# A/V Mappings and Notations Merging the Vocabularies of Video and Drawing

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### APPARATUS AND PLACE

"The experiences of space cannot be separated from the events that happen in it; space is situated, contingent and differentiated. It is remade continuously every time it is encountered by different people, every time it is represented through another medium, every time its surroundings change, every time new affiliations are forged."

— James Corner, The Agency of Mapping: Speculation, Critique and Invention<sup>1</sup>

Digital audio and video recorders have the potential to capture, study, measure, and understand these everchanging physical and ephemeral complexities of place. These readily available devices can be exploited to become investigative tools in the practice of architecture. The potential of this device as a tool in the practice has been explored through the development of a course entitled *Notation AIV*, and through various city studies entitled *Side Walk*, *NY AIV Map and By-pass*. These are video notations and mappings of New York City, Detroit, Michigan, and Atlanta, Georgia.

Notation A/V, a course developed and taught at the University of Michigan, consists of a series of short exercises, each of which isolates a different condition of place while singularizing a specific feature of the tool (the camera). As the city is analyzed, taken apart—so is the medium at hand. The juxtaposition of isolated conditions of both place and camera, the investigated and the investigative, allow for the creation of specific yet complex filters for seeing and revealing unanticipated relationships and characteristics, both physical and ephemeral, about a particular place. These are "neither secondary nor representational but doubly operative: digging, finding and exposing on the one

hand, and relating, connecting and structuring on the other."<sup>2</sup> Camera features such as zoom, focus, or fade and recording techniques such as stationary camera and panning are looked at individually and coupled with conditions of place such as intersection, boundary, threshold... The relationships between the isolated tool feature or camera recording technique and the specific condition of place are exhausted for their potential in revealing something unanticipated about both the place under investigation and the investigative tool. Both the place and the camera are investigated and investigative, and both are exploited.

The dictionary definition of notation states that it is "the action of taking or making note of something".3 The particular camera feature becomes a means for taking and noting. It is the lens for seeing and revealing, structuring, and relating. The camera captures a particular condition of place, while the potential of the camera is further understood. This, as "a finding that is also a founding; its agency lies in neither reproduction nor imposition but rather in uncovering realities previously unseen or unimagined".4 The five-minute, incamera-edited exercise titled Zoom/Threshold is explored by a student by continuously zooming out, each time on a different location along a chosen axis to capture, yet more importantly, to create with the video camera a continuous space composed of a series of subspaces. This way of seeing that space is both a reading yet also a construct. It is discovered yet created by the student through his specific use of the camera feature given and his thoughtful consideration of threshold. Another student interprets Zoom/Threshold as getting very close (zooming in and staying there). We enter an unknown space of a common threshold mechanism. We are caught in the space of transition—the escalator. While there, as viewers yet inhabitants of this notation, we are consumed by an abstraction of moving lines,

volumes, and repetitive sounds to discover a spatial rhythm of this system — a place that we inhabit so often in very different ways.

In the previous example the zoom feature of the camera allows us to change scales. Getting that close to the escalator is a detail. While we could see this enlarging of scale as not unlike the drawing of a larger scale detail on a drawing document, one that would allow us to add and uncover more detail, in this case, the change of scale allows us to do this, yet also to become more diagrammatic and abstract. Notations are just that, "reductive and abstract" as Stan Allen states in his essay Mapping the Unmappable: On Notation. 5 This abstraction is important in that it allows us to uncover the ephemeral and physical conditions of place and their complex relationships rather than simply presenting a moving picture of a place. A student uses the Focus/Field study to "slow speed and invert time" as he describes. However, something else can be illustrated here. With the camera out of focus, he records the movement of speeding trucks on a highway at night. Through this filter, in this case out of focus, the headlights of the trucks are exaggerated as a slow field of flickering lights. Another short study in which the coupling is Camera Movement/Edge, a different student attaches the portable tool to her foot to examine the edge where the buildings and the sidewalk meet as she walks this place. Upon viewing, what is seen is a pattern of both textures and movement — what is there physically and the rhythmic movements of her walk. The rhythms that emerge upon viewing these abstractions over time may allow us to understand a larger organizational structure of activities and forces at work during a period of time. The flickering field of lights would begin to visually describe the occupancy of this space, a space — the highway, which is physical (the structure with its ramps and exits) yet redefined and constantly transformed by the fleeting vehicles, their speed, their weight, their groupings... The transforming textures on the sidewalk edge study would begin to reveal what we cannot literally see on the notation, yet can understand upon viewing; the traffic, the patterns of activities, the encounters and distractions—all directing pedestrian movement.

