Dissecting the City:
The Video Camera as Architectural Scalpel
The Subcutaneous Exploration of the City -
A Snapshot of the Status Quo
(A Report on an Ongoing Insurgency)

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Luis Bunuel's and Salvador Dali's cooperation in the famous surrealist/dadaist film *Un Chien Andalou (1929)* [1] is best remembered through the image of a knife cutting through an eye ball. As the knife cuts through the gelatinous mass of the eye it is laying bare the liquid substance of our dreams.

The architect uses his pencil to cut through the layers to expose the essence of the design, the destructive force of the blade morphs into the creative force of imagination.

WHY "ARCHITECTURE + FILM"?

Wim Wenders in *Why do you make films?* [2] paraphrases Béla Balázs' observation about the cinema's ability and also responsibility "to show things as they are", and that it can "rescue the existence of things" [3]. Wenders recites Cézanne: "Things are disappearing. If you want to see anything, you have to hurry" [4]. In this interview the act of filming for Wenders sometimes amounts to a heroic act. "For a moment, the gradual destruction of the world of appearances is held up. The camera is a weapon against the tragedy of things, against their disappearing. Why make films? Bloody stupid question!" [5]

The camera will record things that otherwise would vanish from our memory. Film will preserve things they way they are. In that sense, the camera is "objective".

Eadweard Muybridge in his 11 volumes of *Animal Locomotion 1884-85* [6] analyzed the movement of the body, human or animal, with the help of a stroboscopic set-up, a series of cameras that broke up the fluid movement of the test object into a sequence of stills. Muybridge was one of the first to use the objective recording quality of the camera lens to gather deeper insight into a problem, in this case the sequences of movement. His influence and benefits to the arts and sciences has long since been recognized.

The use of photography, film and video to document and investigate architectural, urban and environmental conditions has been common for a long time. Conversely, the use of architecture and urban conditions to create the ambiance and even the narrative in film has been a basic tool since the Lumière brothers and Méliès started the tradition of cinema in 1896. Architecture as a predominantly "visual" art form (with

scientific foundations) relies on the skill and sharpness of the "eye of the architect". What better tool than the "eye" of the camera could assist the architect in his quest for a design solution? What other focus than the framed inquisitive gaze of the camera lens could refine the architect's attention to detail better?

We can quote the French architect Jean Nouvel to add another argument for the necessity to teach architecture students about film and its relationship to architecture:

"Architecture exists, like cinema, in the dimension of time and movement. One conceives and reads a building in terms of sequences. To erect a building is to predict and seek effects of contrast and linkage through which one passes...In the continuous shot/sequence that a building is, the architect works with cuts and edits, framing and openings..." [7]

The late Andrey Tarkovsky, the poetic Russian master of metaphysical films and mesmerizing images, describes film making as "Sculpting in Time" [8] and gives his autobiographical book the same title. Again, we are reminded of the relationship between the three-dimensional aspects and the fourth dimension of time: experiencing architecture, conceiving spaces, is the unfolding of physical realities over time, the sequencing of our experience. No photo can ever do justice to a building. One has to walk through it to experience the ever-changing spatial phenomena, the differentiation in light and texture, the change of color, the compression and expansion of space. No wonder that Tim Benton in his Essay *Representing Le Corbusier* [9] comes to the conclusion that only film can get as close as possible to the experience of wandering through the real building. His proposition is to use film and video when staging an exhibit about architecture.

In the late twenties and early thirties documentary film was used to convey the ideas of the modern architects. For example, the avant-gardist Hans Richter was commissioned to direct films for the *Schweizerischer Werkbund (SWB)* for the *First Swiss Exhibition on Housing and Living* [10] in 1930. The collaboration between architects and film directors, the marriage between architecture and film, the mutual use of each others' techniques goes back to the beginning of film. Contemporary filmmakers like Peter Greenaway occupy themselves

with the idea of architecture and film constantly. In his early short films, *H is for House (1973)* [11], *Windows (1974)* [12], *A Walk Through H (1978)* [13], or in the later *Inside Rooms - 26 Bathrooms (1985)* [14] Greenaway explores spaces and concepts. In his famous *The Belly of an Architect (1986)* [15] the whole profession and its obsession with itself is portrayed.

