This paper will address the category of film with the emphasis on spatial analysis that is relevant in the making and the perception of the moving images. Historically, film has been a product of a predominantly urban psyche, as its emergence is linked to the modern city. As a result of its dissemination, film continues to affect our perception and understanding of the city space.

This analysis is followed by the examination of selected examples of the avant-garde film production concentrating on the work of the Constructivists in 1920s Russia and examples of the production in the 1950s France and Japan.

The role of film in perception and understanding

All representations, including film, are unstable categories and are always in a state of flux. Consequently the way in which we perceive and represent space in various media, including film, changes. Driven by our desire, the visual models for representing space are always slightly out of phase and in need of renegotiation and restructuring. This is due to the fact that the desire-driven scopic mechanism has the propensity to explore, use and wear out both representations and its visual mechanisms of production. The wish to see and be astonished anew is therefore set to search for novel visual regimes and setups.

The invention of different visual mechanisms for both presentation and perception bestows upon us the secondary feeling of identity in space and time that is experienced as delight. The sense of identity is therefore established by the systematic production of differences characterised by this constant search for newness. This gradual but nevertheless perpetual mutation of visual mechanisms of representation is paramount.

Both cognitive theory and psychoanalysis have been involved in theorising this phenomenon. Cognitive theory, provided the vehicle for the examinations of the role of film in the works of Rudolf Arnheim (1954/74, 1958) and more recently David Bordwell (1989). Affected by the emergence of psychoanalysis and the Gestalt, cognitive theory stated that people's perceptions, feelings, and actions result in significant part from the processes that are beyond the input to the senses. In regards to the same issue the emphasis of psychoanalysis has been on the examination of the role of the libido and the unconsciousness.

Both schools of thought agree that the processes of perception depend upon prior mental representations that subsequently become projected onto the world as a way of ordering it, or making sense by arrangement. These inner processes construct, in a significant sense, something new out of the data - a stable perceptual world consisting of both an inference about the state of its affairs in the environment, but also of ideas, theories and attitudes.

According to the cognitive theorists, for evolutionary reasons the mental constructs that we bring to the task usually correspond to the patterns shaped by the environment itself. In this constellation the roles of architecture and urban design cannot be underestimated as they
provide the psyche with the blueprints by which it will outline and mould most of its ideas and theories.

Eyes are given to us at birth, but vision is not. We gradually construct it as we progress through life. For example, the "early vision" processes taking place in the cells of various parts of the eye have the role of sharpening and exaggerating minute variations of illumination, texture, and other clues. This is visual data is collected in the early life and stays in the subject’s depository. The same goes for the tactile quality of objects and materials that become linked to their visual perception. Experiences of certain spatial configurations about the relationship of the inside/outside, of the threshold, of climbing, descending or falling etc. are all stored and embodied in the subject.

Through these experiences the visual system "constructs" objects from our rather disorganised visual field. However this construction doesn't mean complete creation, instead the perception is the product of the collaboration between external spatial phenomena and internal processes (Arnheim 1958). The first house, the neighbourhood and the city - have their roles in the formation of our ability to perceive spatially. The specific qualities of the perception will be unique and personal, determined by the experiences of different setups and their configurations and by our own imagination.

**Film and spatiality**

Film has a privileged position in this context. It offers for viewing and appropriation numerous visual and spatial assemblages that join the psyche’s amassed inner supply of spatial and visual configurations.

From the point of view of the subject, there is always a desire for newly generated physical and mental spaces where announcements and creations can happen. The promise and the belief is that in these freshly formed spaces the dichotomies, as oppositions between rival entities, may be considered, reconciled and understood as belonging to metaphysics. Film appears to be able to provide such a space.

Like the perspective in Quattrocento (Koroliija Fontana-Giusti, 1999), the emergence of film has granted the same comfort and reassurance about the world. The comfort arises from the fact that the realm of internal processes and imagination (fantasy) could be first externalised and then retrieved in the form of the film. This room and the opening for fantasy is about going beyond and surpassing the outdated. In this sense the role of the avant-garde film is exceedingly pertinent. It contains and marks big leaps in the habitually gradual mutation/evolution of representations, visual mechanisms and vision itself.

On the subject of film and reality, Rudolf Arnheim (Grundmann, 2001) points out the crucial difference between him and Siegfried Kracauer. For Kracauer the world was understood as a raw material and photography and film were in the business of “rescue of outer reality” by introducing physical nature in its original state. By contrast Arnheim argues: “But images do not imitate reality, they hint at it. They have the ability to make the essential part visible, and are thereby a fundamental principle for understanding the world. Vision and perception are not processes that passively register or reproduce what happens in reality” (Ibid).

This emphasis on the difference between the hint at reality and the physical imitation of it is significant. Arnheim continues: "Vision and perception are active, creative understanding.
You have to imagine the following: When we observe something, then we reach for it; we move through space, touch things, feel their surfaces and contours. And our perception structures and orders the information given by things into determinable forms. We understand because this structuring and ordering is a part of our relationship with reality. Without order we couldn't understand at all. Thus in my opinion the world is not raw material; it is already ordered merely by being observed" (Ibid).

