

Article

Emerging Architectural Spatialities Using Assemblage Theory to Understand Novel Emplacement Practices in Cinema's Spatial Representation

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Abstract

Intersections between cinema and architecture originated when moving images started recording actual buildings and urban environments and, from their inception, they have been accompanied by extended theoretical reflections on authenticity and objectivity of spatial representation. In recent times, disruptive transformations in the modes and techniques of architectural expression introduced by digital production have originated a fundamental rethinking of these questions. Looking at the impact of technology advances on mechanisms of spatial narrative in cinema, this paper explores how the new forms of architectural expression configure elements and contexts that radically challenge the traditional notions of authenticity and objectivity. Although the new forms of visual narration of architecture in cinema are well understood, the way in which they enhance film narrative is not. With the help of relevant philosophical concepts developed by Gilles Deleuze, this study explores this complex architectural phenomenon to shed light on the mechanisms operating behind it by decoding exemplary cases that transcend the conventional limits of spatial individuation. Through a case study on hybrid, complex and multiple speculative spatialities found in the Marvel movie series, this study offers a theoretical frame to understand the emerging architectural typologies and morphologies. By applying assemblage theory to decode these spatialites, this study offers a description of the novel means used in cinema to redefine architectural types and forms by creatively deterritorializing and reterritorializing consolidated ones. Through the engagement with the Deleuzian understanding of the productive capacity of repetition, the new architectural elements are described as assemblages that expand their both material and intangible boundaries, endowing them with narrative forces of differential individuation.

Key words: Repetition; Assemblage; Cinema; Architectural representation

1 - Introduction

This study originates from the observation of the radical enhancements recently brought by new technologies in the modes and techniques of architectural expression in cinema. Concentrating on the new mechanisms of spatial narrative, this exploration focuses on how this expression configures its elements and contexts and challenges the traditional notions of authenticity and objectivity.

It firstly recognises the relations between the understanding of space in architecture and cinema by seeing film and moving images as important drivers of change in our understanding of space and place, as posited by Richard Koeck (2013) and Andong Lu and François Penz (2011). Since its inception, cinema has constituted a prime experimental laboratory for innovation in architectural expression, originating spatial representations

with original design experiments, such as Robert Wiene's The Cabinet of Dr. Caligari, and new architectural visions, such as Le Corbusier and Pierre Chenal's L'Architecture d'Aujourd'Hui. By making space a primary interpreter of performative, functional and symbolic tasks, cinema has greatly expanded the role of spatial narrative. Exploiting its potential to "develop a new architecture of time and space unfettered by the material constraints of gravity and daily life" (Vidler, 1993: 46) cinema has fostered the production of spatial representations that redefine the understanding of the relations between reality and representation. Even when actual architecture is represented, authenticity and objectivity have been subjected to powerful spatial narratives that recreate its locality, culture and identity. Technological advances have progressively strengthened this representational capacity, increasingly expanding the autonomy of narrative from the actual, material architectural expressions.

Literature on this phenomenon is abundant and consistent over a long period of time. Seminal works include Dietrich Neumann's (1996) Film Architecture, which provides a close look into set-design and how it informs the narrative of the film; François Penz and Maureen Thomas's (1997) Cinema and Architecture, one of the pioneering studies on architecture as quasi-protagonist of film; and Nezar Alsayyad's (2006) Cinematic Urbanism, which demonstrated the central narrative role gained by architecture in film.

The discussion in this paper is different from the above perspectives. As mentioned by Tim Bergfelder (2007), there are few studies on architectural scenes in films, focusing on how they are "beyond their subservience to narrative", and have an impact on the audience and film narrative. With the help of Deleuze's related philosophical concepts, this paper examines the complex architectural phenomenon in cinema under the equality of architecture and narrative. Narrative is considered as a key factor in the construction of architectural representation in cinema.

Following this perspective, this study furthers the discussion on the breadth of the narrative enhancements both in theoretical and practical areas, offering a theoretical contribution to the discourse on architecture and placeness. In dialogue with studies on authenticity in material architectural emplacements, this research identifies and delineates emerging perspectives for architectural phenomena. Specific spatial narrative genres, such as theming, are discussed by engaging with literature on non-places and hyperspaces, such as Disneyland, the integrated casinos of Sands Corporation and the *copycat towns* in China (Augé 1995; Boorstin [1961] 2012; Bosker 2013; Eco [1967] 1986; Huxtable 1997; Relph 1976).

A review of key theoretical positions in the discourse on the mechanisms of cinema's architectural representation, focused on the problems of its authentic and objective reproduction, provides the basis for a discussion on the enhancements supported by the recent digital turn. This review addresses the question of differences and similarities between representation and reality in cinema during the 20th century's rapid evolution of techniques of production and reproduction, which has constantly been central to film theory and criticism. Such a discussion engages with the multifaceted discourse located at the intersection of wider visual and performative art fields that has often involved empirical developments and produced exemplary architectural expressive outcomes such as the spatial gesticulations of Hans Poelzig (Scheffauer 1960; Vidler 1993) and the durations of Robert Mallet-Steven (Becherer, 1996).

