Looking Through the Rear Window Collage, montage, cyberspace and real-place

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This paper attempts to discuss the value of image, representation and simulation as a vast and inspiring terrain for architectural inquiry. In re-thinking the idea of design process as a series of processes, we experimented with the development of ideas as traces sampled from the world around us, studying how an architectural design process can evolve from disciplines other than architecture itself. Whether on the streets of European cities or within film-space, the work from these three undergraduate design studios focused on various ways of rethinking the way we see cities and space by critiquing the relationship between observation and critical thought. The use of various forms of digital/hybrid media became an integral part of this critique. This media was employed as a tool that enabled the merging of experiential and conceptual realms. blurring the line that separates the geography of memory from the knowledge that is built-in to space. The notion of program became increasingly affected by its redefinition as narration, making it a rich, complex departure point for architectural thought. Techniques involving photo-collage, digital image constructions. computer modeling and storyboarding were developed using urban landscapes, films and paintings as opportunities for experimentation. These techniques were tested in the field through an undergraduate summer Study-Abroad program in Paris and Barcelona as well as in two fourth year topic studios. Architectural space and its concerns exist beyond the realm of the built, and can be found in the barley visible infrastructure of Paris; in the eighty-minute existence of a film-space version of Berlin or it can even be seen through the eyes of a character in the compressed space of a Hitchcock film.

STUDIO 1: EXPLORING THE HISTORIC CITY: SAMPLING URBAN SPACE.

In trying to define a model for approaching a city like Paris, we understood that one could look at the "big picture" that involves the linear history of place and the evolutionary process that defined that city's qualities. This traditional template for

studying urban space and its architecture is scripted by nature and denies the multi-layered qualities of urban space of which its built history is just but one layer. In attempting to understand what makes a place, we realize that for every consensual, shared bit of information there is also a very personal, private interpretation of everyday events for which recorded history is but a vehicle, a vessel.

Urban spaces are scenarios where stories unfold, moments are experienced and memories are born, and there is much to be learned by allowing these places to inspire architectural thought by looking at them at face value, filtered through the unique interpretation of each of our own minds and imaginations.

In the case of Paris, we looked at the big picture first, and realized there were several different geographies that occurred simultaneously. The perception and experience of a tourist involved the city-as-surface, moving from one monument to the next. But there is another city. A city of distinct and almost incongruent pieces, held together by the glue of infrastructure. Each subway station behaves as a "star gate", emerging into an urban condition that lacks any phenomenological continuity the previous stop or the one preceding it.

The underground movement from place to place displaces the commuter's perception of the city as a continuous whole. The class developed the idea that the entire metro system with its stations popping up in hundreds of locations constituted a city in itself, a system of "star gates", and one with huge gaps inbetween. In this way, each urban area surrounding a metro stop became like a movie set, involving changing stories against a fixed architectural backdrop. Students were asked to select five metro stops at random, and given the assignment to walk the immediate area surrounding each metro station exit, photograph it exhaustively and then sit-down in a café and write a short story about something occurring in that place.

With this story as their "program", they proceeded to envision an imagined new urban space by "constructing" the visual experience of that imaginary piece of city with the photographs taken earlier, in fact transforming the existing conditions as found to now represent what each student imagined happening there. These five resulting photo-constructions (much like those used by landscape architect Yves Brunier) were assembled as a system connected by the random order in which they were visited. The resulting product is reminiscent of Guy Debord's Psycho-geographical maps (Naked City, etc).

As a means of understanding Paris, students recognized how each sub-system of the city was subject to its use by each individual, and that this anarchic and fragmentary analysis of the modern city becomes far more useful as design medium than the blanket cliché of the city-as-mega-structure. It helps us bridge the gap between urban and architectural thinking and allows for us to see the city as a series of opportunities based on individual experience as an alternative to looking at the city as frozen convention of historical events.

Employing digital photography and Photoshop, these third and fourth-year students applied this same technique in studying other, more focused topics. An exercise on "Landscape and architecture" was approached as a critique of the city, and quick pastel "impression" sketches were followed by a series of postcard-sized photo-constructions (carefully assembled collages of sampled urban landscapes).

