

Carmen Aroztegui Massera

Arquiteta, professora adjunta da Escola de Arquitetura da Universidade Federal de Minas Gerais (UFMG), Rua Paraíba 697 sala 101, Centro, Belo Horizonte, MG, CEP 30130-140, (31) 3409-8812, aroztegui@gmail.com

Abstract

In the field of architectural representation, film constitutes an important resource since it expresses the lived dimensions of a space. Cinematic space makes sense only in the context of the subject's experiencing of events. This paper contends that visualizations of architecture emphasize the object/building, stripping space of the subjects of everyday's practices. The paper discusses the nature of the subject, and the event in film theory, and architecture in order to analyze an awarded example of an architectural animation, Alex Roman's "The Third and the Seventh."

Key-words: animation, representation, film, subject.

Architecture's visualizations, and in particular the animations produced in Computer Graphics (CG), have been criticized from several aspects. From the modeling perspective, most visualization produced using CG invariably tends to "hard-edged-objects-in-empty-space" (DAVIES, 2004). Perhaps this emphasis is due to the procedure in producing such visualization, which relegates to a second stage all other modeling elements (i.e. camera, light, atmospheric effects, video editing, and audio editing). Nonetheless, such critic echoes with the questioning made from phenomenology as to the reduction of representation to an optical image, stripped of the subject meaningful construction of space.

The digital screen has the awful potential of creating the delusion that the optical image, its space, is the reality that appears to us in our lives: this is indeed a terrible tragedy that can only impoverish the world and our consciousness as the artifacts it conjures are built. (PÉREZ-GÓMEZ, 2011)

The warning gets special relevance when considering architects professional practice, the project, as pre-figuration of a real building. It is worrying the

production of traditional animations in architecture that present a building with a camera flying around it, displaying it "objectively," with no people, and implying an exterior alienated subject.

Nonetheless, lately, the inputs of professionals with CG background, and the affordability of grater computational power, are affecting such tradition of animation in architecture. This article focuses in one of such explorations in order to discuss the opportunities and pitfalls of its strategy. The strategy, *which coincidentally is widely promoted by software and hardware companies, could be summarized as follows: highly photorealistic renderings of space, materials, and lighting combined with slow camera movements. Furthermore, within this strategy, the animation became a key piece in the advertizing of the building at the end of the design process.*

Such photorealistic strategy shares with film the production of imagery that retains the impression of capturing a moment, a concrete situation. However, films resorts heavily in the portrayal of an event through narrative. Even though we can engage in film narrative without any effort, once we look at

the film's planning of the scene, we realize how a film's representational codes are distinct from real life perceptions. In film, the playing of the gazes and the audience identification is supported by nontrivial codes of manipulation of the image sequences. Understanding the distinction between real life perceptions and the filmic representation of space is fundamental when speculating on the potential of such representations.

Subject and event in cinema

Films share with traditional Cartesian representations a monocular vision, and the verisimilitude that accompanies the projective method. As an audience, we engage with film easily. Even though we seat in the movie theater, quiet and in the dark, we feel as if we have been to another time and place. It feels as if we have been to the place the movie sought to take us, enduring the hero's misfortunes, and rejoicing in his victories. Such a movie feature is relevant to the architect's profession since it provides representations of space, which expresses space through experiencing.

Even though we feel transported to the time and place of the movie, remembering a filmic space is not the same as having experienced a space in real life. Deleuze (2009) points out the differences between the immobile and voyeuristic audience's attitude when watching a film, and the attitude involved in moving and interacting with the world, actually embodied in a tangible space. Different from the experience of real space, audiences elaborate upon the meaning of space via the point of view of the narrator or the movie's key characters. The intimate and dynamic process of identification plays a major role in how film draws audiences into the narrative. Metz (1982), and later Aumont (1996), referred to a process of double identification. Primary film identification relates to the spectator conflating the camera with his or her own eye. The spectator experiences the film as being the focus of the representation, positioned in a privileged place at the center of the omnipresent vision. Secondary film identification originates from the spectator's predisposition to engage with the situation narrated. Aumont (1996) establishes a psychological and primordial desire in the audience to engage with the story. Similarly, Bordwell (1995) refers to how the audience engages