# CAMERA AS AN EXTENSION OF THE BODY

Various studies involve attaching the camera to the body of the investigator. In this way, rather than choreographing the shots (what we will see, frame, and capture) or being drawn to certain views while on site, we are choreographing the set-up—how the camera relates to the body and to the particular condition that

we are investigating. We do this ahead of time, then we go about our everyday activities or the activity carefully chosen for that particular investigation. Unconcerned by what we may capture, we inhabit our places, moving, pausing, in transition. The camera is an extension of the body — attached to a shoulder, an arm, a foot, a rolling briefcase, the back of the head on a helmet facing backwards... Side Walk, a recording of New York City's ground plane, is done by taking a walk through the city with a wide-angle video camera draped over one shoulder, casually on the side of one's body, not unlike the way one carries a shoulder bag. Forgetting about the instrument being carried (it on its side and pointing downwards) a three-hour side walk takes place. Upon viewing (Figure 1), the richness of surface in what we usually think of banal plane is discovered. The colors, the textures, the materials, the changes that are constantly taking place on the ground plane beneath us as we walk reveal the passing through of districts and the everyday activities of the city as if subtle cues and guidance on the city's ground plane. In this study, the complexity of the city is rediscovered through the familiar, yet the unfamiliar—the ground plane that is always there beneath us but often not perceived. Through another study in which a student positions the camera in his luggage, pointing outwards and recording, we experience the various speeds and movements of the space between the car and the plane (the airport), the clumsiness and discomfort of carrying heavy bags, and even the camera as an active, almost alive instrument caught for a moment in the x-ray machine as the security personnel inspects it. Unknowingly to them, it (the camera) also inspects them. Can the video camera, in its capacity to record continuously without our instructions at every moment or our eyes at the viewfinder, become also an objective observant, analytical, removed, yet intimately connected to us?



Fig. 1. Side Walk.

#### LIVING SECTION

While some of these explorations are about the camera as a portable gadget and about what we can do with its features to make it into an investigative tool, other explorations take our more conventional architectural drawings and notational tools as a point of departure for finding analytical potential in the video camera. A Notation A/V student, in a final independent study for the course, takes the common drawing convention of the Section Cut and extends it into video in order to view into the spaces of the city. In his study, entitled Living Section, the various activities and daily rituals are played beside each other along a chosen line through the city (Figure 2). While the inspiration for this study comes directly from a common architectural convention, he finds a similar condition happening visually in the film, The Cook, The Thief, His Wife, and Her Lover directed by Peter Greenaway. Here the camera pans slowly across adjacent spaces and between walls, revealing the activities happening within and along the indiscriminate line that traverses the building from a parking lot, through a kitchen to a dining room. Similarly, this occurs with audio in the film *Delicatessen* by Jeunet and Caro. We hear the various spaces of a building interplay as sounds that originate in different spaces permeate each other or disappear into wall cavities. This Living Section study achieves what Bernard Tschumi refers to as the "tripartite mode of notation... (events, movements, spaces)...for all inevitably intervene in the reading of the city." While Tschumi with the tripartite mode of notation, as he states, questions our more typical architectural tools, this student embraces one of those tools to achieve a similar outcome. While Tschumi is bringing film (moving image) to influence the way we draw, Living Section is bringing drawing to video. It is bringing the conventions and sensibility of architecture to the moving image. In both cases, there is undoubtedly a discovery and an evolution of all media involved as investigative tools in our practice.