To disentangle this discourse and illuminate the complex relationship between reality and representation in its contemporary development, this review develops an interpretive framework that, hinging on the Deleuzian¹ notion of differential repetition, identifies cinema's representations as forms of individuation that are subject to the endless play of steadily returning, yet differential underlying forces.

^{1 -} As an outstanding poststructuralist writer and philosopher, Gilles Deleuze's research covers many fields, including cinema, music, literature and so on, and his works has been widely studied in the contemporary era, including his concepts such as "assemblage" and "rhizome". Deleuze advocates the attention to the "becoming" process, as well as the differences in it. He pays more attention to the self-organizing processes and becoming rather than substance and being (Lorraine, 2011: 1).

1.1 - An overview of the discussion on film representation

The overview of the modern discourse on film representation addresses key interpretations of the questions on reproduction, authenticity and differentiation that have contributed to the contemporary understanding of the agency and potential of architecture in film. It also includes an introduction of Gilles Deleuze's concept of differential repetition.

Siegfried Kracauer's (1947) Psychological History of the German Film saw authenticity as the key definer of film approaches towards realism in the first half of the 20th century. On the one hand, he identified a realistic approach aimed at arranging "real-life material with veracity as his sole object" (168). He used the work of Austrian film director G. W. Pabst to exemplify the efforts to make "feel 'how [the represented is] true' rather than 'how beautiful'" (169). Conversely, Kracauer described the non-realistic approach as derivative and unreal, underlining how it resulted from the impossibility for sets designers to "allow the screen to explore that very reality which they abandoned" (95).

This split contrasted with the theoretical and creative elaborations of theatre architect and film director Robert Mallet-Stevens who recognized how the apparatus of production confined cinema in an "in-between space" constructed through and inhabited within the settings (Becherer, 2000: 584). Mallet-Stevens (1922) referred to this space as a "middle truth," terming it as le vrai moyen (157-159), and systematically integrating it in a design practice that rearticulated the lineage in modern theatre that led from Adolphe Appia's new realism (Krasner, 2008) to the Brechtian Verfremdung (Shklovskii & Sher, 1990). For Mallet-Stevens, cinema could not be attributed to either real or unreal dimensions, but constituted a mirror image that, as Richard Becherer (2000) posited, uses the abstractive machinery of the filmic image to escape from the binary oppositions of "verisimilitude and vraisemblance" (584), i.e., what Kracauer termed realistic and non-realistic approaches. Asserting that what Mallet-Stevens comes to explore as reality was only a residual element, Becherer (2000) noted that the studio was the only reality since the "little realism that does eventuate from the 'realistic' setting... is accomplished at the

expense of the reality of another aspect of the sight before him, that is, film production" (585).

This understanding of realism is further elaborated by film theorist André Bazin (1971) who submitted that film's essence is its capability to automatically represent reality. Automatism, as an artificial production process, reasserts the inauthenticity of film representation precisely because it ensures objective relations between reality and film (Bazin, 1971). As clarified by film theorist Robert Stam (2000), Bazin's argument that the machinery can keep film's representation consistent with the reality constitutes the basis for a style that focuses on formal aspects in the completed awareness "of the artifice required to construct a realist image" (61).

This form of illusory realism resulting from the mechanical reproduction in film was also central to Walter Benjamin's (2007) The Work of Art in the Age of Mechanical Reproduction. There, this form of realism is identified as able to "reveal entirely new structural formations of the subject" (16) through the affordances of "a spectacle unimaginable anywhere at any time before this" (13). Its "equipment-free" aspect of reality is described as the "height of artifice" (13), engaging the public in a distracted form that guarantees a unique state of absorption (18). Notwithstanding the destructive force on authenticity and cultural heritage of this illusory realism, for Benjamin this kind of absorption entirely preserves all its authority and capacity to form and inform habits and adjust reality to the masses and the masses to reality (18-9).

A decisive contribution to support the interpretation of the productive capacity of the illusionary character of representation in contemporary cinema is offered by Gilles Deleuze's concept of repetition as creative force. In *Difference and Repetition*, Deleuze (1994) identifies repetition as a subversive force of differentiation. Repetition institutes instances of individuation by appropriating reality through a "despotic overcoding," rather than creating homologating, inauthentic and impure copies (Deleuze & Guattari 1983; Manfredini 2019c; Smith 2006). Deleuze exemplifies this idea using a work of Borges, who describes an imaginary writer, Menard, who recreates Don Quixote. Deleuze (1994) quotes Borges (1962): "The text of Cervantes and that of Menard are

verbally identical, but [the expression of] the second is almost infinitely richer" (52), showing how even "the most exact, the most strict repetition has as its correlate the maximum of difference" (xxi). Fredric Jameson (2005) synthesised this differential capacity of repetition to create realities with independent narrative and expressive abilities by asserting that in cinema representation de-realises reality, while realising non-reality (188).