These images were provocative interpretations of situations found in certain spaces of the city and were produced always in sets of three or four postcards per exercise, avoiding the deterministic condition that would have resulted if there had been a single "final" photo-construction. Working with a series of ideological guidelines based on work previously developed by my colleague and co-instructor Teddy Cruz, we avoided the pursuit of a single result but rather a body of work as a whole essay, with many iterations and variations that did not attempt to make a single statement or critique. This was important to us because images can be over-burdened with too much "meaning", rendering them frivolous as one-liners of otherwise openended ideas and observations. In terms of technique, the digital merging of sampled images with sketches became an ideal process for a study-abroad design studio, employing sketchbooks, laptops and digital cameras as individual mobile design studios. In the case of this particular summer studio, the theoretical agenda of discovering the city on it's own terms was combined with design techniques that allowed for quick and expressive interpretations of specific topics within each city. It helped students relate the phenomenological instances of architecture to the conceptual knowledge imbedded in it. Students found their own versions of Paris and Barcelona by wandering through them and by documenting those experiences as an act of critique of the city.

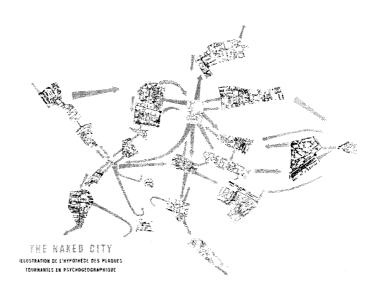


Fig. 1. The Naked City.

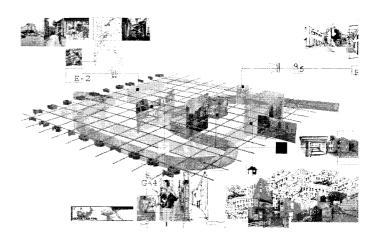


Fig. 2. Student mapping of the Paris Metro.

STUDIO 2: LOOKING OUT THE REAR WINDOW: SIMULATION AND REPRESENTATION

The power of the written word is often overlooked in the design process. The images and ideas that emerge through words is typically taken into spatial narrative in film, but painting can also be seen as an isolated frame in of itself. Our first exercise here was to write a short narrative of what one imagines happening within the space of a painting by Giorgio DeChirico, who's "metaphysical surrealist" images are strongly spatial and even decidedly architectural. Students wrote their short stories and then produced eight storyboard sketches that highlighted the key moments of their narratives.

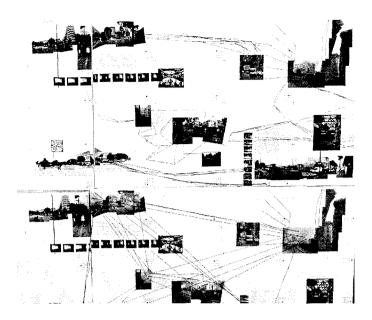


Fig. 2B. Student mapping of the Paris Metro.

It's important to understand that just as all buildings have primary and secondary spaces (determined by form, program and tectonics) so do films, where scenes are linked to one another through specific continuity techniques that establish secondary scenes or actions. Students were asked to build digital models for each storyboard sketch, independent of each other, and later collage the sketches to create a hybrid assembly of images. The resulting concept was then used as a guide to combine the individual models generated from the storyboard sketches. The original narration became collapsed into the new object-piece, hinting at its sub-parts but defining new spaces as a result of their union.

The next exercise involved the Hitchcock film Rear Window. Using the film itself as a source, students built individual digital models of the film's set, carefully reconstructing the urban

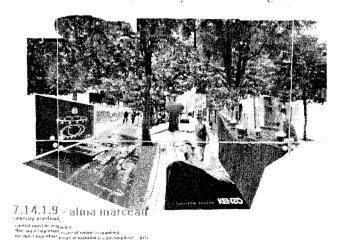


Fig. 2A. Photo construction of imagined metro stop.

