly-through animations were taken into consideration. The components of the matrix were selected and put together based on what is required for a cinematically effective representation of architecture. Nevertheless, this film-architecture matrix appears to be a useful tool for any kind of filmmaking. The notion of time and a well-planned temporal/narrative, composition design tools that the matrix offers, and more importantly the cinematic plan can be useful design and analytical tools for any cinematic production. Although the effect of the film-architecture matrix has not been tested outside the field of architecture, it has the potential to impact other types of filmmaking too.

It should be noted that this film-architecture matrix neither offers a universal pattern for filming architecture, nor it does formulate a magical prescription for architectural animations. Yet, as it was explained, the matrix contributes to the field both as an analytical and design tool. The matrix guides its user toward a method of thinking in which architectural filmmaking is a multilayered system.

6.1.3 Species of Spaces

Historically, categorization is a highly intellectual act and has functioned as the basis of human cognition and knowledge. From the *Categories* of Aristotle to the works of Kant, Husserl, Spinoza and Foucault, categorization has always been an instrumental means of philosophy, theorization and analysis. In categorization, objects, things, theories, ideas and phenomena are grouped under a title based on a common feature. The operation of grouping is one side of categorization, but there is a more significant aspect

to it and that is the exercise of ‘segregation’ and ‘isolation’. In order to study a specific category, one needs to isolate the category from an intricate system and look at it as a single, dissociated element.

Isolating a category of things for the purpose of research or pedagogy is a known method in both architectural studies and film studies. In cinema, studying cinematic tropes — as categories or ‘species’ of different narrative conditions — is a prevalent method for both research and teaching of film directing. Categorizing constituent elements of buildings is a well-practiced method in the field of architecture too. In his *Architectural Composition* (1988), Rob Krier, architect and theorist, suggested that understanding the ‘composition’ of architecture, and architecture as a whole, is dependent on an accurate understanding of architectural elements of architecture such as doors, windows, façades, walls, etc.⁴²⁹ A similar approach was utilized in Koolhaas’ *Elements* (2014) and other sources. Categorizing architectural elements, and studying one of the categories unearths novel aspects of a seemingly banal category and, on another level, shows how the category is situated within the bigger system.

This dissertation borrows from the categorical studies in the field of architecture in which the focus is often on a spatial element, and combines it with categorical methods of research into cinematic tropes in film studies. In fact, by combining the two research frameworks from two disciplines, this thesis has proposed an innovative methodological framework.

Taking inspiration from George Perec and his notion of species of spaces, this dissertation was organized around three spatial spaces: doors, windows and corridors. In ACT 3, the concept of species of spaces functioned as a framework of analysis. Each chapter, within ACT 3, focused on a species, its architectural features, and film form

⁴²⁹ Krier, *Architectural Composition*, 70-100.

associated with the spatial element. Chapters of ACT 3 contribute original discussions to the field as the chapters not only reveal novel features and observations in relation to each species but also present how film form responds to each architectural element, in other words, how film form responds to architectural form. The role of the species of space in cinema in general, and in the films of Tarr and Angelopoulos, in particular, are discussed in the chapters. From this perspective, this dissertation can be considered the first attempt that examines the relationship between film form and architectural categories.

The analysis of the chapters of ACT 3 demonstrated that concentrating on one species of space magnifies its characteristics and leads to novel types of categorizations and definitions. For example, in the chapter of Corridors, the definition of a corridor, and what can be interpreted as a corridor was challenged. It was observed that various spaces of movement such as streets and roads, based on their common cinematic and spatial features can be construed as different types of cinematic corridors. The original interpretations and categorizations are the result of focusing on category and looking at it through the lens of cinema. Certain cinematic and narratological features of a spatial element can uncover new ways of categorization and can result in drawing novel parallels.

The employment of the notion of species of spaces showed that the analysis of cinematic techniques and strategies associated with a species of space can serve as a model for specific scenes in cinema, for instance, the scenes from the works of Tarr and Angelopoulos. Moreover, the narrow focus on a species of space in cinema unveils broader approaches and tendencies in the zeitgeist of filmmaking as an important element of the contemporary visual culture. The treatment of doors and thresholds in longer takes, the emergence of the long Steadicam walking/moving shots in corridors, and using windows as bridges to memory and dreams are examples of the more general research outcome of this framework.