Drawing upon Deleuze's work, this paper considers authenticity and objectivity in film representation as features established through processes of differential repetition within new and independent realities. What is presented in films is considered as a generative reality specifically located and framed by a narrative constructed through repetition. Our understanding of the Deleuzian concept of the creative force of repetition is presented in the following discussion to clarify how it has been used in the exploration of the mechanisms behind complex representations of contemporary cinema.

1.2 - Framework

The framework of this discussion draws upon Deleuzian concepts to establish an interpretation of the relations between the film representation and reality. The notion of assemblage is used to disentangle and describe the relational systems between heterogeneous elements as it is developed by to shed light on complex concatenations of elements. The assemblages are constellations by of multiple elements that, under the guidance of embedded agents, have dynamic sets of relations with emergent properties. From this perspective, cinema is an assemblages with repetition between two autonomous entities, the filmed objects and the film itself, where the content is the repeated objects (the images of the film) and the filmed ones; the relations are the associations between the two sets of objects; and the agents are the multiple narratives that activate them.

Focusing on architecture, the representational elements of its spatial assemblages are object of a tripartite study of objectual materiality, associative network and narrative agency. The objectual materiality is the concrete visual content of architectural representation, including the material, spatial, morphological and typological aspects. The associative network is the set of relations between the architectural elements that constitute the

assemblages and creates the provisional unities or conditions that structure specific domains. Film narrative is the agent that guides the formation and transformation of the associative networks and defines the frameworks and agency of the overall architectural expression.

The analysis concerns relevant case studies of architectural scenes selected from science fiction films in the last decade. It provides a description of the representational process in which these scenes constitute expressive assemblages.

2 - Theoretical discussion

To frame an understanding of film's representational assemblages, this section discusses the theoretical instruments that help decoding the force of differential repetition and revealing the narrative association between reality and film representation. It addresses the participation of film narrative in the generation of architectural expression and the ability of films in constituting dynamic assemblages of variable heterogeneous elements.

2.1 - Film representation is a form of repetition activated by film narrative

The force of differential repetition, according to Deleuze, operates with complex mechanisms to generate realms of possibilities, production and creativity. According to Deleuze, repetition is a "positive power [puissance] of transformation," which can "dissolve identities" (Parr, 2010b: 225) to create new individuals and cyclically reproduce itself via difference (Parr, 2010b: 225).

To exemplify the difference activated by repetition, Deleuze (1995) describes the decorative motif composed of multiple repeated figures combined by dislocation. He observes that what appears as simple reduplication is always marked by a disequilibrium, instability and dissymmetry caused by missing parts and displacements. Those parts which are missing or displaced embody "an internal difference" which is a self-sustainable "acting cause" of repetition (Deleuze, 1995: 20) that does not depend on a subject or object, as it is "the full force of difference in and of itself" (Parr, 2010b, 226). Moreover, the productivity of differential repetition in the decorative motif operates through dislocation of the figures, determining the state of the figures and the association between them.

Repetition is a key instrument of cinema narrative as it is used to define the set of rules regulating the relationship between representation and reality. The narrative localises the repeated objects, including any architectural element, in the film environment by determining their connotation and state in participation. This agency of narrative in cinema can be explained, using Deleuze's concept of assemblage, as the operation of two autonomous entities (the repeated objects and the film narrative) connected by external relations.

2.2 - Narrative as agent of change through repetition

Deleuze and Guattari (1987) define an assemblage as multiplicity of elements constituting concatenations in continuous transformation with three basic conditions. Assemblages are composed "through the establishment of the lines of articulation or segmentarity, strata and territories, and lines of flight, movements of deterritorialization and destratification" (Deleuze and Guattari, 1987: 3).

The interpretation if this concept is multifaceted. Graham Livesey (2010) proposes that assemblages are "complex constellations of objects, bodies, expressions, qualities, and territories that come together for varying periods of time to ideally create new ways of functioning" (18). Thomas Nail (2017) adds that an assemblage is a fragmentary multiplicity, highlighting that it is defined solely by the external relations between self-subsisting fragments (23). He thinks that an assemblage is open and flexible, and always in the state of becoming, as it has no final state and is not a complete product, rather "a vast network of processes [that] continue to shape it" (23). Jeffrey A. Bell (2010) specifies that an assemblage can "maintain itself without being reduced to either side of a dualistic relation" (19), as assemblages "swing between territorial closure that tends to restratify them and a deterritorializing movement that on the contrary connects them with the Cosmos" (Deleuze & Guattari, 1987: 337). Ultimately, in an assemblage, it is the in-between, the set of relations that counts (Deleuze & Parnet, 1987, viii). Cinema assemblages involve particularity and complexity in a process that make specific arrangements between film representation and reality. As a repetition of reality, film representation is intended a form of individuation with its own narrative and expressive capacity. The associative force of the narrative is not innate, but a kind of external relations created through the repetition that is not static, but it is adjusted during the life of each film. An assemblage, which can also be the concatenation between film and reality, can be interpreted in terms of three basic conditions:

The first condition required is the presence of concrete elements that can be associated in a whole entity (Nail, 2017: 26). In the film-reality assemblage, the repeated objects (the images of the film) and the filmed ones are the concrete contents. The second condition required is the existence of a set of relations2. This is the network of specific external relations that Deleuze calls "abstract machine" and, according to Nail (2017), support the "conjunction, combination, and continuum" (25) of all the elements that appear to be meaningfully related. For film-reality assemblage, this is the narrative associations between the two sets of objects. The third condition is the presence of agents; what Deleuze calls the "personae". Agents are the "mobile operators" that "draw the relational diagram and establishes a correspondence" between the elements and the relations (Nail, 2017: 27). For film-reality assemblage, the agents are the multiple narratives that activate the content.

This assemblage model how narratives can lead to a different assemblage result. Reality can be understood as the result of the contents in this assemblage being activated by realistic narrative. In this process, narrative reconstructs the relations, and localises the contents in their relations. The shift of different narratives thus can create different expression beyond the appearance of the same content, as narrative transforms the relations rather the content.

^{2 -} For Deleuze, although the elements have a tendency toward "territorial closure" that tends to restrict them, and the relations between them, on the contrary, connect them, the relationship between the elements and the relations is not one-way (Bell, 2010: 19; Deleuze & Guattari, 1987: 337). Deleuze proposes that there is a "coadaptation" (Deleuze & Guattari, 1987: 71, 91) or reciprocal presupposition of the two (Deleuze & Guattari, 1994: 74, 77), so that the elements and the relations are "mutually transformative" and act "in a kind of reciprocal feedback loop" (Nail, 2017: 26).

The interpretation of the operation of narrative lays a foundation for a further exploration on architectural expression in film. The way in which film narrative participates in architectural expression is the constitution of one of the three conditions of the representational assemblage. It activates the content, which is the objectual materiality of architecture as the set of architectural elements visually represented in films, including the material, spatial, morphological and typological aspects. It also activates the relations within the network that associates the architectural elements.

In such assemblages, film narrative gives architectural elements different weights. Some are thus active, while some are inactive. Some are emphasized, while others are ignored. This reconstructs and strengthens the state and portion of different architectural elements participating in the relations. The operation of narrative in repetition realises architectural associations by changing the relations between elements and designing their participation. It does not change the appearance of the architecture, but realizes its localization to the film environment, enriching its expression.

2.3 - The activation as absolute positive deterritorialization

The discussion above describes how the film narrative realizes its associative task by completing the reconstruction and strengthening of the relations between the material architectural elements. This function, in assemblage theory, is defined as deterritorialisation. Deterritorialization is described by Parr (2010) as a "movement producing change", holding that it indicates the creative potential of an assemblage as "transformative vector in a territory" (69). He proposes that to reterritorialize is to "free up the fixed relations that contain a body all the while exposing it to new organisations" (69). Deterritorialisation is associated to reterritorialization, which is the way in which separated elements recombine and enter into new relations (Patton, 2010: 73).

Deleuze and Guattari (1987) use the concept of "deterritorialization" to describe how an assemblage works and distinguish it in four types along the twin axes of absolute and relative, positive and negative (508-10). There are four types of deterritorialization: relative positive de-

territorialization, relative negative deterritorialization, absolute positive deterritorialization and absolute negative deterritorialization. Deterritorialization is relative when it concerns the movements within the actual order of things, while absolute deterritorialization acts as its "internal dynamic" concerning the state of things (Patton, 2010: 73-4). Relative deterritorialization involves the escape of an element or agency from an established assemblage (Nail, 2017: 35). The difference between the positive and the negative lies in the result of the escape. Relative negative deterritorialization aims to maintain and reproduce an established assemblage, while the positive leads to an ambiguous result: both the possibility of a new world and the possibility of co-optation (Deleuze & Guattari, 1987: 297, 256-7). For absolute deterritorialization, the difference between the positive and the negative corresponds to the difference between "the connection and the conjugation" of deterritorialized elements (Patton, 2010: 74). Absolute deterritorialization is positive when it leads to the creation of a new assemblage (Nail, 2017: 35-6; Patton, 2010: 74), while it is negative when it undermines all the assemblages (Deleuze & Guattari, 1987: 510, 636).

Among these four types, this paper focuses on the absolute positive deterritorialization. According to Deleuze and Guattari (1987), this type "prefigures" a new world, which does not "emerge ex nihilo" (Nail, 2017: 36), but is created in the shell of the old (Deleuze & Guattari, 1987: 142, 177) with "subjects and objects that are continually escaping from all assemblages" (Nail, 2017: 36).