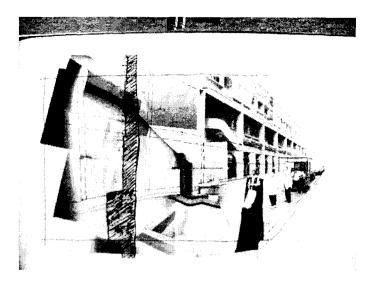


Fig. 3. Composite sketch + photo construction.

courtyard where film takes place from a composite of individual camera frames. They were able to place themselves within the room where James Stewart would be observing out his window via their 3D Studio target-cameras. This way, they re-built the conditions for the original narrative of the film. The next step involved each student re-writing a part of the films narrative. introducing their own twist to the plot, and then choosing camera frames used in the film to define "scenes" that they would transform physically to adapt to the new altered story. Thus four sketches were produced for each camera frame and a digital model built for each transformed view. This step acknowledges that architectonic space and its materiality occurs mainly as a sensorial/optical event within the context of a program (or narration), and that one need to not look outside the program (in this case, the re-written story-as-program) to find a reason for ideas in architecture.

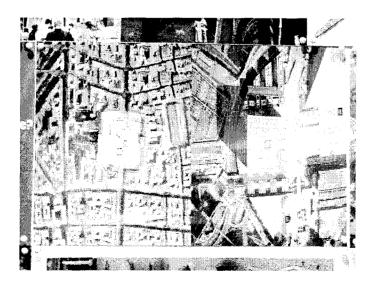


Fig. 4. Photo construction: Inverted densities.

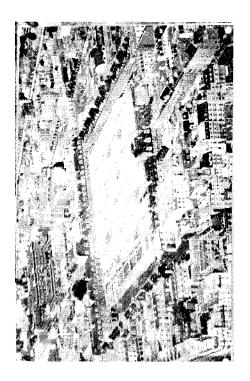


Fig. 5. Photo construction: Public Spaces.

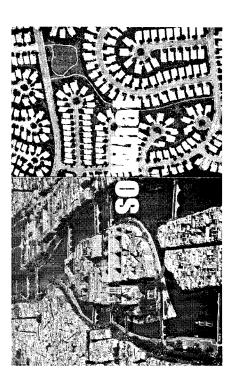


Fig. 6. Photo construction: Opposing images.

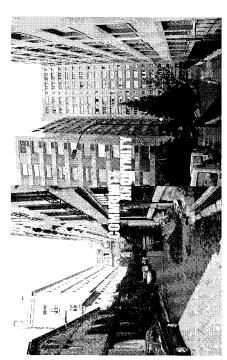


Fig. 7. Photo construction: Opposing images.

They were in fact redesigning the space of the film as James Stewart's character would have seen it himself, keeping all visualization within the confines of the film's own language. The resulting four partial digital models were then recombined

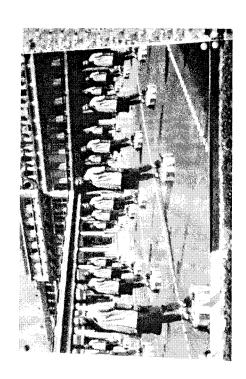


Fig. 8. Photo construction: Public Space.

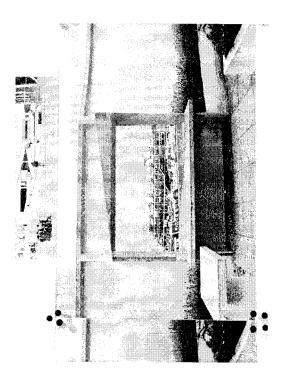


Fig. 8.4. Photo construction: Building and landscape.

to form a whole again, in effect redefining the original architecture of the film's set. The narrative-as-program once again was the source for ideas of morphological nature, linking ideas with form vis-à-vis the story being told.

The following stage was focused on exploring aspects of the design process that we deemed impossible with traditional design tools: Slicing the whole digital model in arbitrary tenfoot sections, the students introduced narrative-based modifications to each individual section (in over twenty sections or slices). Thus each individual digital model slice was modified to acknowledge the impact of the modified story for the film, and finally those 3D sections were recombined into a whole again, with the consequent update to the formal expression of the "model/set".

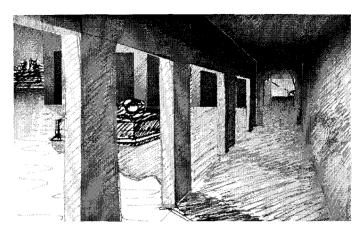


Fig. 9. Sketch of imagined DeChirico space.