If we go back to the beginnings of Modern Architecture, the days of the Bauhaus, we will find Walter Ruttmann's classic *Berlin: Die Sinfonie der Großstadt (Berlin, Symphony of a Great City, 1927)* [16], portraying not only the architecture but also the rhythm of the metropolis. The phenomenon of the metropolis is caught in a similar way in Dziga Vertov's *Man with the Movie Camera (1929)* [17]. In both pictures the passing of time became the element defining the contents of the film. Federico Fellini sends us on another journey through time in the very personal portrayal of his *Roma (1972)* [18], as he uncovers the many historical and sociological, but also architectural strata of his beloved Roma Aeterna. Jacques Tati criticizes the impact the International Style has on the Paris of the early sixties in his satirical *Playtime (1967)* [19]. He frontally attacks architects, city planners and multi-national companies for their failure to provide a human environment by having his alter-ego Hulot suffer through the "amenities" of the modern world. Architecture and the city play a crucial role in the famous *Metropolis (1927)* [20] by Fritz Lang and the visionary *Blade Runner (1982)* [21] by Ridley Scott. Here, architecture is pivotal and dominating in creating the mood of the film; without the architecture envisioned by those filmmakers, no story could unfold. These two classics are just the most well-known of cinematic forays into the future of mankind that treat architecture and the city as the omnipresent stage they are. And so, one could go on and on citing examples of the intricate entanglement of architecture and film, both literally and metaphorically

In the meantime, during the last decade, the interest in the topic has become wide-spread among architects, artists and filmmakers. There are festivals that deal solely with the relationship between architecture and film, for example the *film+arc.graz,* International Film Biennale in Austria.

LESSONS FROM "ARCHITECTURE + *FILM*"

Architecture in film is not only a backdrop or stage for the narrative to proceed and to unfold, but also a reflection of the narrative itself. Furthermore, film architecture reflects upon "real world" environments in a way that it allows the spectator to become acquainted with a different, possibly more objective evaluation of the environment than he could achieve from his subjective point of view. In this case the spectator is the educated, trained professional as well as the layperson or dilettante of architecture.

The cinematic representation of architecture provides additional information regarding the perception and experiential potential of the built environment by introducing the factor of time, frame and scale. Thus it adds insight to our view of the world. Sometimes, as in the case of William Cameron Menzies' *Things to Come (1936)* [22] for example, it can give us a glimpse of the much sought-for ideal architectural world (in the mind of the director). The question of perception and reality in the time of the Internet and Virtual Reality becomes more and more important, not only as a matter of chronology but also as an inquiry into truth. In this regard, Akira Kurosawa's *Rashomon (1950)* [23] makes a statement about the shifting nature of things and perceptions and thus is crucial to architecture in a paradigmatic sense. Architecture and the city are mirages we perceive differently at any moment.

The exposure to the necessity of framing and focusing when shooting a scene clearly proves advantageous when dealing with architectural design solutions. It helps clarify ideas and concepts. Framing the view forces us to look closer, to decide on the limits of our interventions, and to work within those boundaries.

Collaging as a cinematic device to create an environment, a story or narrative can also be regarded as an architectural technique of design inquiry. If collaging could be called a means of synthesizing ideas, editing could be seen as the analytical tool of film, with its primary function being that of a scalpel dissecting and clarifying the "body of work", reducing it to its simplest components.

The temporal or fourth dimension of film is probably the most exciting and important aspect relevant to architecture. Architecture is not static - it is a dynamic installation we measure. The fluidity of space, the ever-changing perspective and angles, the pulsating of the space as we make our way across the voids is like the subjective trajectory of the camera's eye. The light and the sound permutates with every frame and every step we take. The student will experience the "sequential" quality of architecture in the sense that a building is perceived in a string of frames with shifting perspectives and angles. Using the camera to capture a scene emphasizes the role of a moment's observation in putting together the puzzle of an image. Together all these observations or frames will disclose a "panoramic" picture. It is necessary to walk through or around a building in order to become fully aware of its presence as a multi-dimensional object in space. This is achieved through the awareness of the perception over time. If Tarkovsky was a master of "time as real time in a surreal setting", newer productions like the Wachowski Brothers' *The Matrix (1999)* [24] question the issue of time and space in the light of virtual reality.