Such a process is in line with the above observations on the nature of rich architectural expression in films that repeat reality with independent narratives and autonomous expressive abilities. The narrative enhancement can be understood as a kind of "invasion" into the materiality of the represented architectural content. The absolute positive deterritorialization is thus conceived as the mechanism of the generation of architectural expression. It entails the information exchange in the association between film narrative and architectural objective materiality. Specifically, when film narrative changes the state of the architectural elements by reconstructing and strengthening a set of new relations among them, it deterritorialises and reterritorialises their information

under the guidance of the new narrative agents.

The boundary of the architecture is thus expanded as the architectural elements can carry not only the architectural information, but also the film narrative information. In this process, architecture and narrative cocreate each other. On one hand, architecture can break through the traditional spatial dimension and be redefined in a larger scope, creating a polysemic complex space experience. On the other hand, architecture can present the narrative information in its unique visual way and help the film visualize the abstract narrative agent.

3 - Case Study

The application of the theory of differential repetition assemblage on actual case studies to unveil the power of narrative emplacement has been carried out on relevant instances of digital architectural space in cinema. Fictional architecture, traditionally deemed essential to performing arts such as theatre and cinema to produce meaningful emplaced repetition (Rohmer, 1948; Manfredini, Salotti & Taut, 1998), with the application of digital technology has radically improved the power of its spatial constructs with a deep sensual experience. Science fiction films have developed an eminent capacity in world-building storytelling and developed consolidated mechanisms for the construction of hyperreal representation. Within science fiction, the Marvel Cinematic Universe (MCU) film series stand out for the innovative application of digital technology in the construction of emplaced narratives.

The recent progress in this area can be observed by comparing older physical sets, such as those in 2001: A Space Odyssey (1968) or the Star War Series, with MCU's digital sets. The spatialities MCU films are much more perceptually intuitive and convincing (Prince, 2012). The efficient transduction of narrative realised with their technology has taken the medium to a incomparably immersive aesthetical experience, as stated by Robert Neuman (2009), a supervisor of stereoscopic film production for Walt Disney Animation Studios.

On this basis, the representativeness of MCU films is reflected in their double confirmation of the important role of narrative emplacement in this immersive experience. On the one hand, as Alison Griffiths (2008) defines

the digital space as eliciting a bodily sense of participation from viewers (18-9), she describes it as "neither fully lost in the experience nor completely in the here and now" (3). When viewers see the imaginary world simultaneously as a technological achievement and as an authentic part of the imaginary narrative world, it is the film narrative that settles this dialectic. On the other hand, the dialectic in the narrative in the MCU films goes one step further, as it is born with a source of tension between different worlds (the "super" world and the "normal" world) (Gaine, 2011) that requires a higher immersive qualities. In addition, MCU films have developed novel hypernarratives though transmedia forms (Menard, 2015) that have expanded the conventional structure of serial repetitioning cinema (Shaham, 2013) by producing multimodal integrated actual and virtual systems of redoubling reality.

The study of MCU films complex systems of repetition and assemblage concentrates on two differential repetition assemblage processes. One concerns narrative emplacements that combines "super" world and "normal" world. This process produces architectural assemblages through synchronic iterative juxtaposition that make possible the concurrent coexistence of incompatible spaces that contain multiple and variable horizons. Coincident, multi-level contexts are produced through a disjoint blending of various concatenations of consistent types and forms. The other regards narrative emplacements that make homologous contrasting worlds. This feature occurs over different films of the same series with architectures of diachronic iterative juxtaposition that present homologous element subject to radical substitutions over time.

3.1 - Synchronic iterative juxtaposition

The Marvel Movie series has as main characters superheroes that, as Vincent Gaine (2011) posited, concurrently occupy the "normal" and the "super" worlds. The prime source of tension in the superhero narratives the clash between these two worlds (113-23). The worlds constructed in Marvel series films are future worlds full architectural scenes constructed by impossible juxtaposition. A typical example of the synchronic iterative juxtaposition assemblages is Hannah Beachler's Golden City capital of Wakanda, a key set of the film series

where an umbrella Afrofuturistic narrative macrotheme hosts a multilevel set of assemblages, such as the vernacular architecture of the traditional South African rondavel huts, the modernist *comics* urbanism of Jack Kirby's high-rises and the ultra-modernist concrete city of Hadid's Wangjing Soho towers. The *Palace*, a key the architectural scene in *The Black Panther* (2018), epitomises this assemblage type.

The Palace is presented with the help of the special effects' technology in multiple forms that show a variety of differently connected architectural elements. All these elements have clear references in the contemporary material reality. The main structure is a high-rise building composed of a podium and two interconnected towers. The tall buildings are made of many superimposed or substitutive architectural elements which are represented in a rather traditional and detailed way. These elements form complex concatenations hold together by multiple sets of relations controlled by the narrative.