#### ZOOM AS A SYSTEM OF MEASURE

In NY A/V Map, New York City is sampled, measured, and represented using the video camera. From South to North, sunrise to sunset, over a seven-day cycle along the entire length of Broadway Street in Manhattan, a cross section of physical conditions and activities through the city is collected using a digital video camera. Here the zoom feature of the camera is exploited as a filtering device, a measuring device, and as an idea for traversing the city — zooming through it. A cross-section samples, and as an architectural convention, it reveals spatial relationships along a chosen line. Here, the ubiquitous Broadway Street, the only street deviating from the grid while traversing the entire island, is this line — the Section Cut. However, instead of looking into the cut perpendicular to its length as one would on a conventional Section Cut drawing, we inhabit and travel this line following the historical trajectory of the city North, as a sliver of space within the city. Broadway Street, which extended North beyond the occupied area of the island ahead of the rest of the city in the 1600's as a pathway to then faraway farms, delineates the directionality of the development of the city. The footage is collected and presented following this growth pattern and direction (Figure 3).

By walking the city slowly, minute-by-minute, block-by-block over a period of seven days, from sunrise to sunset, a series of stationary takes using the zoom feature of the tool are collected in a process that measures the city. While zooming through the city suggests great speeds and moments that merge into each other quickly as the individual zooms overlap, the process of collecting the footage is quite slow, slower than the moments captured. Between each shot there is a fifteen-minute wait that involves the walk north (1/3 of a city block length) and the set up of the next shot. The systems of measure used are of various scales and related to both time and distance. Some are artificial (every fifteen minutes), others are natural (sunrise and sunset). Zooms and their distance capacities, the lengths



Fig. 2. Living Section.

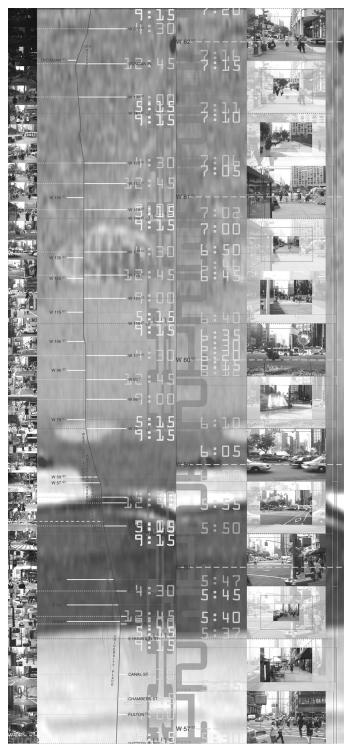


Fig. 3. NY AV Map.

of the city blocks, the breakdown of the week into days, hours, minutes (and the various activities that inhabit these time segments) are some of these measuring systems (Figure 4).



Fig. 4. NY AV Map — measuring systems.

# **VIDEO AS PERSPECTIVE**

As we collect the footage, in looking through the viewfinder we are guided by vanishing lines that vanish both forward and backwards, disappearing both into the distance ahead and also beyond the foreground of the picture frame. As we collect the footage, we are guided by lines (the sidewalk edges) that vanish into one vanishing point ahead of us, our consistent and guiding point that helps us to accurately place the individual 236 shots on our chosen axis — the line. These lines also vanish backwards as we traverse picture planes zooming with each take forward as we traverse the city. In its technicality, the procedure of collecting and organizing the footage is a coordination of picture planes and vanishing lines, as one would construct a perspective drawing. Could we then also compare this video investigation to perspective drawing? Conceptually, we could compare it to perspective in a similar way to how Stan Allen describes it:

"as a concept of time: ordering, surveying and recreating the past from the privileged viewpoint of the present...Space is read in depth-locating the spectator in front and in the present, from which distance and the past are entered and traversed. Perspective establishes a temporal field, from which supports narrative history."8)

In the case of NY A/V Map, an idea for traversing the city, the investigation can be considered a perspective in that we pass through the city's historical sequence following its evolution as we move forward North zooming through it—a one point perspective in motion. While we are following time and trying to keep up with it (in our complex choreography for collecting the footage), we are also retracing time.