Another implicit but noteworthy contribution that this dissertation makes is that this thesis through ACT 4 (*Studio 35mm*) confirms the usefulness of the framework of species of spaces as a pedagogical framework. It was the assumption of this thesis that by dissecting cinematic strategies and techniques used for filming a species of space, the technique or strategy can be learned and, subsequently, can be adopted in architectural films and animations. An overall strategy of a shot or scene is comprised of multiple components and each component was meant to be tackled in the film-architecture matrix separately.⁴³⁰

These strategies that were studied through the film-architecture matrix, at times, were transferred to the architectural films and animations as a whole with all of the constituent elements such as movement, compositional aspects and editing. During the experiment of ACT 4 there were also examples where a single component such as the pace or the type of camera movement or a specific technique of montage was selected to be applied in filming a species of space. In various cases, the experience of *Studio 35mm* indicated that transferring cinematic observations to an architectural animation or film where the same species of space exists can be a highly useful method.

A direct or indirect adoption of cinematic strategies utilized in professional films and applying them to architectural animations is an effective approach from different points of view. At a basic level, it compensates for the lack of technical and cinematic knowledge of architects and architecture students. By deploying a specific technique or strategy from scene the same or a similar spatial experience can be crafted in an architectural film or animation. Besides, as the species of spaces participate in the spaces

⁴³⁰ Camera movements and related attributes such as direction and path of the movement were meant to be analyzed on cinematic plans. Features related to composition, framing, optic and the juxtaposition of human characters and space in a frame were to be dissected through compositional notes and two-dimensional abstract diagrams. Editing and its relating elements such as chronological order, timing design and temporality and scales of the shots were related to the time-scale diagrams.

of different types of narratives, film form, linked with these spaces, can be assimilated to discrete contexts.

For instance, in a long take over-the-shoulder shot (as a cinematic strategy) the intention is to film an action taking place in a corridor (as a species of space) and, at the same time, film how a character is experiencing the corridor. This cinematic strategy can be applied to any corridor scene when a similar desirable effect is to be achieved. The same strategy — a long take over-the-shoulder shot in a corridor — can be employed for a trench in a war scene, a scene depicting a carnival in a street, a corridor in a hospital scene or a scene illustrating a runner running in a road. This cinematic strategy in all of the mentioned contexts has the same function; it introduces the event and space simultaneously as it captures how a protagonist moves through a corridor. Therefore, the extracted cinematic techniques and strategies related to a species of spaces are applicable to other contexts, storylines and spaces where the same species of space is concerned.

Moreover, it was the studying of filming strategies linked to species of spaces in the works of film directors that prompted students to avoid random filming techniques which is one of the common flaws of architectural films and animations. On a more intellectual level, this process enriched both cinematic and architectural understanding of students; students had to think about the architectural properties of a species of space and the way a cinematic strategy can respond to and reflect an attribute of the species of space. Once a suitable filming strategy for a species of space was identified, it was the task of students to use it in the right place and the right time in their films.

The framework of species of spaces as a pedagogical basis led to three sorts of outcomes. First, students had the opportunity to study different cinematic techniques and strategies employed for filming specific architectural elements. Secondly, by dissecting the cinematic construction of each case through the film-architecture matrix, on the one side, students had the chance to examine the details of how a scene entailing

a species of space was created. On the other side, the concept behind filming a scene in a certain manner, or in other words, the reason why the film form was chosen for the architectural element, could be asserted. Thirdly, the learned cinematic strategies for a species of space were applied partially or completely in a scene where a similar impression was intended.

The obtained cinematic lessons from the studies conducted by students into the examples of species of spaces were diverse. However, students who selected species of spaces that are included in this dissertation were encouraged to experiment with cases analyzed in ACT 3 (chapters of species of spaces). There were remarkable attempts in the experiments by students, but the most notable application of the cinematic strategies was borrowed from Bela Tarr. The cinematic strategy through which Tarr filmed the opening scene of *Damnation* (analyzed in chapter 4) was adopted in four animations.

In the scene that is a long take, Tarr's camera pulls back from a landscape and while the camera is drawing back a spectator realizes that the scene is being filmed through a window. As the camera keeps zooming and dollying back the protagonists of the film appear in front of the camera staring at the landscape through the window.⁴³¹ Students who had 'window' as their species of space as well as students who were about to design their opening scene were asked to analyze the scene from *Damnation* and reconstruct it in their own films. After analyzing the scene through the film-architecture matrix five students chose to resort to the cinematic strategy of this scene. Three of the most successful films produced in *Studio 35mm* adopted the cinematic strategy of the scene to create a similar spatial effect.⁴³²

⁴³¹ In Chapter 4 it is discussed how this scene illustrates the relationship between the view (the landscape), frame (window) and the viewer (protagonist).

