

Optical Density

Morten Meldgaard

PhD, Architect MAA, Film director DDF

Associate professor

Architecture, Space & Time

Institute for Building, Landscape and Planning

The Royal Danish Academy of Fine Arts School of Architecture

"Wherever anything lives, there is, open somewhere, a register in which time is being inscribed"

Henri Bergson, *Creative Evolution* (1911)

The sprawl, the shrinking city, and the megapolis are well-known topics of documentary cinema and have been exemplified in films such as Michael Glawogger's "Megacities" (1998) or Florent Tillon's "Detroit Wild City" (2010). But how can a vision for urban density in relation to the smaller urban unit of the historic city be described? And how does the discourse of urbanism actually develop inside the optical density of media? Is architecture a form of mass media as Beatriz Colomina would have it,¹ or do there exist separate orders of tectonic and optical regimes? If so, optical density could be defined as the ordering and sedimentation of different geometries in visual space. In order to examine these questions further we will take a closer look at Max Kestner's award winning city portrait "Dreams in Copenhagen" (2009).

In front of the glass cabinet exhibiting walrus, two women stand. One with a pram, the other with a small child on her shoulder. The women pragmatically discuss their love life while the polar wind whistles in the cabinet of the spectacle. They talk about open relationships, sex and whether it is ok if the man you love receives text messages from his most recent encounter on the wrong side of the blanket. We are at the Zoological Museum, in a scene from Max Kestner's recent film about the city of Copenhagen. The reference to the display cabinet of the zoological museum is clear, not only in its celebration of a certain voyeurism of the spectacle, but also in its way of manipulating perspective geometry through tampering with the focal plane of the image.

"Dreams in Copenhagen" is deposited in small tableaux' of dramatic content, consistently solved within single shots which maintain the spatial and temporal dimension of the scenes. In this way, each single shot works like an independent scene exhibiting its content almost like the display cabinets at the Zoological Museum. The film works with a radical visual grip, so that the sharpness of the image is consistently in the back of the picture plane. The plane of sharpness depicts the city while the transient, out of focus characters float through this optical space. This mode of creating a novel and alien stratum in the optical regime of the movie is characteristic for a certain filmic constructivism we might trace back to directors such as Alfred Hitchcock and Jean Luc Godard.

In the movie we meet the worker and his replacement; the symbolic worker, the street wench, the janitor, the mechanic and a number of prominent leaders of Denmark's leading architectural offices. And then we meet life. Sexuality, shared children, divorce, casual sex, shopping, transportation, home equity, immigrant children and estate agents. In that order and then of course the men in gray, those

¹ See Beatriz Colomina: *Privacy and Publicity, Modern Architecture as Mass Media* (Cambridge, Mass.: MIT Press, 1996)

who will finally clean up the city. The film has, in fact, also another side than the diverse and vibrant; parting, loss and the final goodbye.

The City portrait. Kestner's film continues a long cinematic tradition of putting the city as an entity at the centre of the story. Since its emergence as a technology a hundred years ago, film has been closely linked with two themes: Metropolis and movement. It was among the city's mobile masses that the booming art would find the audience that it could move. The city is perhaps the place where fiction and documentary are closest to each other. Everyone knows the feeling of seeing Times Square in New York for the first time. It is already a *déjà vu* of the thousands of times you've seen it on film. The city is not just co-starring in documentary films, but also in fiction: From the bombed out "Vienna" in Carol Reed's "The Third Man" to the Thomas Mann-inspired *Venification* of San Francisco's streets in Hitchcock's "Vertigo" (1959) and in the documentary tradition from Walther Ruttmann's "Berlin: Symphony of a Great City" (1927) to Michael Glawogger's looped "Megacities" (1998). But while the city portraits of the twenties tried to loosen the connection to fiction, exemplified admirably by Dziga Vertov in "The Man with the Movie Camera" (1928), it is precisely this relation that characterizes the modern city portrait. Jean Luc Godard's film about Paris, an homage to Vertov, "I know two or three things about her" (1966), opens the field in which the term "fiction" and "documentary" lose their ordinary meaning.