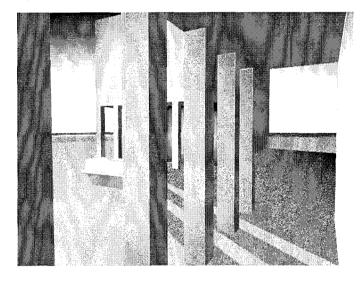


Fig. 10. Digital model of imagined DeChirico space.

We understood the idea that the main character's eyes were in fact our virtual eyes, and the 3D Studio camera became a surrogate for the director's vision on how the story was to be told. The design process developed in the Rear Window studio allowed us to investigate the powerful relationship between the written word and architectural representation. We also found the value of digital simulation as a means of understanding the ideas behind Hitchcock's use of the camera, a technique that teaches us how to visualize space and relate it meaningfully to the story (or as in our case, the program).

STUDIO 3: THE EIGHTY-MINUTE CITY: AN URBAN RE-MIX.

The idea for the process developed in this studio was inspired by the work of another respected colleague of mine. Paulette Singley, who drew a comparison between the "real" sequential locations used in the making of the film Falling Down and the "suggested" path that the film's anti-hero (played by Michael Douglas) takes in his journey across the Los Angeles basin in his quest to reach the ocean. The site for the film's narration

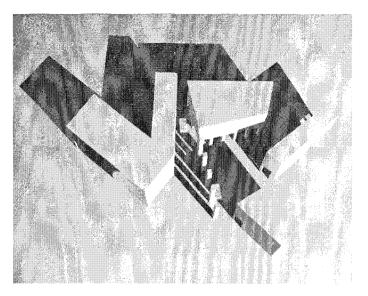


Fig. 11. Composite model of several imagined DeChirico space models.

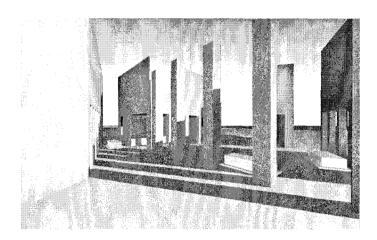


Fig. 12. Composite model of several imagined DeChirico space models.

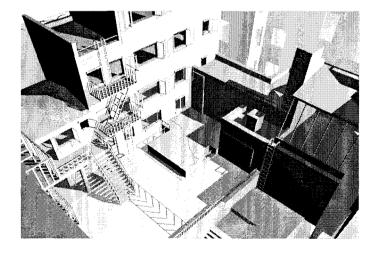


Fig. 13. Digital model of Rear Window set; based on frames taken from the film.

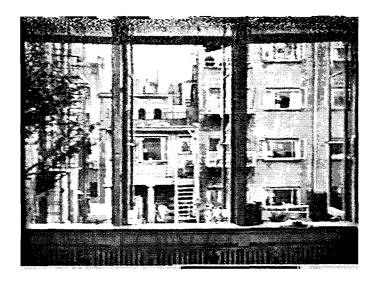


Fig. 14. Scene from the film: Rear Window.

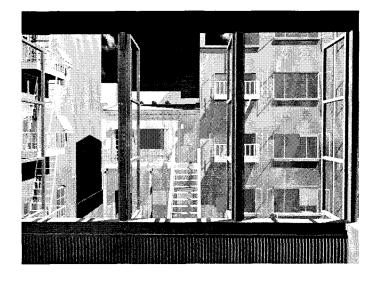


Fig. 15. Digital model of Rear Window set; based on preceding frame.

was in fact a fictional, fragmented version of Los Angeles, who's perceived scale is determined by the "virtual time" of the journey as described in the film's narrative.

The sequence of city we see in the film is not the actual sequence used in filming it. A zigzag path of disjointed locations was used to describe L.A.'s physical east/west axis. The film then defines its own site, an alternative Los Angeles. In a reverse process, we used the eighty-minute film "Run Lola Run" as our project site, and its narrative as our program.

The studio developed a mapping of the film's derive through the city of Berlin, modifying it in key points, in fact re-designing the environment of key scenes to incorporate specific ideas and texts that were not contained in the film itself. The non-linear procession through urban space that this film describes became an excellent model for a design process that had the creation of opportunities as a desired outcome. Much as in Singley's Falling Down analysis, we looked at the various locations used in Run Lola Run as describing a de-facto city, unified or given cohesion by the film's story. The various scenes in the film formed a sampling of Berlin, their programmatic sequence established by the film's narrative(s).

