Space and Time Through the Lens: A Cinematic Exploration From Lumière, Warhol and Keiller

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Abstract

To gain a deeper understanding of how space and time are depicted in cinematic movementimage, this paper analyzes five seminal films: Arrivée d'un train en gare de La Ciotat (1897) by the Lumière brothers, Empire (1964) by Andy Warhol, and Patrick Keiller's Robinson trilogy (London [1994], Robinson in Space [1997], and Robinson in Ruin [2010]). These films were chosen for their innovative approaches to representing time and space, each reflecting distinct historical and stylistic shifts in cinema. Using these films as case studies, the research examines how cinematic techniques shape viewers' perception of time and space, aiming to shed light on the role of film in capturing the intricacies of lived experience. The study is structured in several stages. First, a historical and theoretical context for each film is established, situating them within relevant cinematic and philosophical frameworks on realism, durational cinema, and spatial representation. Following this, a comparative analysis is conducted to identify the ways each film uniquely presents temporal flow and spatial depth, focusing on elements such as framing, pacing, and sensory composition. The study concludes by synthesizing insights from these analyses, demonstrating how cinema's moving images uniquely capture temporal progression and spatial immersion, thus providing a rich framework for understanding space and time as more than mere backgrounds for narrative but as integral elements of the cinematic experience. This exploration contributes to an under-explored area of film studies, illuminating how cinema's language shapes our understanding of the spaces and moments we inhabit.

Keywords: Cinematic Movement Image, Time and Space, Visual Perception, Realism, Durational, Spatial Representation, Temporal Progression, Lived Experience in Cinema

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Introduction

In an era where visual media increasingly shapes our perception of reality, cinema remains one of the most powerful mediums for exploring complex ideas of space and time (Bruno, 2002; Currie, 1995; Deleuze, 1986, 1989; Gill, 2000; Mulvey, 2007; Wood, 2012). Since the earliest days of film, directors and theorists alike have examined how cinema's unique capacity to manipulate temporality and spatiality creates immersive experiences that deeply resonate with audiences (Bazin, 2005; Deleuze, 1986, 1989; Mulvey, 2007; Tobe, 2016). Despite the critical role that time and space play in film, scholarly discussions often prioritize narrative over these fundamental elements, resulting in a relatively under-explored area within film studies. This study seeks to address this gap by analyzing how cinematic movement-images capture and convey the dimensions of time and space, which are often experienced as dynamic, transformative forces in daily life.

Positioned within the frameworks of cinematic realism, durational cinema, and theories of spatial representation, this study builds on the work of film theorists such as André Bazin, Gilles Deleuze, and Henry Lefebvre who have argued that cinema not only represents but actively constructs our experience of space and time. By selecting historically significant films that span a range of styles and temporal frameworks—Arrivée d'un train en gare de La Ciotat (1897) by the Lumière brothers, Empire (1964) by Andy Warhol, and Patrick Keiller's Robinson trilogy (1994-2010)—this study examines how different cinematic approaches capture and reshape our understanding of spatial and temporal dimensions.

The urgency of this study lies in its potential to enrich contemporary film theory and practice by highlighting how cinematic techniques can create layered, immersive experiences that go beyond narrative structure. As digital media continues to evolve, and as cinema itself increasingly blurs the lines between reality and representation (Aytas & Can, 2022; Elcott, 2016), understanding the ways in which films depict space and time becomes essential for both scholars and practitioners. This research aims to demonstrate that cinema's portrayal of time and space is not merely an aesthetic choice but a means of framing, understanding, and even transforming everyday human experience.

Time and Space in Cinema: Movement and Perception

Cinema, as a medium of representation, uniquely captures the complex relationship between space, time, and human perception (Bazin, 2005; Bruno, 2002; Currie, 1995; Deleuze, 1986, 1989; Gill, 2000; Pallasmaa, 2007). The concept of realism in film underscores cinema's ability to authentically represent the world, often by presenting scenes in a continuous flow that mirrors real-life movement and temporality (Bazin, 2005; Deleuze, 1986; Mulvey, 2007; Tawa, 2022; Tobe, 2016; Tschumi, 1996; Wood, 2012). Techniques such as long takes, deep focus, and the unbroken continuity of action aim to immerse viewers in an experience that feels immediate and real (Monaco, 2000; Wood, 2012).

The "movement image" in film theory refers to how cinema depicts movement and change, capturing the passage of time as an unfolding, dynamic process (Deleuze, 1986). In contrast, the "time image" challenges traditional linear depictions of time, showing it as multifaceted and nonlinear, reflecting the fragmented and layered nature of our lived experience (Deleuze, 1989). This theory suggests that time, rather than being a simple sequence of events, can be represented as a complex, interwoven dimension (Till, 2009), where past and present overlap and influence each other.