The structure of a film or video can be examined and compared to the structure of a plan or building. By following the sequences of the scenes, the observer can determine how the director envisioned the dramatic skeleton of the film. The structure of the sequence of spaces in a building or in the fabric of the city adheres to similar rules. Architecture is the stage for human interaction, as the backdrop for or active ingredient in the infinite flow of events that make up our existence. The data flow that determines our design decisions is made visible in the temporal dimension of the film. It also leads us back to the issue of perception again.

Language itself is probably the most interesting aspect for comparison. Is there a common language, common vocabulary and syntax in film and architecture? When film emerged on the stage of the world, Modern Architecture followed soon. Given the avant-garde character of Modern Architecture in the twenties and thirties, and the fact that we encounter the first "cross-over" artists like Laszlo Moholy-Nagy and Man Ray, it would make sense to search for a possible common basis in the language of film and modern architecture. To find this common language, if it indeed exists, is an ongoing project.

THE LABORATORY AND THE QUEST

The introduction of a new course titled "architecture + *film*" was the logical result of an ongoing exploration of the hidden aspects of the city within the design studio.

Considering I had previously used film as a teaching tool in studio, it was a consequential decision to widen the reach of the audience by creating a new course open to upper level architecture students and to interested students from other disciplines as well. Opening the course to students outside architecture on the one hand made it possible to disseminate ideas on architecture, and on the other hand to receive input on our field from "non-initiates".

The omnipresence of TV, video games, computers and the traditional cinema allows us to experience that fascination in a more or less subtle, direct or indirect way on a daily basis. Today's students grew up with MTV and video games. Their minds, we assume, seem to be better prepared than the minds of older generations of architectures, to embrace and apply the techniques of film making for their own profession. Teaching a class about architecture and film taps into these potential resources and hopefully will unleash a burst of creative energy benefiting their education as future architects.

Another aspect that should not be underestimated is the trend towards the blurring of different fields of occupation. Many architects will become virtual artists, and filmmakers will become explorers of urban space.

Exposing the students to the world of film making by blending theory, analyses of films and most of all the making of their own film essays about the city seems to be appropriate to a contemporary education in architecture. Using the medium of film/video not only enables the students to record facts, but it also helps them to develop their editing capabilities.

Choosing the topic, deciding on the content, choosing the frame, cutting and splicing, putting sound over the visual sequence, these are activities closely related to designing as an architect.

The students are encouraged to investigate among other issues the hypothesis of a common language of architecture and film through their writings and their video productions. It might not be visible at first sight, but the language that is known to the students, that of architecture, does have some impact on the way they conceive their films. At the same time, their having grown up with television and movies impacts how they describe and work their designs in the architecture studios. But does that really point towards a common or at least related language between the two art forms?

When generalizing it is fair to say that "language" is what drives the videos of the students and acts as the main "design tool" they use.

INSURGENCY AND DISSECTION - ADVENTURES IN CITY SURGERY

If the camera can preserve things from disappearing the camera can also make things re/appear. The eye of the camera is simultaneously the student seeker's microscope and telescope laying open the hidden treasures and secrets of the city. Wandering the city armed with this recording device the student's task is to probe the skin, the different layers of the city. By doing this visual and aural probing the student will find himself drawn into the complexity of what makes up a contemporary city. The filmic results so far have proven beyond the wildest expectations that the city of Houston, in this case, has many more fascinating aspects than we could have imagined before. These are facets that help us paint a new picture of the city after each class' foray into its depths. It has also proven that a student (that has never before shot a video or a film) with an exciting task can rise well beyond expectations.

The students are sent out to re-discover their urban environment equipped with the camera as their "objective" probing instrument. They scout the city for information.

Through the exposure to a city image as conveyed by film directors students learn to look for the various layers that constitute the very fabric of the city.

Learning to use the camera as their "eye", they will frame the hidden image that is one of the many particles the city's structure is made of. Through investigating their city by means of dissecting it with the camera, they will come to a better and deeper understanding of the workings of the urban entity.