with the narrative by actively building hypotheses about possible outcomes throughout the viewing of the film. Identification during the movie is not monolithic, stable or permanent. On the contrary, during the film the audience can identify with the gaze of a variety of different characters or situations, from one scene to another. It is important to note that this theory of filmic identification implied a correspondence of the camera (and projector) with the spectator's eye. Vision and gaze were conflated. Nevertheless, such correspondence is considered a misconception in later film theory and is highly questioned (COPJEC, 1989). Vision and gaze are distinct. Vision relates to perception, the ocular representation shaped according to the laws of physics. Gaze relates to emotion "is the anxious state that comes with the awareness that one can be viewed." The relation of the subject with the screen is not merely a relation of sense and recognition, which considers the screen as mirror (COPJEC, 1989). The subject does not recognize the screen representation with his own conception of self. Therefore, the screen is under suspicion of camouflaging reality.

Acknowledging the distinction of what is an optical phenomenon (vision) and the ways the subject imagines himself/herself (related to the gaze) goes beyond film theory and into the discussion of representation and the real. Film brings the space, as established before, in an individual who is immobilized, visually and auditory over stimulated, and mentally engaged in a narrative. Experiencing real spaces is quite different from film: fully sensorial, embodied, involving the fruition-movement, and not necessarily an isolated practice. It carries the complicity of others, spatially and temporally synchronic. Architects should recognize the limitations of the representation strategies as simulations of the real.

In order to expose such limitations I propose to discuss the nature of the event – experienced in real space an expressed in films.

Kwinter (2001) proposes revising the nature of event in the context of architectural morphogenesis and warns to the risk of "falling into formalistic parody or mere embellishments and celebrations of market logic in frictionless freefall." He proposes a theory that would shift the event from the logic of the

possible and the real that relies in appearances and resemblance, towards the virtual and the actual. Experiencing is not predetermined by space or its predefined possibilities, but it happens as an actualization of its virtual opportunities. Such shift would position architecture "in full proximity and intimacy with the system of forces that give shape and rhythm to the everyday life of the body." (KWINTER, 2001). Architecture would be redefined "not by how it appears, but rather by practices those it partakes of and those that take place within it." (KWINTER, 2001). Kwinter emphasis in the virtuality of the practices, related to the contingency of everyday life, distances the event (lived in the real) from the representation of the event, discussed in film theory.

Preoccupied with the links of modern time and the emergence of cinema, Doane (2002) exposes two aspects of the word *event*. On one hand, event "implies the fortuitous, the accidental, transience, and unpredictability (as in 'events overtake us')" (p.140). This aspect, the event as contingent, is connected to life, the concrete, and to a resistance to structure, meaning and the rationalization of time. Perhaps this aspect of the event is the one that relates best to Lefebvre's "lived space" since it relates to our everyday lives activities that actualize the space, and that do not signify. The contingent also relates to what Kwinter refers to the actualization of the virtual, an event not predicted as a possibility that simply happens.

On the other hand, the word event connotes "a high degree of constructedness, as in the notions of a media event or social event." (DOANE, 2002, p. 140). This aspect leads to identifying a structure that makes an event meaningful, transcendent and gives a representation of totality. They could be everyday lives activities, but made significant through a narrative. Doane (2002) and Mulvey (2006) associated this feature of the event to memory, a remembered traumatic event that erupts into the present. Memory belongs to a lived experience, pre-verbal. But the way a remembered event is signified and structured into language in the present, approaches memory to cinema since both resort to a re(a)presentation through language of something past that is absent. As a representation, movies have the potential of eliciting an unconscious structure of meaning. Mulvey goes further saying that cinema

"may be compared to the memory left in the unconscious by an incident lost to consciousness. Both have the attributes of the indexical sign, the mark of trauma or the mark of light, and both need to be deciphered retrospectively across delayed time." (2006, p.9).