In relation to realism, theories of multiple perspectives, such as David Hockney's concept of "joiner photography," emphasize how a combination of different viewpoints can create a more complete, dynamic representation of space (Demirtas, 2011). Hockney's technique, which merges multiple images to form a single composite, challenges the conventional notion of a fixed perspective, encouraging a more fluid, subjective understanding of space. This concept parallels the cinematic technique of creating immersive, layered realities through a combination of visual angles and temporal shifts (Hockney & Gayford, 2016; Monaco, 2000; Moreira Soares & Germana Gonçalves, 2022; Tobe, 2016; Wood, 2012).

The idea of "Death 24x a Second," as proposed by Laura Mulvey (2007), further complicates our understanding of realism in film. Mulvey's work highlights how film, by freezing a moment and allowing repeated viewing, creates an illusion of movement and time. The experience of watching a film is not simply a passive observation of time, but an active process of engaging with the cinematic representation of time, where the viewer's perception is influenced by the film's manipulation of movement and stasis. This illusion, though framed in the context of realism, suggests that what we perceive as "real" in film is, in fact, a constructed reality.

These theories—realism in film, movement and time images, multiple perspectives, and the illusion of movement—provide a foundation for this study's methodology. By exploring how these elements influence our perception of space, time, and reality, the study will examine how cinema constructs and manipulates the viewer's experience, revealing the complex interplay between the subjective and the real. Through this lens, the methodology will focus on analyzing how films use time and space to create immersive and dynamic representations of the world, challenging the boundaries between fiction and reality.

Historical Context, Cultural Ideas and Theoretical Framework of Case Studies

Each film examined reflects its historical moment and cultural concerns, offering insights into how cinematic space and time interact with societal values and technological advances.

In *Arrivée d'un train en gare de La Ciotat* (1897), the Lumière Brothers capture the fascination with realism and movement at the dawn of cinema. Set during a period of rapid industrialization, the film reflects the era's awe toward technological progress, as the train represents modern mobility and the compression of space and time (Crous, 2019; Patrick, 2016). The film's direct depiction of a train arriving at the station plays with viewers' perception, creating a visceral experience that aligned with the novelty of early motion pictures.

Andy Warhol's Empire (1964) embodies the experimental spirit of the 1960s, where avant-garde cinema pushed the boundaries of narrative and time. Filmed in an era marked by rapid urban growth and a booming pop art movement, Empire transforms New York's iconic Empire State Building into an abstract symbol, subverting expectations by focusing on static time and anti-narrative form. Warhol's extreme minimalism reflects a critique of instant gratification, challenging viewers to engage with prolonged observation and monotony.

Patrick Keiller's The Robinson Trilogy (1994, 1997, 2010) explores Britain's shifting landscapes amid economic and political changes, spanning two decades of urban decline, globalization, and post-industrial identity. The trilogy combines observational and narrative cinema to explore the social and historical layers of British spaces, revealing the impact of

neoliberal policies on the physical and social fabric of the country. Keiller's depiction of neglected urban and rural spaces critiques transient, non-place environments that contrast with traditionally "lived" spaces, offering a poignant reflection on how economic shifts shape national identity.

This overview of historical and cultural context shows how each film anchors itself in the specific time and place of its creation, grounding the theoretical discussion in a broader social framework. These elements underscore the relevance of realism, movement-image, and time-image concepts and how they reveal cinema's power to reflect and reframe societal values and perceptions of space and time. This will form a key basis for analyzing each film's visual and temporal strategies in the following methodology chapter.

Methodology

The methodology employed in this study is a comparative case study analysis (Creswell & Creswell, 2018; Groat & Wang, 2013), which allows for a detailed examination of how different films depict space and time through their unique cinematic techniques. This approach is ideal for analyzing films that span different historical periods and stylistic approaches, such as Arrivée d'un train en gare de La Ciotat, Empire, and the Robinson trilogy. The research involves textual and visual analysis, focusing on key scenes that highlight the filmmakers' manipulation of space and time. These scenes are deconstructed to understand the role of framing, pacing, camera movement, and sound in shaping the viewer's perception of temporal flow and spatial depth. Additionally, the study applies thematic analysis to identify recurring cinematic elements, such as the portrayal of movement, duration, and sensory experiences, and how these contribute to the overall depiction of space and time. To contextualize these observations, the analysis is framed within relevant theoretical frameworks, particularly those of André Bazin's realism, Gilles Deleuze's timeimage, and Henri Lefebvre's concept of lived space. This methodological combination of visual and theoretical analysis provides a comprehensive understanding of how these films, through their cinematic language, construct immersive and transformative experiences of time and space.

Cinematic Explorations of Space and Time

Case Study 1: Arrivée d'un train en gare de La Ciotat

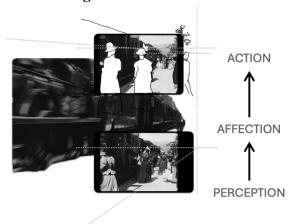


Diagram 1: Experiencing Realism in Lumière's Arrival of a Train, From Perception to Action

MIMESIS of Everyday experience

This section explores how the Lumière Brothers' iconic short film captures real-time movement and spatial immediacy. The use of static framing and depth of field immerses the viewer, evoking a tactile perception of motion. The train's approach symbolizes early cinema's fascination with realism, showcasing André Bazin's idea of unmanipulated representation of reality. The interplay of time and movement situates the film within Deleuze's movement-image framework, where time is perceived through visible action and spatial continuity.