When we use the camera to make a shot, we begin to represent, by means of its lenses and mechanism of capturing the image, that, which we have essentially already ordered by observation. However additional play and negotiations happen between us and the camera that result in the footage for viewing and subsequently the montage. The extent to which the work is adding innovation to the viewing depository of the spectators will mark the work’s originality. The degree to which that added visual value is able to connect to the subject on various levels will mark its overall signifying, expressive, and emotional value.

**Depicting movement in urban space**

One of the main novelties about film had been the fact that it was apparently able to capture the fourth dimension – time. In doing so, it depicted movement as it spread-out. By depicting various kinds of transfer, passage, shift or interchange, film became involved in the exploration of space in a qualitatively new fashion.

Depicting moving rearrangements meant that film was able to represent life as it unfolded in time and space by the speed of twenty four images a second. This is due to the persistence of vision that secures the illusion of motion which results when a series of film images are displayed in this quick succession.

On the unconscious level and expressed poetically, this flux/animation of images meant that for the first time that which moves us all, the spirit (anima mundi), (Deleuze 1993) was apparently ‘ushered’ into previously dead and immobile representations. With film, at stake was something much greater – the representation of the special breath of life that goes through all of us from the moment we are born until the last of our traces are preserved for another person’s memory…

While the presentation of movement and life in space and time, sits comfortably with films whose structure follows a textual narrative, the challenge and innovation came from the area of the avant-garde film as it does not necessarily follow the narrative storytelling. Rather it aims to go beyond text in order to explore and experiment with the structure of the film itself (Bordwell & Thompson 1979). This orientation toward trans-textual norms in the avant-garde films allowed for the possibility of sensing beyond conventions.

Concerning architecture, urbanism and the representation of space this experimentation was significant. It enabled the audience to see the cities and the environment in a different way. Crucial contribution is to be found in the early works of the film makers such as Dziga Vertov and Sergei Eisenstein. Their works exhibited ambition and imagination that have shown the
inventive power of the new medium. In these groundbreaking works by both directors we also sense the cross-fertilization with other disciplines.

Vertov, initially studied music and later medicine at the Psychoneurological Institute in St. Petersburg while experimenting with "sound collages". He worked for the newspapers and for the Kalinin’s agit-prop train. His aim was to capture "film truth"—that is, fragments of reality which, when organized, conveyed a deeper truth routinely not available to the naked eye. In the "Kino-Pravda" series, Vertov focused on everyday experiences, filming marketplaces, bars, and schools, sometimes with a hidden camera and without permission. *The Man with the Movie Camera* (1929) ‘Fig.1’, for example, is about this kind of exploration of space, cities, movements, vision, sound and speed. It is a novel representation of the experience of daily life.

Sergei Eisenstein (Bordwell 1993, Shaw 2008) is acclaimed for his use of montage, his film structure, fast cuts, sense of rhythm, spatial knowledge, and abstract counterpoints. His most famous shot is architectural in its nature. The anthological take shows baby’s pram moving overwhelmingly down the Odessa Steps ‘Figs 2 and 3’ as advancing soldiers step down at workers, women and children. It is a remarkable scene in its cruelty, and remains seminal in viewers’ helplessness, *Battleship Potemkin* (1925).

The sequence is spatial, architectural and urban. Over the years it has turned the original film location into a major tourist attraction in Odessa. The multiple shots provide a clear idea of space and the workings of its elements. The viewer is painfully aware where the danger comes from. The geometry of the square and of the movement of the army echelon is projected with architectural clarity. They contrast the random soft swarms of people. The swift montage and its arrangement of shots and sequences produce striking effects upon the viewers.
In his later essay, Eisenstein argues for organicness of the overall structure: “Organicness can be defined by the fact that the work as a whole is governed by a certain law of structure and that all its parts are subordinated to this canon” (Eisenstein 1949). These concerns about the parts and the whole coupled with the urge to govern them by the same law of structure – the same canon- reads like a page taken from the Renaissance architectural treatises, where the principles could be traced back to the ancient notion of harmony. The five part structure often used by Eisenstein corresponds to the five bays of the classical temple, or the five parts of the Greek tragic drama. Eisenstein, an architect by education, had incorporated into his films the principles that had originally determined his understanding of the notion of structure.

With film’s ability to represent time, a fresh language has emerged – an idiom that ‘timeless art’ of architecture could not embody. Such new expressions were: the overall dynamism of the sequences, the acceleration of cuts taken from different angles producing the effect of urgency, depiction of architecture in movement (the drawbridge in October, 1927) and in use (the dying woman and the dangling horse on the same bridge).

Both Eisenstein and Vertov indulged in shooting variety of movements and editing them inventively. The montage included array of the crowds, moving vehicles, trains, buses, ships, bridges etc. Indeed many of these sequences became anthological for Constructivism and film in general. The experiments with spatial representation enriched the understanding of the possibilities that modernism had to offer both as a world view and as a particular system of expression and production. Consequently, a great deal became absorbed into the film syntax, the language of the main stream and later avant-garde cinema.