Fig. 1. The Architect's Eye — poster announcing screening

Often, important sociological, economical and urban-architectural facts are uncovered, and little known conditions and stories unfold to become a new patch of color on the urban map/quilt.

Looking beneath the surface of the city enriches their experience as architects-to-be, showing them new facts of behavior and environmental conditions to be considered when making design decisions.

Meanwhile, the city explorers armed with their probing and recording devices will dive into and under the numerous layers of the city skin to reveal phenomena and relationships hitherto unrecognized. Their camera eyes will find truths and interpret them according to what was established before the electronic insurgency had taken place.

The choice of format and style is in the hands of the city scouts, it can range from an "objective" documentary to a fictional "feature".

Students are assigned a one-minute video exercise to become acquainted with the technology and the city as well. The one-minute format is modeled after the exercise given to several established film directors in 1995 [25]; these directors were given the reconstructed camera used by Lumière a hundred years ago. The idea behind that was to celebrate one hundred years of cinema by directing shorts filmed with this famous first camera. The film reel only being long enough for ca. 60 seconds of production makes planning and editing crucial.

Following this example, the students are asked to make a one-minute short, the framework within to work is the title given by the instructor (e.g. Flesh and bones, blood and guts — Dissecting Houston).

After this exercise is conducted during mid-term, the students prepare the script for their main film. This production ranges between 5-10 minutes in length, and again, the topic is architecture and the city in its broadest sense.

The films are shown in a public screening at the end of the semester.

An important part of the class is the writing of a film diary that discusses the readings, the films seen, and issues related to architecture and film. The readings are selected from theoretical writings on film and from architectural texts. The technical standard of the student productions and especially the topics handled in the videos have become ever more sophisticated over the years.

Interest in this type of architectural investigations has remained on the rise since it was first offered. The results of the students' cinematic city excavations so far have brought to light that interest in social and environmental issues among the students is much higher than one could have hoped for. Most of the videos focus on issues dealing with minorities, concerns of the average person, or environmental problems stretching from urban sprawl to air pollution. The other category of videos is a more personal one portraying fictional events in a "feature" like architectural setting — architecture as a purveyor of mood.

When the angels in Wim Wenders' Wings of Desire (1987) [26] experience their city, Berlin, they do it solely through their intellect. They can hear and see everything that is going on in the minds and hearts of the Berliners, but they can not "feel" it. When the Scientist, the Poet and the Stalker in Tarkovsky's

Stalker (1979) [27] travel the "Zone" they try to rationalize and explain what they experience. They can't, but they seem to feel it deep inside in the subconscious part of their brain. These are two extremes of experiencing surrounding conditions, and these are two prime examples how film can teach architecture students about their field indirectly. When a student took up the challenge to show an aspect of Houston within the short time frame of one minute, she chose to portray one of Houston's farmers' markets frequented by the Hispanic population of the city. El Mercado (dir. Amy Thoner) captures the mood and

Fig.2. El Mercado — *Young Patron*

the spirit of this place perfectly by focusing on the people there. Just like Wenders' angels did in *Wings of Desire*, the student explores the place via the faces and expressions of the children, the marketeers, the customers. The technique combines "snapshots" of the "protagonists" underlined by the music of a Mexican pop group. Both the lyrics and the music compliment the visual images. Having done such a thorough investigation with the help of the camera, the student would be well prepared to translate these discoveries into design (screen *El Mercado*).

The same student, together with a colleague, produced a second video that went right under the skin of the city. Reporting on the *Spray Can Culture* (dir. Amy Thoner and Marc Frohn) of Houston, the two students went on a ride with graffiti artists. This nightly adventure intriguingly uncovers one of the many secret activities that unfold under the cover of darkness.
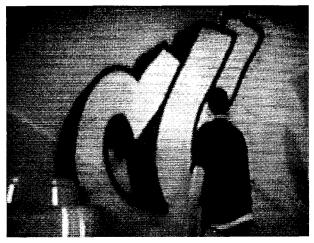

Fig. 3. Spray Can Culture — *Graffiti Night Hawk at Work*

It takes the audience into the penumbral realm of "night hawks" expressing their desires to protest against all kinds of conditions of the city artistically by leaving their mark on buildings and other surfaces. This night ride is an exciting example of how far the students are willing to go, and how far to expand the limits of the medium used to document their investigations. This specific exploration leads us almost into a Tarkovskyan Zone of Being (screen *Spray Can Culture*). In *Full Screen* (dir. Marc Frohn) we are led right away into this twilight Zone. The video lifts the veil off a spiritual gathering under a freeway overpass.