Students were asked to identify particular scenes and their physical settings, and combine these moments with specific urban theory texts they were researching separately. Using images collected from a wide range of sources, each student assembled bits and pieces of images to "construct" visually credible spaces that incorporated the physical place described in the film, the portion of the story (program) that unfolded in the place and the text they had researched separately.

The results were a series of composite re-designed urban spaces that when placed back into the film's structure, described a new city. The *Stargate* mapping concept we had explored in Paris's

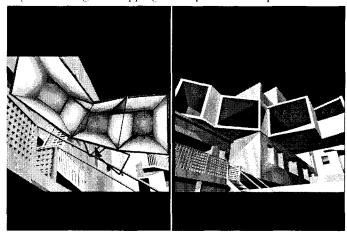


Fig. 16. Digital sketch and model of Rear Window set; after re-writing of narrative.

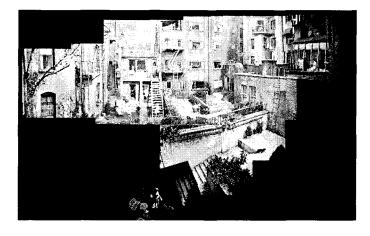


Fig. 17. 180-degree view of Rear Window set. Photo construction with captured frames from the film.

subway system here gives way to a re-mapping of a fictional city based on a subtle change in its program

The idea of borrowing and scavenging images and texts from diverse sources to produce images of inhabitable spaces opened opportunities that cannot be attained through traditional representational techniques. In taking images from the existing world, we realized that architecture could be seen as an act of interpretation and not simply that of invention. By freely associating images and written ideas borrowed from the world around us, we pieced together or "constructed" spaces with materiality built-in to the visual experience. Even more relevant, we generated multiple series of related images that maintained a free-flowing dialogue of design ideas and opportunities, unlike traditional deterministic processes of seeking

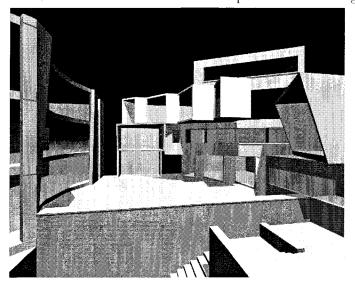


Fig. 18. Wide-angle frame of digital model of Rear Window set after narrative transformation.

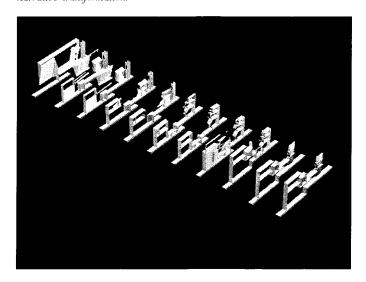


Fig. 19. Breakdown of building into ten-foot sections.

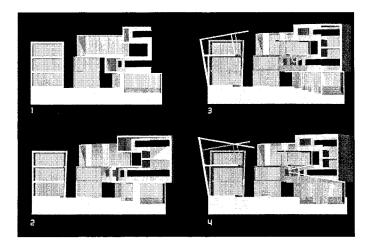


Fig. 20. Operations on each section, allowing the new narrative to affect each section individually.

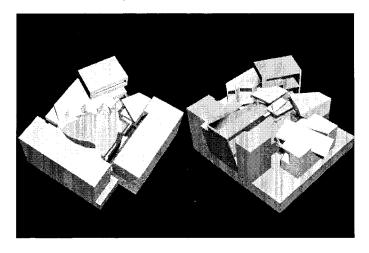


Fig. 21. First generation model before sectional operations and second model after modified sections are brought together as whole again.

conclusions or results that often leads to constrained, safe and predictable outcomes.

The process of sampling images and modifying them to express ideas-in-progress allowed students to move seamlessly between various scales of urban fabric, encouraging them to blur the distinction between individual and collective space. The association between city and architecture became as evident as between location and narration. Traditional, linear design processes start with a simple concept and develop in complexity as more knowledge is brought into the process.