Case Study 2: Empire by Andy Warhol

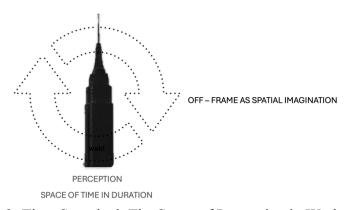


Diagram 2: Time Stretched: The Space of Perception in Warhol's Empire

Warhol's *Empire* shifts focus from movement to duration, embodying the principles of durational cinema (Stoller, 1966; Warhol & Wolf, 2004). The prolonged, static shot of the Empire State Building transforms the structure into an almost abstract entity, critiquing conventional notions of narrative and spatial engagement. This approach exemplifies Deleuze's time-image, where time itself becomes the central experience, challenging viewers' perceptions of continuity and action. Warhol's minimalist treatment also resonates with Laura Mulvey's concept of "delayed cinema," urging the audience to confront the passage of time without the distraction of narrative progression.

Case Study 3: The Robinson Trilogy by Patrick Keiller

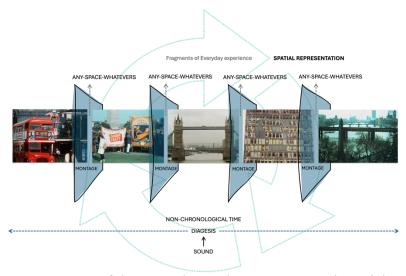


Diagram 3: Fragments of the Everyday: Urban Montage and Spatial Narratives in *Robinson in London*

Keiller's trilogy combines narrated imagery with contemplative pacing to explore urban and rural landscapes (Izmir University of Economics & Özgün, 2016; Piskorz, 2021; Rattenbury, 2002). By layering historical, social, and economic narratives, the films critique the production of space within cultural and political contexts (Lefebvre, 1997, 2014; Rattenbury, 2002). Drawing on Henri Lefebvre's concept of lived space, Keiller connects physical landscapes with personal and collective memory, highlighting the tension between non-place and historical depth. The trilogy's reflective tempo situates it between movement-image and time-image (Deleuze, 1986, 1989), where fragmented imagery and narrated thoughts evoke temporal fluidity and spatial critique.

Comparative Analysis of Cinematic Techniques

The comparative analysis of cinematic techniques across the works of the Lumière Brothers, Warhol, and Keiller reveals distinct approaches to framing, pacing, sound, and the representation of time. In terms of framing and composition, the Lumière Brothers use static shots to evoke a sense of immersive realism, while Warhol strips away dynamism through static framing to create abstraction. Keiller, on the other hand, blends dynamic and static imagery to layer time and place. Regarding pacing and duration, Arrivée d'un train captures the immediacy of motion, *Empire* stretches temporal perception with its prolonged duration, and The Robinson Trilogy employs a reflective pace that layers various temporalities and histories. In terms of sound and sensory perception, Arrivée d'un train evokes auditory realism with its emphasis on movement, while *Empire* uses silence to foreground the experience of duration. The Robinson Trilogy incorporates voiceovers and environmental soundscapes to deepen its portrayal of space and time. Finally, when applying Deleuze's concepts of movement-image and time-image, Arrivée d'un train aligns with the movementimage by linking time to physical motion, *Empire* exemplifies the time-image by emphasizing the experience of duration over action, and *The Robinson Trilogy* bridges both modes, offering reflective meditations on space, time, and social critique.

Arrivée d'un train en gare de La Ciotat (1897),
Lumière Brothers

Empire (1964),
Andy Warhol
Patrick Keiller

Pacing and Composition

Pacing and Duration

Immediacy of motion

Stretched perception:
extreme Duration

Stretched perception:
extreme Duration

Surd and Sensory Perception

evokes auditory realism, emphasis on movement

ACTION

ANY.SPACE-WHATEVERS

Fragment of Everyday
experience

Everyday
e

Table 1: Comparative Analysis of Cinematic Techniques

Conclusions

In conclusion, this study highlights the profound impact cinema has on shaping our understanding of space and time, demonstrating its ability to transform how we perceive the world around us. Through the analysis of Arrivée d'un train en gare de La Ciotat, Empire, and The Robinson Trilogy, we see how different filmmakers use cinematic techniques—such as framing, pacing, sound, and the manipulation of temporal flow—to create immersive experiences that resonate with viewers on both a sensory and intellectual level. By drawing on the theoretical frameworks of Bazin's realism, Deleuze's movement- and time-images, and Lefebvre's concept of lived space, this study reveals that cinema does not merely depict time and space but actively constructs and transforms them, offering a complex interplay between fiction and reality.

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