# **SCALE AND REPETITION**

In this mapping, what is collected can only happen once, yet it reveals patterns about the city at many scales that are repeated in time. Like a thumbprint, each zoom is unique, yet at the same time, each zoom is repeated again and again in the trajectory. At a larger scale, the entire document, which is connected into one seemingly continuous zoom in post-production editing, studies and represents one week in the history of this city. Already a year has passed, and those activities interactions in those places — are happening and have happened again and again, day-by-day in the routine of the city. As Allen Lightman writes in one of his fictional theories of time in his novel Einstein's Dreams, "And just as all things will be repeated in the future, all things now happening happened a million times before."9 Each interaction is the same yet it is unique. In the film Smoke, the character Auggie photographs his corner cigar store at exactly 8:00 a.m. every day. A friend flipping through the thousands of photographs remarks that they are all the same. Auggie, corrects him, pointing out that each is completely unique. This contradiction embodies the two distinct scales that can be revealed in two different speeds. By speeding up the footage, we are able to see and understand the patterns both physical and ephemeral of the city—the transformations of the configuration of the street, the way the light moves through the city, the topographical changes, the movements of people and cars ... Slowing down the footage or better yet collecting the footage - seven days entranced by what is framed within the viewfinder, allows us to become absorbed with the irreplaceable details of each take, the particular activities, the various populations, what they are wearing, saying, looking at, their expressions and attitudes, the individual interactions that are taking place. While NY A/V Map exists as a repetitive fragment within a larger cycle of history played against each other over and over again, it also exists as one unique moment in time.



Fig. 5. NY AV Map — inhabitable document.

### INHABITABLE DOCUMENT

These collected and assembled physical conditions and everyday events captured in audio and video will be amplified as a sliver of time to be cycled and presented at the second year anniversary of the collection of the footage on Broadway Street itself. The activity of two years past will be overlapped on the activity that loops the city block-by-block, day-by-day two years later (Figure 5). A container attached to a vehicle will travel the length of Broadway over seven days with specific rest moments that will ground momentarily the container (for a measured period of time) yet mark the locations where Broadway is crossed by an avenue, also measuring and locating. This marks the unique condition of interstitial parks that occurs on the city from the residual spaces of these crossings as this line slowly diverges from the grid of the city. The same public that has been documented, the same public that constitutes the map may also physically inhabit this document in passing and in going about their respective daily activities. The same activity, the same light, the same streets and buildings will play their rituals against the rituals of two years past. The document within will play the collected footage at three speeds: speeded up to seven minutes, at normal speed—three hours, and slowed down to occupy the length of seven days. These various time formats together and individually will allow different conditions of the city to be read and juxtaposed within the space of the city (Figure 6). Their assemblage in the container as related to the city will constitute another map, a three-dimensional, inhabitable document, on and moving on Broadway to reveal both the physical and the ephemeral rhythms of the city to the city.



Fig. 6. NY AV Map — container on Broadway.