The different aspects of the *event* in cinema – contingency and structure - are addressed since the initial experiments started by Edison and the Lumière bothers. Early cinema had the "apparent capacity to perfectly *represent* the contingent", "to capture a moment", "to register and repeat 'that which happens'." (DOANE, 2002, p.22). The archival desire associated with the technological assurance of indexicality of film (the fact that it can be played back indefinitely), and the supposed fidelity of the image, reinforced the lure of registering the contingent. The scenes of these early films were produced in a long take, a fixed shot within which the event happened. The themes staged did not need the help of a narrator, either because they were events previously known by the audience (the life of Christ), the quotidian (the arrival of a train, the baby's breakfast), spectacular events (executions), exotic actualities (Sioux dancing), or simply lighthearted provocations (kiss, tricks). These scenes could be presented independently without the need of a narrative to organize them in a sequence. The culture of the spectacle in Paris at the end of the nineteenth century, which included the staging of spectacular events, was fundamental for the emergence of the public that later became moviegoers (SCHWARTZ, 2001). Sometimes, the actors would address the public frontally, or would wink to the camera, acknowledging the public as accomplices of the event. Even though staged, the event was *exhibited* as if caught by chance, and less connected to a narrative structure (COSTA, 2005). Notwithstanding, the scenes carried within both aspects of the event. Doane (2002, p.141) reminds that "[t]he fact that film is finite (the length of the reel) resulted in the necessity of conceiving the event simultaneously in terms of structure, as a unit of time, as not simply a happening, but a significant happening that nevertheless remained tinged by the contingent, by the unassimilable."

After 1908, films started to introduce longer narratives that resulted in the establishing of canonical ways of telling, the classical film (COSTA,

2005). The shot sequence, an inheritor from these early scene examples, begin to be explored within the montage, allowing more complex structuring of time and space. Mostly descriptive of the space, the shot sequence was used in classical films for establishing the situation where the action/narrative would happen. Nonetheless, the event, expressed in the shot sequences, and even though was articulated into a narrative, presented certain ambiguity of interpretation. Bazin (1967) noticed the potential of these shots when combined with a deep focus, in Welles' films and the Italian neorealism. He contrasted the manipulation of time made in the Eisenstein's montage with the isomorphism of time produced in the shot sequences; the time of viewing is the same as the diegetic time. Bazin was preoccupied with liberating the audience of the tyranny of a closed tied narrative and the scene openness to interpretation. Such ambiguity of interpretation would emerge when films would portray everyday life's events, within its meaningless gestures, its descriptions of apparently unimportant details. Concurrently, Deleuze also remarks the difference between realism (a naturalistic approach), where "what it counts is the detail that looks true," and neorealism, where what it counts is "the detail that looks false." (2009, p.513). He reminds, citing Robbe-Grillet, the importance of the detail that looks false as proof of the true reality. Bazin and Deleuze were preoccupied not with the technical device, the shot sequence, but with how it affected the experiencing of the film.

The features inherent to the narrated event, both structure and contingent, articulate the engaging of the audience as a subject. Roughly, it could be said that in one extreme the subject implied in the event-as-contingent is an observer, someone that tries to make sense of a representation. And on the other extreme the subject identified in the event-structure is someone engaged in the action, participating into the narrative. Both features of event, however, relate to its representation. Experiencing space belong to the practices it partakes, the contingent understood as its actualization, and not its appearances or resemblances belonging to the realm of representation.

In the next section, the article will describe an animation in architecture in an attempt to identify the nature of the event and the subject proposed.

The example selected does not aim at being representative of all the cases. Nonetheless, certain common features will emerge and enlighten the potential and limitations of the chosen visualization strategies.