From the perspective of assemblage, these architectural elements are the representational contents all related by tight architectural significations. Taking *the shed* as an example, the architectural arrangement includes a sloping roof that forms a part of the smooth outline and serves as a balcony for several actions. In the relational system constructed by the narrative, the shed is a component that does not stop at a single configuration, rather it affirms its spatiality as part of the whole assemblage also when its context changes. For instance, in one case the shed is situated in a virtual African country with developed technology where the opposition and integration of traditional African culture and future technology reflect the central theme of the film narrative.

The narrative strengthens the relationality between juxtaposed architectural elements constructed by different architectural typology and morphology. The concurrent coexistence of juxtaposed incompatible spaces of the modern and abstract architectural elements and the traditional and concrete architectural elements resulting from architectural arrangement are assembled by the narrative. In this process, the modern architectural elements are manifest disruptive technology, while the traditional architectural elements are assigned with the role of cultural heritage. Their assemblage reconciliates

the architectural inconsistency by carrying the narrative and architectural information into the seamless expression of the film.

Film narrative thus localizes these architectural elements repeated from discordant realities to the film environment through constructing a set of variable and instable hyperspatialities. This relation rationalizes the juxtaposition of these elements and provides an explanation for the representation. The juxtaposition of various architectural elements in architecture is crucial to a narration where opposition and integration of differences are the prime vehicle for the understanding of a novel type of multiple and plural spatialities. The assemblage created by architecture and narrative produces a rich expression thar uses repetition to produce realities of difference.

3.2 - Diachronic iterative juxtaposition

Serialization is another feature of the Marvel series films. In the same series, the development of narrative often requires an architectural scene to be represented in multiple films repeatedly. However, they neither choose to copy the architecture completely, nor choose to replace it. Instead, the architecture is represented in an iterative way, "growing" with the development of narrative. This kind of repetition leads to a situation in which the architectural materiality remains unchanged to the greatest extent, while the expression of it changes according to the narrative. The Avengers tower, a key architectural scene in *The Avengers* (2012, 2015), epitomises this.

As far as the materiality of the architecture is concerned, after the first film, its representation in the second film is a precise repetition. Take the decoration on the facade as an example. In the first film, a sign with the word "STARK" is hung on the facade of the architecture. In the end of the film, the sign is destroyed, leaving only the letter "A". Similarly, in the second film, when the architecture is represented again, the letter "A" also appears, designed as part of the facade. It can be concluded that from the first to the second, the architecture keeps the continuity of its materiality.

However, the architectural expression realizes iteration. It comes from the superimposition of film narrative, because from the first to the second, it is the shift of the

focus of film narrative from Tony Stark to the Avengers that completes the architectural iteration. Specifically, take the letter "A" as an example. Firstly, it is an architectural element participating in the architecture-narrative assemblage in the first film. The assemblage is generated by connecting both the architectural information and the narrative information, in which the letter "A" takes "STARK" as the agent and is connected by the relations constructed by the film narrative in the first film.

Then in the second film, the letter "A" is represented as an architectural element again, but it is given a new agent to participate in a new relation. As an abbreviation for the Avengers, the letter "A" in the second film is assigned the agent of "the Avengers". It leads to a situation in which the new architecture–narrative assemblage generated in the second film consists of the architectural elements repeated from the first film and connected under the relations constructed by the narrative in the second film. When the architecture is represented in the second film, loyal audiences can perceive the whole narrative development from the first to the second from the letter "A". Architecture thus becomes the epitome of the development of the narrative through iteration, narrating visually and autonomously in films.

4 - Conclusion

By using Deleuze's concept of repetition and assemblage, this paper interprets the complex mechanism behind the production of emerging architectural hyperspatialities in cinema. The discussion submits that these representations accomplish a project of implementing a spatial production that transcend the limits of actual reality that has been pursued by filmmakers since the inception of moving image technology. Through a theoretical speculation around representation as reality produced with differential repetitions and rhizomatic multilevel concatenations. Architecture in film is described as a realm that enables the production of territories in form of variable assemblages of heterogeneous elements (the fragments forming the concrete content), associating relations (the regime of signs forming the expression) and narrative enhancements (the agents of reterritorialisation of deterritorialised elements and relations).

Spatially, these enhancements change the relations between the repeated architectural elements through an information-exchange process which, in Deleuzian

terms, is capable of producing an absolute positive deterritorialization that "does not function to represent, even something real, but rather constructs a real that is yet to come, a new type of reality" (Deleuze, 1987: 142). A study on two types of assemblage production through differential repetition discussed how iterative juxtaposition has been deployed in synchronic and diachronic forms to establish hyperreal concatenations of novel types of (in)consistent realities. By applying assemblage theory to decode the spatiality of these realities, exemplarily found in the Marvel series films, this exploration contributes to the investigation on the progressive capability of contemporary speculative architecture to transcend the conventional limits of spatial individuation. By engaging in a theoretical discussion on the construction of architectural emplacements supported by the new technologies, it foregrounds the reterritorialisations mechanism emerging in the age of digitally augmented and transduced repetition.