Our process accepted complexity from the beginning and did not attempt to "simplify" this complexity via abstraction. These constructed images were purposefully avoided being one-of-akind or unique by always being produced as one of many simultaneous images, always forming a "series". This way we avoided placing too much "meaning" to any one given photo-

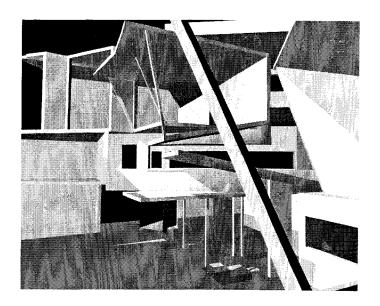


Fig. 22. Actual camera frame from the film, now viewing the courtyard space after sectional operations.

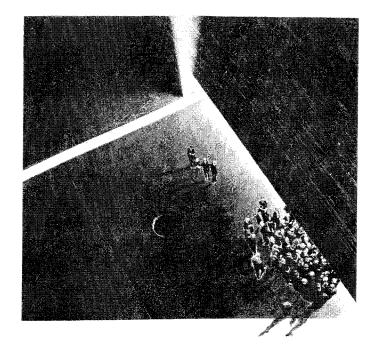


Fig. 23. Photo construction of an idea of urban space. Image is an inverted view of Peter Zumthor's thermal spa in Vals. Switzerland.

construction, at least until we were ready for the subsequent stage of this multi-layered design process.

The next step was to take photo-constructions corresponding to five selected scenes from the film and assemble a revised "map" of the film, revealing a new Eighty Minute City. It was no longer Berlin but an imaginary city sequenced by the narrative of the film and spatially defined by the transformations evolved through collage and text brought into the process from outside

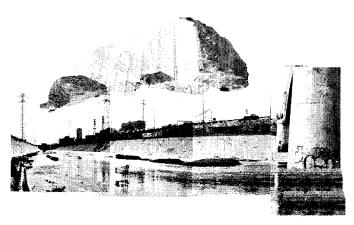


Fig. 24. Photo construction: The Eighty Minute City.

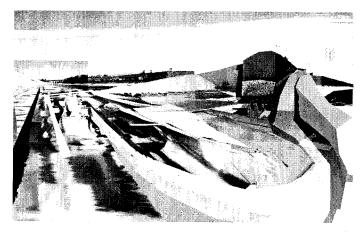


Fig. 25. Photo construction: The Eighty Minute City.

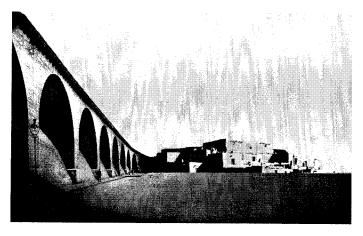


Fig. 26. Photo construction: The Eighty Minute City.

sources. This "infection" of the original spaces in the film, where the same story is now told in a reinvented architectural and urban context, provoked a discussion about the origins of architectural ideas.

The notion of design as an interpretive act became evident. Through open processes of conceiving space through borrowed images within the context of a spatial narrative, we revealed opportunities and possibilities that could not have been "invented". The process we developed actively sought to develop ideas through production (T.Cruz), meaning that the very act of constructing these spatial collages became the ideas themselves, only possible through the act of making them.

These photo-constructions could not be predetermined; they had to evolve as they were made. Surprisingly, the act of producing digitally composite images also became an act of craft, and the resulting architectural concept became a consequence of this effort of making things.

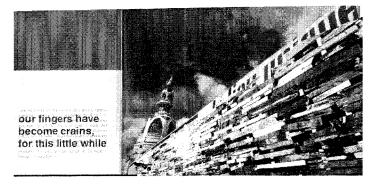


Fig. 27. Photo construction: The Eighty Minute City.



Fig. 28. Text+Image: Resampled Berlin.



Fig. 29. Photo construction: The Eighty Minute City.

Understanding that these "eye-level" photo-constructions were just experiential fragments of a greater whole, the next step was to build a physical model for each of these series of constructions in other words create a "set" that would harbor a space as sketched through a given photo-construction. These models were to contain the same experiential qualities of the photo-constructions, yet embody a physical expression that can only occur in three-dimensional space.