A case: The Third and the Seventh

The winner of the 2010 International Architectural 3D Awards in film (CGArchitect.com) was the animation "The Third and the Seventh" produced by Alex Roman (alias Jorge Seva). Frustrated after ten years of working in the field of Computer Graphics (CG) (SEVA, 2011), Seva decides to take a two-year break to work with "something that caught [his] eye or ha[d] a potential technical challenge" (SEVA, 2008). Using commercial software programs (SketchUp, 3d Studio, After Effects) he recreated fully CG versions of existing buildings from "[the building photographs] for experimenting with new render engine technology improvements, to exercise composition, etc..." The result was a showcase of software abilities "stitch[ed] them all together for other purposes than originally planned." (Seva, 2008). The animation title made reference "to the third and seventh pillars of art: architecture and cinema." (SEVA, 2009). The purpose was to portray "[a]rchitecture through the cinematographic lens." (SEVA, 2009), "an ArchViz example told in a cinematographic advertisement style." (SEVA, 2008). The video is described as "a full-CG animated piece that tries to illustrate architecture art across a photographic point of view where main subjects are already-built spaces." (SEVA, 2009). Nonetheless the absence of a narrative thread, the result is breathtaking.

Slowly paced, the video presents CG scenes of famous buildings (Barcelona's Pavilion, for example) with no other apparent connection than to expose the expertise in the use of CG features. It is suggested at moments, that the images are produced by the cameras, interspersed as shot/reverse shot, within the slow shot sequences of the buildings. But the logic that prevails in the animation is the display of visual effects: hyperrealistic materials, specular reflections of moving objects in curved surfaces, lighting effects, complex object movements (grass, doves, trees), growth, particle animation (petals, pages of books), cloud and smoke behavior, translucent materials, and explosion simulations.

Some of these features are also shared by other animations that won previous film awards (see CGArchitect.com):

- uninhabited spaces;
- long shots with change in depth of field,
- shot sequences with slow dollies, enhancing the rhythm of repetitive elements;
- acceleration and deceleration of time associated to lighting, atmospheric effects, or free falling objects (i.e. the sun bathing the interiors of buildings);
- elements of nature (sky, clouds);
- atmospheric effects (volume light) and particle animations;
- hyperrealist textures showed by in/out of focus, and a shallow depth of field;
- dramatic sunsets reflected on shiny exterior façades;
- blinking of light simulating the turning on the fluorescent lights;
- melodic music (absence of diegetic sound);
- divided screens with different images belonging to the same space.

The list above is not exhaustive. It presents a mix of technical challenges with design options. The animation was frequently referenced in the computer graphics web blogs and communities with regard to the difficulties of producing certain special effects (SEVA, 2008; MACAULAY, 2010; MANAUGH, 2010; HARLAN, 2010). Such effects, as the explosion of books or the computational expensive calculus of caustics, were associated with the creation strangeness; of expressing architecture “[...] in an abstract way. Sometimes surreal.” (MACAULAY, 2010). Other features, like the almost complete absence of the human figure, were design options. It could be said that this almost total absence of the human presence relates to a computational difficulty, since it is a considerable challenge the inclusion of the human body and requires live actions masks. But it is not a coincidence that all other technical challenges are considered but this one. I contend that this absence is intentional and expresses a view of what architecture is all about.

Discussion

Perhaps what is most disturbing is the fact this award is considered architectural related and not simply the recognition to beautifully overcome technical

CG challenges. The production of photorealistic imagery, and special effects using 3D modeling reduces architecture visualization to an advertising tool in the final presentation of exceptional buildings. Maybe following a cliché, dramatic cloudy skies, golden suns, and softly balancing trees, all enter in contact with the building that emerges imposing and centered (cameras tilts upward mostly). The audience is led to see the buildings framed by nature, in a contemplative almost mystic transcendence.