The city space as impermanence

One such example is the work of Yasuhiro Ozu (Bordwell 1988). Ozu’s oeuvre comprises many apparently abstract urban shots involving cityscape, pedestrians, vehicles and deep perspectives. Film critics call these “pillow shots“- stating that their role is to give the spectator a rest between the dialogues. They could also be interpreted as typically infused with the Japanese concept of Mono no aware, an awareness of the impermanence of things – what Europeans call sic transit gloria mundi.

In addition to their documentary or interpretative value, these shots make the settings livelier by means of movement not burdened by the main narrative. Consequently, the film becomes vibrant and instinctive.

As an architect and urban designer I increasingly watch all movies with this private interest in mind. With its big dives into experimentation, the avant-garde production is resourceful about this aspect. For architects these shots are appealing as they are often valuable portrayal of the cities. Streets, cars, trains, trams, pedestrians - are often necessarily involved in the scenes of urban choreography. The dynamism they fabricate has a structural role in the narrative suggesting passages of time or other allusions in regards to the plot. Often the amount of movement would align or contrast itself to the amount of time that needs to be suggested.
In Ozu’s portrayals of Japanese cities in the 1950s, the “pillow shots” have a structure that often includes a poster or a sign in the first plan while the background contains movement. The movement is generally slow and sometimes interlaced with signs; rare pedestrians meander around city corners. Sharp-angled perspectives with layering of void spaces are deployed for the depth of the picture containing gentle strata of shimmering lights, occasional unhurried movement of people and vehicles, floating drapery etc. Shadows are often from the side and under approximately forty five degrees. Characters are implied by their absences. The shots capture time and its passage suggesting the transcendence of the city space ‘Fig. 4’.

The space of a wounded city

In this context it is impossible not to mention *Hiroshima mon amour* (1959) the seminal film by Alain Resnais. The film works through the superimposition of the narrative (text and screenplay by Margueritte Duras) and the city.

A French young woman has spent the night with a Japanese man, at Hiroshima, where she went to shoot a film about peace. He, a married architect, reminds her, an actress, of the first man she loved during World War II – he was a German soldier. The lovers feel deep passion for each other and she discloses him her secret. The main themes of this film are memory and oblivion.

The main structure of the film consists of the juxtaposition of sequences depicting, on the one hand, the post nuclear context of the ravaged city and on the other, the scenes of the lovers’ discourse. The extreme state of the city is presented by the portrayal of its wounded and desolate inhabitants. Through the camera lenses of the French actress we see the defects and disfigurations of the survivors. The gravity of the city’s impairment and the parallel emergence of life in the empty spaces between the ruins, fourteen years after the fatal nuclear bombing, are both fascinating and sore. The black and white shots and the documentary footage reinforce the historicity of the event ‘Fig. 5’.

The documentary aspects of the film are intertwined with the shots of a hand touching the body. The sound track of her voice provides the underlying rhythm. The woman’s admission of the utmost love (culminating in: “Tu me tues, tu me fais du bien”), is edited to correspond to the gradual opening of the shots, gliding into the city by means of lengthy perspectives caught by the moving camera that penetrates the layers of urban walls and concludes its
journey in the centre. These sequences, and possibly the whole film, are the prime example of urban metaphors.

The city space as drama

Situationist International (1957-78) provides another set of experimental examples relevant for our subject of the avant-garde film’s contribution to the understanding of the space in the city.

Debord’s films have the form of a manifesto, where the visual language borrowed from the revolutionary posters. Debord records his own voice on the sound track, with slogans such as: “The spectators do not find what they desire, they desire that what they find.” The films often quote leftist proclamations taken from Marx, Nietzsche, Hegel, Bakunin, Wilhelm Reich etc.. They are mixed with commercial advertising, newspaper articles, comic strips etc.

Situationists believed that the repetitive gestures of everyday were destroying the public life. They were concerned with the human experience transformed and replaced by spectacle and consumption. The protagonists believed in actively constructing new ‘situations’ of daily life in the city in order to confront alienation. This had involved psychogeography- creation of games at urban sites where play is a free and imaginative activity. Situationists could be credited for inventing the “unitary urbanism” which meant seeing the city in a new integrated way.

Conclusion

Through the selected examples this paper has demonstrated how the innovative language of the avant-garde film of the twentieth century had managed to establish itself in our consciousness. It has explained and analysed this phenomenon by focusing on the selected examples and on the space of the city.

These examples and their subsequent re-evocation in the works of the following generation of film makers (Hitchcock, Welles etc) has resulted in the fact that film is embedded part of our visual and mental mechanism when contemplating about the cities of today. There is plenty of evidence for this occurrence.

In conclusion I shall quote one observable trend. In visiting new places we are no longer simply surprised as we have almost always already seen them all on pictures and in film. Upon arrival on the actual site we now always (often unconsciously) compare what is front of
us with previously observed representations. We seek the “right angle and the correct position” for experience and viewing in order to retrace and confirm the (right) sequences already incorporated in our visual and cognitive mechanisms by film. Why do we do this so faithfully?

We act in this way not out of being spoiled by choice or blasé by the abundance of references, but because in the era of visual saturation and overdrive, we necessitate to keep the endless fragments of our perception, of our mental space and of our identity together.

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