The set of five models built for individual photo-constructions where then combined to form a more complex sampling of urban fabric revealing expect secondary spaces and conditions resulting from juxtaposing the three-dimensional fragments into a composite whole.

These spaces described in the photo-constructions were saturated with meaning, layered ideas and were crafted to the point of expressing beauty in their execution. The final presentation of the work was the process itself, with its multiple generations of photo-constructions and consequent models built from them, and finally the camera-eye images taken from the models themselves.

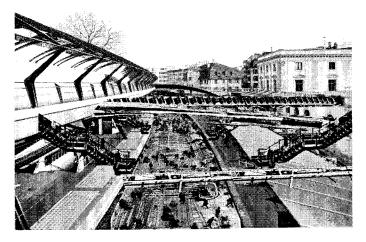


Fig. 30. Photo construction: The Eighty Minute City.

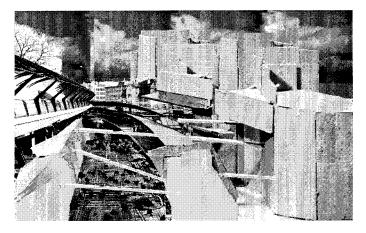


Fig. 31. Photo + model hybrid construction.

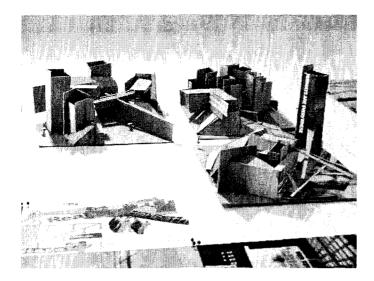


Fig. 32. Models built for individual photo constructions.

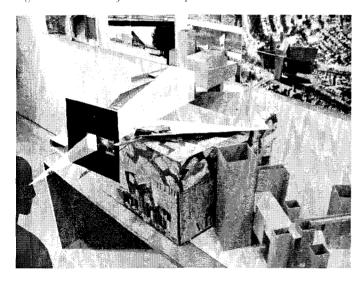


Fig. 33. Construction of urban "set" in model form.

CONCLUSION:

Our ability to learn from and understand other disciplines is one of the most exciting aspects of architectural education. To understand where ideas can come from, we need to understand how our minds work, how we perceive things and how we associate those perceptions with thought. As architecture becomes more associated with the notion of media and not just a twentieth century version of industry, we find that the layered complexity of media offers an opportunity to redefine the way we approach architectural thought. While media deals mostly with societal communication and architecture with solving problems that pertain to the societal habitat, the two almost blur their distinction when they refer to one another. Film brings a narrative into imagined space, provoking associations with the known, with spaces we have already experienced. Architecture as a cumulative phenomenon does something similar by employing the known to create multiple narratives

that occur within materialized space. The city is a natural source of discovery for spaces both real and imagined, and the stories that unfold in its midst are to be observed and rediscovered by each one of us. Observation occurs in space, but the narratives that program those spaces occur in our collective imagination. By looking at film as a singular urban experience, we learned that a movie director and an architect have much in common. Using the camera as a surrogate eye, we can experience and create worlds that cannot be conceived as abstraction only. The design process is an act of making, where thought and craft can be made simultaneous with the appropriate tools and processes. In re-thinking the idea of Program as a story to be told, we find an opportunity to redefine the design process making it a live, dynamic act intended to generate possibilities and not simply determine outcome.

In an era of edges blurred by media, where image is a driving force in every aspect of human interaction, we have attempted to take the act of seeing seriously. Where the written word becomes as powerful as abstract thought and where accident becomes opportunity, we have attempted to explore where ideas come from and how the actions of observation and interpretation override the simplistic notion of invention. As young architects extend their horizons and explore geographies other than what is already familiar to them, they realize how much architecture becomes an active amalgam between culture and place. This realization identifies the architect, as a participant in the accelerated rhythm of change the world is experiencing in the twenty-first century.

Lebbeus Woods wrote: "The architect is not a detached professional, upholding timeless values, but an instigator, an agitator, an active participant. One does not participate by following the crises of change, but by being part of its initiation". Sampling from the complex world around us and reinterpreting it on our own (sometimes contradictory) terms was our way of participating in that very same world; In fact, we have found that less is not more; complexity is welcome, and contradiction is quite possibly evidence of change.

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