Pure Cinema. Is it the very image of urban density that the moving image revolves around? It was the literary urban portraits by Charles Dickens which inspired D.W Griffith to revolutionize cinema in his thematization of the metropolis through the fall of Babylon in his 1916 silent film masterpiece "Intolerance". Eisenstein understood this link between Dickens' writings and Griffith's invention of the close-up, making it the foundation of his theories and reflection on cinema. According to Godard, "Montage is what made cinema unique [...]. The silent movie felt it very strongly and talked about it a lot. No-one found it. Griffith was looking for something like montage, he discovered the close-up. Eisenstein naturally thought that he had found montage [...]. But by montage I mean something much more vast."²

Here, Godard reflects on the increasing density of the hyper montage of the urban as something 'much more' vast than the montage of cinema: The urban sprawl as a meta-cinematic construct expanding in four dimensions with an open-ended appropriation of new parts.

From this source stem the staged and directed documentary from Nicholas Barker's "Unmade Beds" (1997), over Glawogger's "Megacities" (1998), to the new film by Max Kestner. Evidently, Kestner must have seen and copied the small vignettes of voyeuristic ecstasy in Barker's beautiful film about four New Yorkers and their search for love in the big city. But where did Barker himself get his inspiration from if not from the voyeur film par excellence Alfred Hitchcock's 1954 attempt at *Pure Cinema* "Rear Window"? In the interview-book by Truffaut, Hitchcock states himself that it was a possibility to explore a pure cinema: "It was a possibility of doing a purely cinematic film. You have an immobilised man looking out. That's one part of the film. The second part shows how he reacts. This is actually the purest expression of a cinematic idea."³ The movie opens with the lifting of the blinds of the window in a triptych structure mimicking the curtain of the cinema. Hitchcock's idea of a "pure cinema" is based on Lev Kuleshov's 1921 montage experiment in which we see the same man three times, although with different images proceeding the shot each time: death, hunger, sex. Every time we read the objectively same image differently depending on what it is combined with. This shows us that the moving image is labile in its way to distribute content, meaning, and "truth". In this sense we might

² Tron Lundemo, "The Index and Erasure: Godard's approach to film history," in *For Ever Godard*, eds. Michael, Temple, James S. Williams, Michael Witt (London: Black dog Publishing, 2004), 380.

³ Francois Truffaut, *Hitchcock* (London : Granada, 1978), 265.

say that the city portrait is not a subgenre of documentary filmmaking, but a genre in its own right characterized by the way it fuses fiction and documentary. In this sense we might see the mediated discourse on urbanism as partly consisting of fictional devices and partly consisting of “real” actualities. In this sense, urbanism is neither a mass mediated representation, nor a given reality, but an over flooding between what can be said and what can be seen.

Black Ice. In *The Disorder of Order*, architect John Outram uses the term “Black Ice” when he depicts the density of the modern city: “So what went wrong? What is the 21st-century city but grid upon grid ad infinitum? But that is the point. It is frozen into a block of black, Miesean ice...”⁴ The term “Black Ice” was coined by the writer William Gibson in his 1984 novel “Neuromancer”. The point is, however, to realize that “the Grid” is as much an element of a certain tectonics, as it is an element of a specific optics, i.e., the principle of projection from a single point. In the movie “The Matrix” (1999) we see how Manhattan anno 1999 comes to resemble the “international style” of Mies van der Rohe and Ludwig Hilberseimer. For every time the agent Smith gains his ground a strong sense of darkness, rain, and repetition arises. Smith is a virus, a hostile program in hacker slang: “Black Ice”. There is a double meaning of the term, on the one side, a virus, on the other side the first virgin ice in winter, which is completely black⁵. This juxtaposition of something viral and unseen and yet oblique, dark, and reflecting is a powerful image of the international style. Here, Mies van der Rohe would replicate: “Only an idea can go as far.” Maybe, but when read in light of “Neuromancer” and “The Matrix”, we must repudiate the statement of the Bauhaus schoolmaster, with the writer William S. Burroughs words: “– Or a virus.” Massimo Cacciari writes on the “One way projection” of architecture that shaped modern architecture when he states that:

“The conquest of space is the plundering of places: it conceives of space as a void to fill, a pure absence, a lack. Space is mere potentiality at the disposal of the technico-scientific project. To the Architect belongs precisely this conception of space: space is pure void to be measured-delimited, void in which to pro-duce his new forms.”⁶

Thus the blank space of the paper guarantees the void of the site, the site as virgin soil, as black ice. This one-way projection, this whiteness of paper and screen alike, points to the realm of the optical rather than the realm of the tectonic. In this sense, urban density is as much about optics as it is about tectonics.