Compared with traditional architecture visualization, which remains almost exclusively in the modeling of the objects, Seva’s animation pushes the envelope showing the potential of modeling non-geometrical elements. The rendering of light in a specific time of the day, the introduction of weather conditions (other than an general sun light), the detailing of textures, etc, brings the visualization closer to the filmic image. The more photorealistic, the closer it appears to be connected to a concrete situation captured by chance. Interestingly, and marking a difference to the majority of CG animations that won this award, the visualization was modeled off real buildings, but completely recreated in CG. It truly accomplishes, outstandingly, the stated intentions of the author: to present a showcase of technical challenges.

Nonetheless, the animation reinstated the most predominant feature in all visualizations: the display of uninhabited spaces. Only after passed 3:14 minutes it appears the profile of a man operating a camera in a tripod, blurred behind a milky glass wall. Later the same man will reappear, his shadow sometimes, but always distant and in full body (long shot). The man, whom is suggested to be the one that records the film, is a lone individual armed with a camera registering the moment. The sequence of “moments” is unarticulated. The camera, directed by the man, repeats over and over his “oh!” when faced to the imposing building. The man is a visitor; he does not inhabit the building. Concurrently, when asked about what was one of the rendered buildings currently used for, and if there was somebody living in it (the “Fuji House” of architect Satoshi Okada), Seva responded: “I do believe it is a weekend residential getaway - I hope so! It must be a beautiful place to spend the weekend at :-)” (SEVA, 2008). The author disregarded the actual occupation of the building. The critic here is not to state that visualizations

should fall into interpretation of a “realistic” portray the people’s life in the building. But to expose how the architectural visualization proposes a particular subject and event: a visitor’s contemplation.

Rethinking Doane’s categories of contingent/structure of filmic representation, the animation allows certain openness of interpretation. The event portrayed - the passing of time, for example - could be seen within the non-important everyday experiencing of an empty building. The sunbathing showed in fast motion, and carefully choreographed with the slowing moving camera, allows perceiving the textures and the playing of the light. The scenes are not tied to the representation of a particular narrated event structure, but describing a situation, a moment of the day. However, the situation always presents a transcendent moment in a spectacular building. The space lived in the quotidian practices, and the space of everyday life is absent. *Architecture as a contemplation practice*, to be revered is the main concept brought by the animation. Such contemplation, as a privileged practice worth portraying, is entangled within the commercialization of spectacular architecture. In other words, the emergence of the subject that contemplates is tightly linked to the “star system architecture” that privileges the event of the transcendent experience.

Reinforced by the absence of a plot, a narrative that could go beyond the subject-contemplator, the animation explored the potential of the shot sequence to the extreme. Through the camera movements - sideways, and in some cases forward/backward dollies - the animation remains as a sequence of establishing shots. Differently from the discussion established by Bazin and Deleuze, the use of the shot sequence does not problematize space. Ambiguity and the representation of “apparently unimportant details” are not used to question or to create an emotive engagement of the audience. The audience remains within a safe distance of the situation.

Similarly as in early movies, the scenes portrayed are self-explanatory events – the passing of time, the flying of books, etc. The event does not need a narrator and exposes architecture in an exhibition regime. However, early films put to evidence the fact they were staged – actors would look straight

into to the camera, wink with complicity, etc. Seva on the contrary, uses the descriptive potential of the shot sequence not to expose the staged exhibition but to introduce a subject voyeur. The subject is not an observer of the scene, as someone looking attentively in order to extract conclusions, but contemplative.

The paper discussed how space experienced through films is substantially different from actually lived space. Events in film are signified in the narrative, and therefore reduced to a set of possible experiences. In actual space, on the contrary, events lack a meaningful structure and relate to the contingent; events are actualizations of the virtuality of the space, and constantly allowing for unexpected significations. Nevertheless, this text also demonstrated that representation in films is not monolithic and can allow for open and ambiguous interpretations. Resourcing to film, architects might produce visualizations that could resort to practices of the everyday life.

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