⁴³² *Urban Below* by Han Wu, *The Window* by Chen Lou, *Windows* by JiaPin Ang and *Maglev City* by Chen Jiayan borrowed the cinematic strategy of the opening scene of *Damnation*. The mentioned films were considered as successful examples since they showed higher standards of filmmaking and were shortlisted in various film festivals and important architectural events such as Melbourne Design Week.

The successful use of this technique and other examples that were used in multiple cases in *Studio 35mm*, bear witness to the applicability of film techniques in the context of architectural animations and short films. In this particular case, the overall filming strategy including framing, the pace of camera, the change in shot scale, and *mise-en-scene* was directly transferred to another context. It must be mentioned that in some cases one aspect of filming a scene was utilized in students' films. For instance, in *Contemporary Panopticon* an identical application of cinematic techniques of a specific film does not exist, rather, the whole film is a modern interpretation of the overall cinematic approach of *A Short Movie About Love* (1988) by Krzysztof Kieślowski. *Contemporary Panopticon* does not represent the exact filming and editing strategies utilized in *A Short Movie About Love* but the film has made an indirect use of *mise-en-scene* and cinematic and spatial arrangements of spaces, characters and camera staging that was explored through investigating the film by cinematic plans.

The conclusion can be drawn that analyzing filming strategies and techniques and applying them in architectural films and animations, might not be successful in every context, but this method turned out to be an effective method when a fast learning mechanism is required. Moreover, this method prompted students to consult with the rich history of cinema and tap into the techniques that are already implemented by the masters of cinema.

Urban Below and *Windows* were selected in the official selection of film festivals that are not specifically architectural film festivals. For example, *Urban Below*, was selected in the official selection of Thessaloniki Short Film Festival which is a significant and competitive festival for professional short film makers. Han Wu, in his reflections on the scene, stated: "this scene is a perfect example of an establishing shot. Through the zoom back technique, the camera does not only set the environment but shows the relationship between inside and outside ... it also shows the setting and how the characters of the film might relate to it". Jia Pin Ang similarly found the scene effective because it "introduces characters and spaces within the same shot" and Chen Lou wrote that the change in the "depth of different spatial layers" in the shot makes the eye of a spectator constantly flow within the depth of the image.

One might argue that direct translation of film form associated with a species of space can suppress the production of novel and innovative strategies and techniques that has not been practiced before and might generate a repetition of cinematic techniques and similar shots and scenes. To respond to this doubt, it should be stressed that even where there is a direct transfer of a cinematic technique, modifications on the basis of the new situation will always occur.

Furthermore, this is the same method through which filmmaking books and filmmaking schools teach filmmaking. In film schools, one of the most prevalent pedagogical methods is to study the blocking and camera staging of other filmmakers. More importantly, it should be noted that an innovative strategy or technique will be discovered when previous experiences do not respond to actual requirements and a new way of doing something is required. It seems that in this context, updated and innovative film form is impossible to achieve by disregarding the past; awareness about the practiced strategies and techniques appears to be an indispensable element to the process of creating original solutions in this realm.⁴³³

In summary, it can be stated that concentrating on a specific spatial element to learn filming strategies and film form is a remarkably impactful method of analysis and teaching method. The demonstration of the effectiveness of this method has occurred in ACT 3 and ACT 4 of this thesis.

⁴³³ There are theorists such as Francois Penz, who believe that film “techniques used today are very similar to the techniques and crafts used in thirties” and changes in film techniques are small. The principles of film techniques and strategies remained the same but today the techniques are digitalized and are being executed through computers. Penz, "Cinema and Architecture: Overlaps and Counterpoints of the Studio-Made Features in the Film Industry and Studio-Based Experiments in Architectural Education."

6.2 Future Direction

An obvious issue in the practice of architectural animations is that the involvement in technology makes architects ignore the historical cinematic background of the new technologies. The principles of film techniques have remained almost the same for more than 120 years. With the advancements of digital filmmaking gadgets, the execution of these techniques has become faster and more accessible, but the film techniques and their fundamentals work in a similar vein as the beginning of the twentieth century. The technique of overlaying background, foreground and middle ground in applications such as Adobe After Effects works very similar to Walt Disney multiplane cameras and camera mattes practiced in the 20s and the principles of modern special effects are akin to *truage* methods in the early ages of filmmaking. When it comes to cutting-edge technologies, the old principles and techniques are not obsolete. Rather, having a historical understanding functions as a prescription for using the newest developments.