The long shadows cast across the asphalt, the movements of the audience in trance and the music overlaid show us a segment of the city that is highly ephemeral (screen *Full Screen*).
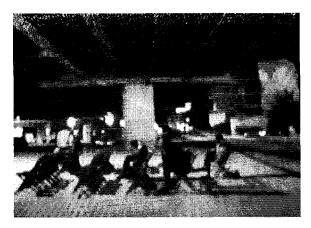

Fig. 4. Full Screen — *The Nightly Gathering under I-59*

The melancholic *Waiting* (dir. Ruth Plascencia and Alan Kitchings) paints a wistful picture of Houston's Greyhound Terminal area, the black-and-white grainy images moving in a slow pace to a jazzy piano tune suddenly interrupted and pierced by counterpuntal frames of an art performance in a warehouse space.

Fig.5. Waiting — *Greyhound Station Downtown Houston*

The video successfully exposes two fringe sides of Houston hinting at some common grounds (screen *Waiting*).

Fig. 6. Waiting — *Waiting....happening...*

But video can also provide a platform for experimentation in the virtual realm, it can be the note pad for sketching the ideas for a future. Seeing this as such an opportunity, another student created *Freeway Fantasies* (dir. Rame Schelhaas), offering solutions for the mega-freeways criss-crossing Houston. A flurry of fantastic collages enlivens the concrete mass of the freeway, the driver is constantly amazed by the ever-changing "apparitions" on the way to work (screen *Freeway Fantasies*).
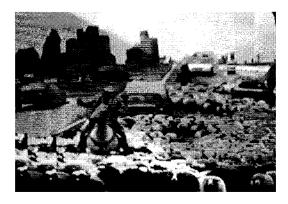

Fig. 7. Freeway Fantasies — *The Big Trail*

IMPACT AND VISION

Seeing this wonderful body of work, is there any measurable impact on the studio design work afterwards? Do these students apply to their design process what they have learned from the foray into film making? Is there an awareness regarding perception and approach to design? One would think that this experience "opened" their eyes to the opportunities in the cosmos of the city. And this would be the stated goal of such an undertaking. The evaluation of the impact on design will be one way to learn from this experiment and to improve its value.

All the students expressed they had learned, with the help of the camera, to see the world with different, more critical eyes. The films shown to them as examples relevant to the education as an architect have left an impression that came to fruition in their own work. It has taught them to observe and investigate, to dig and to create with the pieces found.

The next step was to combine this analytical and surgical approach to the city with an even more synthesized component than the production of a video is: a co-taught course about film, installation and the metropolis. This new course, funded by local grants supports multiple installations in public space, driven by the findings on media and architecture. In this solipsistic way we are back to our field — architecture.
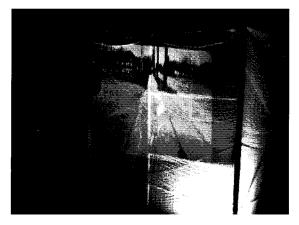

Fig. 8. film.installation.metropolis — *Projection/Screen Test*

FILMMAKERS / ARCHITECTS

These are only a few small examples of what students accomplished with their practical exercises during the class. None of the students is a film major, none of them previous to the course had had any significant experience in making a film or video. Nonetheless, the results are astonishing regarding the depth of investigation and the technical accomplishments. The format and the visual imagination prove that these architects of the future will have qualities and skills that go beyond the mere technical and economical understanding of the "business" of architecture.

Did the experience the students gained as visual scribes of the city make them better architects or did it transform them into filmmakers? I do believe, that they have profited from the course, from their experience of dissecting the city, and that eventually, there will remain that searching eye in their subconscious that is seeking out what is important. Thus, they will have added another aspect to their education as an architect. The course is not intended to transform architecture students into filmmakers, but to open their eyes to architecture through the use of a medium they are all familiar with — television and cinema. It will not only teach them different ways of how to look at things, but it will also make them more critical consumers of those media products of our society.