# **MOBILE VIDEO APPARATUS**

Our next video notation entitled By-pass deals with the contemporary urbanism of Atlanta. It examines its autocentric urbanism, a planning idea of bypassing the city that has occurred with the construction of arterial roads that never connect to the center and constantly defer arrival. Simultaneously these bypasses, common to many of our cities, act as seed of growth for these new cities, one based almost entirely on the car. This investigation examines this condition — the space of the by-pass by exhaustively documenting the city over a continuous 24-hour shoot, looping around Atlanta on the various interstates that constitute the ring (Figure 7). The cycle will begin with the morning commute to become a continuous take(s) that will only be interrupted by the demands of the body (eating and bathroom breaks) and equipment (gas, changing video tapes, etc....)—these as gaps in this seemingly continuous cycle as forays into the finer grain of the spontaneous urbanism of the highway exit. By mounting multiple cameras to the car, the car will be blurred into a mobile video apparatus that will capture a day in the city (Figure 8). Via choreographed viewing apertures — multiple cameras mounted to view the space around the car through the windshield; at the rear and side mirrors, the speedometer, the driver; and into another car — the camera (as an extension of the car, this time twice removed from the body of the investigator) will capture the characteristics of this space, the characteristics of this condition that we so often inhabit — a place where time moves in many speeds and where our perception of where we are fluctuates continuously. Again, what is choreographed here is the set up. The apparatus itself, the car, in its trajectory will capture, study, and measure this intangible place.

# CONCLUSION

These explorations with the video camera allow us to understand the potential of this readily available equipment and technology as an investigative tool in our

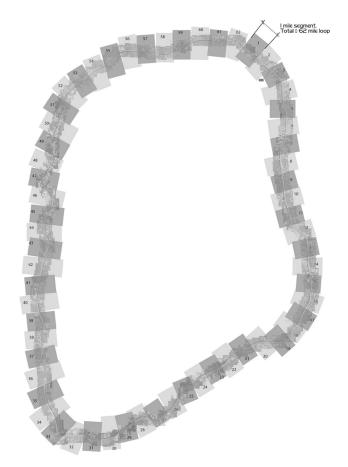


Fig. 7. By Pass — the loop.

practice. Its capacities are found through the exploitation of its features, and camera techniques, by embracing the camera as an extension of the body, or by trying to understand or rethink our more common conventions via the camera itself. Our vocabulary and the vocabulary of the tool begin to be merged as a way of exhausting and clarifying how we investigate, and what we investigate. By using this tool critically yet intuitively we can begin to come up with creative ways of understanding our complex environment, and while this is a revelatory activity, where we find out or "uncover realities previously unseen or imagined", it is

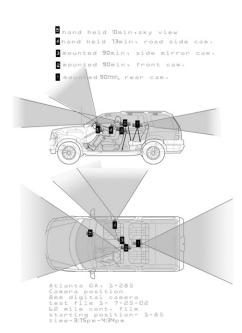


Fig. 8. By Pass — the car as a video apparatus.

also a generative activity, where we begin to project and invent. In our practice, the audio/video camera can be a thinking tool, an instrument for intervening, proposing, or imagining.

### **NOTES**

- <sup>1</sup> Corner, James. "The Agency of Mapping: Speculation, Critique and Invention." In *Mappings*, edited by Denis Cosgrove, 211-252. London: Reaktion Books, 1999, p. 227
- <sup>2</sup> ibid., p.225
- 3 "notation." Oxford English Dictionary. <a href="http://dictionary.oed.com/cgi/entry/00159879">http://dictionary.oed.com/cgi/entry/00159879</a>> 18 September 2002.
- <sup>4</sup> *ibid.*, p.212
- <sup>5</sup> Allen, Stan. "Mapping the Unmappable: On Notation." In *Practice: Architecture, Technique and Representation*. Singapore: OPA, 2000, p. 32
- <sup>6</sup> Notation A/V student Justin Kwok
- <sup>7</sup> Tschumi, Bernard. *The Manhattan Transcripts*. New York: St Martin's Press, 1994, p. 9

- <sup>8</sup> Allen, Stan. "On Projection," The Harvard Architectural Review 9 (1993), p. 122-137
- <sup>9</sup> Lightman, Alan. *Einstein's Dreams*. New York: Pantheon Books, 1993, p. 11

### **PROJECT CREDITS**

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