In this research, during designing the film-architecture matrix, and during ACT 4 one of the most evident messages hinged to every step was the importance of history. The proposed methods and elements of the dissertation can become more useful and taken to the next level if enriched with material rooted in the historical attempts. For example, the film-architecture matrix which was a key component of this thesis was designed based on the series of historical analyses into the analytical/design tools utilized in the history of film and architecture. As an example, the significance of cinematic plans was emerged through researching the history of film and architecture and, specifically, the works of theorists such as Eisenstein, Bazin, Choisy and Cullen.

In recent years, prominent theoreticians and practitioners of new media argued that we still do not know how to effectively use technologies such as virtual reality as a

narrative medium.⁴³⁴ This thesis claims that the resolution to this challenge is 'history'. The same film-architecture matrix that is heavily supported by a historical background can be extremely useful for VR films too. On the strength of the observations of ACT 4 of this thesis, this dissertation suggested that an accurate temporal design through a time-scale diagram is very critical in VR films — if not more crucial than conventional films on flat screens; the transition from one scene to another, works in the same manner as traditional films. Shot scales (close-up, medium shot and long shot) are still applicable as there are actions that are meant to unfold closer to the camera and there are actions that take place farther, so the notion of shot scale and distance with the camera is relevant. Cinematic plans and sections are even more practical in comparison with the cinematic plans drawn for normal animations since VR films are more dependent on *mise-en-scene* and spatial placement of the camera. Therefore, cinematic plans and sections as well as the way the gaze of a spectator is guided in the scene to look around are highly instrumental to spherical videos. We can even state the Eisensteinian concepts of montage of attraction and vertical montage apply to these 360-degree videos.

All of the old methods and techniques arranged in the film-architecture that come from the past are applicable to new technologies. This thesis proposes that the application of traditional cinematic techniques to new technologies is not harmful, on the contrary, it showcases the similarities, differences and continuation of technological trends. Tracing the historical trends in the pedigree of cinema and its successors such as VR films guides us to a situation where the new technologies can be harnessed and advanced more effectively.

⁴³⁴ Richard Koeck, "Film, Space, Architecture (Part1/3)," AA School of Architecture, accessed October 15, 2020, <https://www.youtube.com/watch?v=x4fkhpSj4gI>. Edward Saatchi, "VR pioneer Edward Saatchi: VR films aren't the future of storytelling," [interview by Devindra Hardwar] accessed October 15, 2020, <https://www.engadget.com/2018-01-24-edward-saatchi-vr-interview.html#:~:text=Saatchi%20has%20come%20to%20a,t%20lie%20in%20VR%20movies.&text=Instead%20of%20trying%20to%20mimic,characters%20for%20AR%20and%20VR>.

With regard to the film-architecture matrix, this thesis suggests two possible directions for future studies. First, the application of the film-architecture matrix to more advanced technologies and the adjustment of the matrix for the needs of new media such as VR films, spherical videos, immersive experiences. Second, historical research focused on the matrix aimed at developing its components or adding other components to it.

Another direction that can be taken in relation to the film-architecture matrix is the digitalization of it. Automation and digitization of the film-architecture matrix can facilitate the process of design and analysis. There are digital storyboarding software that operate with tools similar to cinematic plans, but a multi-component film design matrix does not exist. Digitalizing the film-architecture matrix can become the topic of a practice-based study. Through the digitalization of the matrix, the analytical capacity of the matrix will be enhanced and the process of analysis will be facilitated. Moreover, the data generated by the matrix can be harvested by systems and databases available to researchers in the field. Using the accumulation of data on a cinematic database fed by the film-architecture matrix, comparative studies about into the film techniques and cinematic treatment of architectural spaces will become possible.

Another research potential that emerged during this dissertation is the impact of slow movies and the filmmakers similar to Tarr and Angelopoulos on the field of architecture. The utility of watching and slow movies was theoretically discussed in ACT 2 and it was mentioned in this chapter too. Although it was not one of the aims of this dissertation and it was not systematically assessed, the likely positive influence of slow movies for the field of architecture was observed at various stages. This thesis believes that the impact that slow can have on the aesthetic taste of architects has a remarkable research potential. Research topics that can suggested in relation to the impact of slow cinema on architecture include and are not limited to the effect of slow movies on the manners in which architects treat notions such as detail (as an

architectural close-up), movement and texture, their understanding of everyday life functions and narratives of architecture, their approach toward the concept of atmosphere, the way they observe and analyze the use of architectural spaces, and, the how they understand the whole notion of time in relation to the notion of space.

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