The merging of different media like video and "paper", the blurring and disappearance of boundaries between occupations in the global society, and not least the vanishing of things as fearfully observed on the outset of this journey, will require the future architect to be facile and versatile in handling various ways of seeing, analyzing, and synthesizing facts and imagination in order to come up with a design that will hold up to the challenges of the events ahead.

NOTES

[1]*Un Chien Andalou,* dir. Louis Bunuel, France, 1929. b/w, 16 min, VHS, Video Yesteryear.

[2]Wim Wenders, *The Logic of Images. Essays and Conversations* (London, Boston: faber and faber, 1991).

[3]Ibid.: p.1.

[4]Ibid.: p.1.

[5]Ibid.: p.2.

[6]Michael Rush, *New Media in Late 20th Century Art* (New York: Thames & Hudson, 1999.): p.15.

[7]Kester Rattenburg, "Echo and Narcissus", *Architectural Design Profile No. 112* (1994): p.35.

[8]Andrey Tarkovsky, *Sculpting in Time* (New York: Knopf, 1987).

[9]Tim Benton, "Representing Le Corbusier: Film, Exhibition, Multimedia", *Cinema & Architecture. Méliès, Mallet-Stevens, Multimedia.* (London: British Film Institute, 1997): pp.114-117.

[10]Andreas Janser, "Only Film Can Make Architecture Intelliglible. Hans Richter's Die Neue Wohnung and the Early Documentary Film on Modern Architecture", *Cinema & Architecture. Méliès, Mallet-Stevens, Multimedia.* (London: British Film Institute, 1997): pp.34-46.

[11]*H is for House,* dir. Peter Greenaway, GB, 1972, re-edited 1978, color, 9 min.

[12]*Windows,* dir. Peter Greenaway, GB, 1975, color, 4 min.

[13]*A Walk through H,* dir. Peter Greenaway, GB, 1978, color, 41 min, British Film Institute.

[14]*Inside Rooms - 26 Bathrooms,* dir. Peter Greenaway, GB, 1985, color, 25 min, Channel 4 TV.

[15]*The Belly of an Architect,* dir. Peter Greenaway, GB/It, 1987, color, 118 min, VHS, Hemdale, 1991.

[16]*Berlin: Die Sinfonie der Großstadt* [Berlin, Symphony of a Great City], dir. Walter Ruttmann, Germany, 1927, b/w, 62 min, DVD, image entertainment, 1993.

[17]*Man with the Movie Camera* [Cheloveks kinoapparatom], dir. Dziga Vertov, USSR, 1929, b/w, 68 min, DVD, image entertainment, 1998.

[18]*Roma* [Fellini's Roma], dir. Federico Fellini, It/Fr, 1972, color, 128 min, VHS, MGM/UA, 1991.

[19]*Playtime*, dir. Jacques Tati, Fr, 1967, color, 152 min, VHS, Home Vision Cinema, 2001.

[20]*Metropolis*, dir. Fritz Lang, Germany, 1926, b/w, 83 min, DVD, Madacy Entertainment Group, 1998.

[21]*Blade Runner - The Director's Cut*, dir. Ridley Scott, USA, 1982/1991, color, 112 min, DVD, Warner Bros. 1991.

[22]*Things to Come*, dir. Williams Cameron Menzies, GB, 1936, b/w, 113 min, DVD, Madacy Entertainment Group, 1999.

[23]*Rashomon*, dir. Akira Kurosawa, Japan, 1950, b/w, 88 min, VHS, Embassy Home Entertainment, 1994.

[24]*The Matrix*, dir. The Wachowski Brothers, USA, 1999, color, 136 min, DVD, Warner Bros., 1999.

[25]*Lumière & Company*, dir. Sarah Moon, Fr/EU, 1995, color, b/w, 88 min, VHS Fox Lorber, 1995.

[26]*Wings of Desire* [Der Himmel über Berlin], dir. Wim Wenders, WGer/Fr, 1987, color, b/w, 128 min, VHS, Orion, 1988.

[27]*Stalker*, dir. Andrey Tarkovsky, USSR, 1979, color, b/w, 161 min, VHS, Fox Lorber, 1993.

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