Irritation. Hartvig Frost writes in a small note entitled “irritation” that a movie’s actual means of operation is to irritate the retina of the viewer in a way that evokes memories of previous traumatic irritations and thereby secure recognition and identification with the audience.⁷ Kestner’s new film operates on similar ground in relation to optical irritation. In the film, the plane of sharpness of the images is consistently in the background; the town, its houses, and its architecture. Shadows are burned into the celluloid, but always with the sharpness in the background. In the silhouettes we meet, people are in the foreground, blurred and shimmering against a backdrop of a razor-sharp cityscape. The usual perspectival construct is being distorted. People are seen as macerated silhouettes and the perspectival space we know from the renaissance worldview is placed in doubt. The enlightened, Cartesian, panoptic space, which makes planning for life in the modern metropolis possible, resigns in favour of a new and alien “Terrain Vague”. It is no longer a question of the city as a backdrop for life, but vice versa. Humans and their lives pass by and through us while the city remains in constant change. The radical shift in the way Kestner’s film operates with depth of field secures us this experience of a shift

⁴ John Outram, *The Disorder of Order*, in *AD* 70, no. 5, (2000), 15.

⁵ black ice – 1. Thin, new ice on freshwater or saltwater, appearing dark in color because of its transparency, which is a result of its columnar grain structure. Source: <http://amsglossary.allenpress.com/glossary/search?query=black+ice>

⁶ Massimo Cacciari, *Architecture and Nihilism*, (Place of publication: Yale University Press, 1993), 167. I am indebted to my fellow scholar Niels Grønbaek for enlightening me on Cacciari’s point on projection and the blank space of drawing.

⁷ See Hartvig Frost, “Irritation” in: *RAP* 8 (1986), 38.

in focus from the fore to the background. In this respect, density is as much about changing perspective or rather, about leaving metaphor behind: To be able to change level in the structural group of geometry, from perspective geometry to that of topological geometry and back again.⁸ Evidently this structuring of different geometries in a single *Dispositif*, “the Group”, might lead to a certain Eurocentrism based on the idea of progress from projective geometry over perspective geometry ending with particle geometry as the “advanced” state, but might also be viewed in another way, as Sanford Kwinter would have it, as a cascade of symmetry breaks.⁹ Optical density might in this respect be defined very narrowly as the ability of any given visual construct to operate with greater or less viscosity between the individual geometries of the structural group.

Optic and tectonic orders.

Architecture’s concern with the optical has often been filled with disregard, even contempt. Robin Evans gives the traditional figure when remarking about the Barcelona Pavilion “that for Mies Effect is paramount”,¹⁰ and that the tectonic order of the pavilion is merely “an image of rationality” (ibid.). In an optical regime, however, effect is not something secondary or doubtful, it is merely the measurable output of a light source which will decrease according to the square of the source. In an optical regime, reflections are not secondary “effects”, but the encounters which give color and texture, opacity, and density to visual space. In this sense, the moon is only a virtual mirror image of the sun, which it reflects at night.

Perhaps architect Stan Allen is close to being onto something when, in an essay about Mies’ New National Gallery in Berlin, he proposed an alternate kinship between Mies and Schinkel.¹¹ Not the familiar tectonic band exemplified by Schinkel’s Bauakademie, but based on the early works by Schinkel that consisted in theatres of panoramic illusion. These often massive constructions preceded, as viewing machines, the movie house.¹² Allen points out the similarity between the artificial horizon of the 360-degree panoramas and the National Gallery’s way of presenting the city. The image of Berlin, which is produced here, is cropped both at top and bottom and is seen by the observer from a withdrawn position. It is precisely this understanding of the city as a dense optical and mobile collage, which is pointing to another layer in Mies’ work that is different to the purely tectonic. To understand it one must face the fact that in architecture the tectonic is always doubled by the optical. Optics and tectonics are two sides of the same coin, and the mastery of Mies is to acknowledge this and use it to the fullest extent. This focus on the optical properties of architecture can also be found in Sanaa’s intervention in the Barcelona Pavilion as well as in some of their architectural projects.¹³ It is a commonplace that Sanaa works together with the photographer Walter Niedermayer and, in this respect, it is puzzling that Kazuyo Sejima herself has remarked that Niedermayer’s photography sometimes catches the essence of the project better than the realized building itself.¹⁴ The relation between tectonics and optics might, in this respect, be seen as something different than the relation of cause and effect. It might be seen as a true relation that is external to its terms. This is why Sejima states that sometimes Niedermayer can realize the optical dimension of a project with greater clarity than the finished building itself.

8 See Lars Marcussen: *The Architecture of Space - the Space of Architecture* (Copenhagen: Arkitekt skolens forlag, 2008).