Beyond the cited sources, the theoretical underpinnings of his research include multiple studies on contemporary spatial (re)production. Reflections on experiential authenticity in mechanically reproduced spatialities have engaged with social and cultural problems resulting from research on themed environments in our everyday life (Gottdiener, 1997; Manfredini, 2019a; Straub, 2012); intersections of conceived, perceived and lived spaces (Heidegger 1971; Lefebvre [1974] 1991; Soja 1996); and emerging narrative contexts resulting from transcultural, transnational and transductive processes (Berg 2016; King 2004; MacKenzie, 2006; Manfredini, 2019b; Sassen 1991). Important references for this discussion were also analytical descriptions of novel spatialities of networked translocalisation (Appadurai 1995; Blommaert 2010; Carpentier 2007; Greiner & Sakdapolrak 2013). Particularly relevant were those addressing question of pluralism in the production of multiple and competing narratives informing counterhegemonic discourses (Laclau & Mouffe, 1985; Manfredini, 2017, 2019b, Mouffe, 2016) as they guided the interpretation of the new heterotopic realities as instances of affirmations of maximal difference that deploy the potential of machineries of forces, flows, and breaks of realities towards radical emancipatory processes for the construction of a better society.

References

AlSayyad, N. (2006). Cinematic urbanism: A history of the modern from real to real. Routledge.

Appadurai, A. (1995). The production of locality. In R. Fardon (Ed.), *Counterworks: Managing the Diversity of Knowledge* (pp. 204–225). Routledge.

Augé, M. (1995). Non-places: An introduction to supermodernity. Verso.

Bazin, A. (1971). What is cinema? University of California Press.

Becherer, R. (1996). Past remembering: Robert Mallet-Stevens's architecture of duration. *Assemblage*, 31, 17-41.

Becherer, R. (2000). Picturing architecture otherwise: The voguing of the Maison Mallet-Stevens. *Art History*, 23(4), 559–598.

Bell, J. A. (2010). Assemblage + Architecture. In Adrian Parr (Ed.), *The Deleuze dictionary* (pp. 19–21). Edinburgh University Press.

Benjamin, W. (2007). The work of art in the age of mechanical reproduction. In *Illuminations*. Schocken Books.

Berg, P. (2016). The political economy of city branding. Regional Studies: Theme Issue: The Regional Impact of Reconfiguring Global Production, 50(2081–2083).

Blommaert, J. (2010). *The sociolinguistics of globalisation*. Cambridge University Press.

Boorstin, D. (2012). [1961]The image: A guide to pseudo-events in America. Vintage Books.

Borges, J. L. (1962). Ficciones. Grove Press.

Bosker, B. (2013). *Original copies: Architectural mimicry in contemporary China*. University of Hawaii Press.

Carpentier, N. (2007). *Translocalism*, community media and the city. VUB Centre for media sociology.

Deleuze, G. (1994). Difference and repetition. Athlone Press.

Deleuze, G., & Guattari, F. (1983). Anti-Oedipus: Capitalism and schizophrenia. University of Minnesota Press.

Deleuze, G., & Guattari, F. (1987). A thousand plateaus: Capitalism and schizophrenia. Continuum.

Deleuze, G., & Guattari, F. (1994). What is philosophy? Columbia University Press.

Deleuze, G., & Parnet, C. (1987). *Dialogues*. Columbia University Press.

Eco, U. (1986). [1967] Travels in hyperreality (trans. by W. Weaver). Harcourt, Inc.

Gaine, V. (2011). Genre and super-heroism. In R. J. Gray

& B. Kaklamanidou (Eds), The 21st century superhero: Essays on gender, genre and globalization in film (pp. 113–123). McFarland.

Gottdiener, M. (1997). The theming of America: Dreams, visions and commercial spaces. Westview Press.

Greiner, C., & Sakdapolrak, P. (2013). Translocality: Concepts, applications and emerging research perspectives. *Geography Compass*, 7(5), 373–384.

Griffiths, A. (2008). Shivers Down Your Spine: Cinema, Museums, and the Immersive View. Columbia University Press.

Heidegger, M. (1971). Poetry, language, thought (trans. by A. Hofstadter). Harper & Row.

Huxtable, A. L. (1997). The unreal America: Architecture and illusion. New Press.

Jameson, F. (2005). *postmodern cultural theory*. Peking University Press.

King, A., & Ebrary, I. (2004). Spaces of global cultures: Architecture, urbanism, identity (Architext series). Routledge. Koeck, R. (2013). Cine-scapes: Cinematic spaces in archi-

tecture and cities. Routledge. Kracauer, S. (1947). From Caligari to Hitler: A psychological

history of the German film. Princeton University Press.

Krasner, D. (2008). *Theatre in theory*, 1900-2000. Blackwell Publishers.

Laclau, E., & Mouffe, C. (1985). Hegemony and socialist strategy: Towards a radical democratic politics. Verso.