9 See Manuel Delanda: *Intensive Science and Virtual Philosophy*, (London: Continuum, 2004).

10 “If Mies adhered to any logic, it was the logic of appearance. His buildings aim at effect. Effect is paramount. Nobody sees the difference. The unyielding abstraction was secretly tailored, and measured equality was sacrificed for the sake of apparent consistency.” Robin Evans, *Translations from Drawing to Building*, (London: AA London, 1986), 247.

11 See Stan Allen, *Practice: Architecture, Technique and Representation*, (Amsterdam: Overseas Publishers, 2000).

12 Guillian Bruno: *Atlas of Emotions* (London: Verso), 44.

13 “The view through the acrylic will be something different from the original with soft reflections slightly distorting the pavilion”. Kazuyo Sejima and Ryue Nishizawa. See Xavier Costa, Ed: *SANAA: Intervention in the Mies van der Rohe Pavilion* (Barcelona: Actar D, 2010)

14 Walter Niedermayer in a lecture on his collaboration with Sanaa: *Questions of Representation*, Symposium held at the Royal Danish Academy, School of Architecture, 26-27 January, 2011.

Film and Architecture.

“Dichterisch wohnet der Mensch”,¹⁵ wrote Martin Heidegger. According to this remark, poetry, philosophy, and art are the obvious expressions of our existence. This applies to cinema as well as to architecture. Life cannot be described in statistics, quantifications, and rationale. When we try to reflect on life, even when we try to reflect on the "rational", we end up realizing that it is just a word created by our own poetic talent, an image at best as Evans would have it. Kestner's film deals with this issue in concrete form and shows the difference between divergent forms of everyday life and the architect and planner's Sisyphean struggle to harness this multiplicity. As a recurring Greek choir appearing throughout “Dreams in Copenhagen”, we meet a number of architects who seek to understand diversity. We are introduced to the architect's thinking, tools, and their recurring dilemma: how to plan life? Here, we witness comedy in its purest Aristotelian form: the comedy between citizen and community. How does the plan meet a divorce? How does the town planning make room for grief? How do you even plan something for people who are born and then die? The city is a multiplicity. It cannot be rationally grasped in its totality and if one is making use of rational planning tools, the concrete lived life is slipping through one's hands. The people living in a city, they live, eat, shit, meet and get divorced in infinity. The question of modern architecture remains the same as in cinema: What is it like to live in a city?

“Wherever anything lives, there is, open somewhere a register in which time is being inscribed”,¹⁶ wrote the French philosopher Henri Bergson. In Kestner's film, the register, which is being inscribed is first and foremost the urban density and its multitude of life. “Dreams in Copenhagen” is a film which is close to its physical content in its materiality *as* a film. The concept and optical construction, however, is extremely abstract. Content and form had to be separated in order to be reunited in a new expression. In this sense, the film itself is a piece of architecture. It is not only about the urban fabric and the people who dwell there. The movie is a construction in its own right. In this respect we might answer the initial question of this article by the following statement. There does not only exist separate regimes of tectonic and optical order in architecture, the optical regime of moving images does also have a tectonic dimension in the sense that it is a construction. In his book on “constructions” John Rajchman will pair the philosophy of Hume with the cinema of Hitchcock and Godard in order to clarify this specific constructivism of the philosopher Gilles Deleuze, which is neither specific to philosophy, film or architecture¹⁷. It's method is to make form collide in order to create new content. This mode of construction is what brings the tectonic and optical dimension in relation to each other.

“Dreams in Copenhagen” is directed by Max Kestner and produced by the Danish based “Upfront Films” in 2009. It will come out on DVD in a UK version this fall.

The DVD and the Soundtrack by Jóhann Jóhannsson can be purchased through the Danish Cinematek: www.dfi.dk/shop

¹⁵ See Martin Heidegger, *Vorträge und Aufsätze*, (Stuttgart: Klett-Cotta 2004).

¹⁶ Henri Bergson, *Creative Evolution*, (New York: Dover Meneola, 1998), 16.

¹⁷ “Hume was a great empiricist because a great “constructivist”, for he asked how, from “impressions”, we build up a life, form beliefs, bring together our passions in the convention of a society... Alfred Hitchcock is an “empirist” for Deleuze since he constructs a cinematic time built from relations prior to the individuals that fill them. But Jean-Luc Godard takes the idea even further in inventing a montage of “irrational continuities” where the “and” of cinematic construction falls free from the movements of the “is any of given identities or predications.” John Rajchman, *Constructions*, (Cambridge, Mass. MIT Press, 1999) 3-4