Lefebvre, H. (1991). [1974] The production of space (trans. by D. Nicholson-Smith). Basil Blackwell Ltd.

Livesey, G. (2010). Assemblage. In A. Parr (Ed.), *The Deleuze dictionary* (pp. 18–19). Edinburgh University Press.

Lorraine, T. (2011). Deleuze and Guattari's immanent ethics: Theory, subjectivity, and duration. State University of New York Press.

MacKenzie, A. (2006). *Transductions: Bodies and machines at speed*. Continuum.

Mallet-Stevens, R. (1922). Le décor moderne au cinéma. L'Art et Les Artistes, January (IV:23), 157–159.

Manfredini, M. (2017). The augmented meta-public space: Interpreting emerging transductive territories in enhanced centres of consumption. *The Journal of Public Space*, 2(3), 111–128.

Manfredini, M. (2019a). Envisioning atmospheres of spectacle and activism. Utopia and critical urbanism instruments for the reclamation of the fragmented terri-

tories of the WALL and the MALL. The Journal of Public Space, 4(4), 83-108.

Manfredini, M. (2019b). Mobility, translocalisation and transduction: The resilience of new urban commons in the era of advanced technospheres. In A. Marata (Ed.), *Diverse City* (pp. 1–10). CNAPPC - Consiglio Nazionale architetti Paesaggisti Pianificatori e Conservatori.

Manfredini, M. (2019c). Simulation, control and desire: Urban commons and semi-public space resilience in the age of augmented transductive territorial production. *The Journal of Public Space*, 4(2), 179–198.

Manfredini, M., Salotti, G.D., & Taut, B. (1998). Bruno Taut, Der Weltbaumeister: l'interno e la rappresentazione nelle ricerche verso un'architettura di vetro. F. Angeli.

Mouffe, C. (2016). Democratic Politics and Conflict: An Agonistic Approach. Política Común. https://doi.org/10.3998/pc.12322227.0009.011

Menard, D. (2015). Entertainment assembled: The Marvel Cinematic Universe, a case study in transmedia. Liberty University.

Nail, T. (2017). What is an assemblage? *Substance*, 46(1), 21–37.

Neuman, R. (2009). Bolt 3D: A case study. *Proceedings of SPIE 7237*, 72370F. http://spiedigitallibrary.org/proceedings/resource/2/psisdg/7237/1/72370F_ 1?isAuthorized=no

Neumann, D. (1999). Film architecture: Set designs from Metropolis to Blade runner. Prestel.

Parr, A. (2010a). Deterritorialization/Reterritorialization. In Adrian Parr (Ed.), *The Deleuze dictionary* (pp. 69–72). Edinburgh University Press.

Parr, A. (2010b). Repetition. In A. Parr (Ed.), *The Deleuze dictionary* (pp. 225–226). Edinburgh University Press.

Patton, P. (2010). Deterritorialization + Politics. In Adrian Parr (Ed.), *The Deleuze dictionary* (pp. 72–74). Edinburgh University Press.

Penz, F., & Lu, A. (2011). Urban cinematics understanding urban phenomena through the moving image. Intellect.

Penz, F., & Thomas, M. (Eds). (1997). Cinema and architecture: Melies, Mallet-Stevens, multimedia. BFI Publishing. Prince, S. (2012). Digital visual effects in cinema the seduction of reality. Rutgers University Press.

Relph, E. (1976). Place and placelessness. Pion.

Rohmer, E. (1948). Cinema: The art of space. In *The Taste for Beauty, trans. Carol Volk* (pp. 19–29). Cambridge University Press.

Sassen, S. (1991). *The global city New York, London, Tokyo*. Princeton University Press.

Scheffauer, H. G. (1960). The vivifying of space. In Freeman (24 November-1 December 1920); re- printed in Lewis Jacobs, ed., Introduction to the Art of the Movies (pp. 76–85). Noonday Press.

Shklovskii, V., & Sher, B. (1990). Theory of prose. Dalkey Archive Press.

Shaham, I. (2013). The structure of repetition in the cinema: Three Hollywood genres. *Poetics Today*, *34*(4), 437–518.

Smith, D. (2006). The concept of the simulacrum: Deleuze and the overturning of Platonism. *Continental Philosophy Review*, *38*, 89–123.

Soja, E. W. (1996). Thirdspace: Journeys to Los Angeles and other real-and-imagined places. Basil Blackwell Ltd.

Stam, R. (2000). Film theory: An introduction. Blackwell Publishers.

Straub, J. (2012). *Paradoxes of Authenticity Studies on a Critical Concept*. Bielefeld transcript Verlag.

Tim Bergfelder, Sue Harris, S. S. (2007). Film architecture and the transnational imagination: Set design in 1930s European cinema. Amsterdam University Press.

Vidler, A. (1993). The explosion of space: Architecture and the filmic imaginary. *Assemblage*, Aug. (21), 44–59.