TRANSMUTATIONS

VIDEO IS MORE.

DEANSTORM

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DEANSTORM
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video is more.

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start here.

thesis statement

The design process is essential to creating meaningful architectural space. Through this sequence or cycle, creative surprises emerge. With the advent of digital media, perceptions of architectural space are being transformed, and new architectural ideas and innovative spatial concepts are being revealed. Media is an extension of the mind and body. And digital technology is changing human behaviors, interactions, and relationships. Thus, it is evident that an inherent interconnection exists between imagery and the experiential, physical world. Engaging in design inquiries, architectural theorists are already beginning to explore this concept.

Creation is exploration, observation is revelation. Digital images and motion pictures can be used as abstract forms of sketching and hypothesizing about architectural space. Production can induce further inspiration. Capturing new images and reworking existing digital content initiates the process, but the designer's active, manipulative experimentation unveils avant-garde thoughts and visions. As the designer creates various mediascapes, architectural and spatial ideas can be explored like never before. In this way, the architect is learning about the project by alternating between intuition and analysis. By transmutating digital content into fresh imagery, one creates new modes of perception. These transmutations can alter the way individuals view the world and interact with it. As the designer creates exploratory media and manipulates digital imagery, some impressions are revealed and grasped, while other concepts encourage further questioning. With the acquisition of new ways of viewing architectural space, the contemporary designer's ways of thinking, working, and making are constantly evolving.

By creating and presenting intriguing digital imagery, both still and in motion, a designer can stimulate a suspension of disbelief, prompting an altered state of curiosity. This state is partially and simultaneously connected to reality, to memory, and to the imagination. New perspectives generate new ways of seeing — and possibly more importantly — new ways of understanding. Consequently, architectural imagery can engage viewers in ways that begin to explore potentials for alternate realities, as existing relationships with space, time, and form are openly challenged. Within this context, the designer is not someone who simply re-presents some aspects of the world as it is, but rather, with his manipulative explorations in digital imagery, is one who triggers entirely new mental constructs, affecting thoughts, knowledge, memories, and imagination.

With this process, the architect is creating space that exists at the intersection of digital imagery and architecture. Furthermore, the designer is initiating an architecture that exists at the edge of perception. These spatial conditions establish an environment which directly engages and responds to the individual's evolving relationships with time, space, and form, with memory and imagination, and with reality and the screen. And in the end, the designer is attempting to manipulate both architecture and space to elicit a response similar to that which is created by manipulated digital imagery. Thus, this architectural space challenges perception and requires personal translation and reconstruction within the mind to be fully comprehended.

architecture begins with an idea.

"Neither teachers nor students are today encouraged to undertake an adventure: dangerous, risky—perhaps hopeful?—which understands itself as a search for the whence, the whereto, and the why of Architecture's condition: a quest for the miracle, or at least the abyss which illuminates it. And if someone is still bothered by a problem to which no curriculum answer can be given then he or she should refrain from raising it, because that to which technicized thinking can give no answer is irrelevant—a 'pseudo problem.'"[1]

— Daniel Libeskind

Answers are not known.

This is where it begins.

INTRODUCTION

The design process is essential to creating meaningful architectural space. Through this sequence or cycle, creative surprises emerge. Thoughtful ideas coalesce with inventive experimentation to imaginatively produce creative spatial compositions. Completely immersed in the process, the designer cannot predict the outcome. Designing is not knowing. Rather, it is a form of questioning. And architectural questioning can be influenced by the tools which the designer chooses to engage. More specifically, using contemporary digital technologies, an experimental method of creation can inspire new sequences in the design process. With the advent of digital media, perceptions of architectural space are being transformed, and new architectural ideas and innovative spatial concepts are being revealed. Media is an extension of the mind and body. And digital technology is changing human behaviors, interactions, and relationships. Thus, it is evident that an inherent interconnection exists between digital imagery and the experiential, physical world. Engaging in design inquiries, architectural theorists are already beginning to explore this concept. Creation is exploration, observation is revelation. Digital images and motion pictures can be used as abstract forms of hypothesizing and sketching architectural space. Production can induce further inspiration. Capturing new images and reworking existing digital content initiates the process, but the designer's active, manipulative experimentation unveils unconventional thoughts and visions. As the designer creates various mediascapes, architectural and spatial ideas can be explored like never before. In this way, the architect is learning

about architectural space by alternating between intuition and analysis, because oscillation is inherent to the process. By transmutating digital content into fresh imagery, he or she creates new modes of perception. These transmutations can alter the ways individuals view the world and interact with it. At the intersection between architecture and motion pictures, experimental, perceptual designs are attempting to reveal new ways of seeing, interpreting, and understanding digital imagery and architectural space.

VISUAL PERCEPTION

Optical physiologists and psychologists have examined how perceptual capabilities of the eyes, brain, nerves, and muscles are involved in bringing forth an understanding of an object. Visual perception is not merely a passive activity in which impressions of light are received on the retina. Rather, vision is equated with nerve and muscle movements associated with the aesthetics of resultant mental sensations. Therefore, since certain aesthetics may cause an individual to move one's head or eyes in specific directions, form greatly influences how one feels about a work of art or architecture. Consequently, perceptual meaning is produced within the viewer in a way that is much more complex and interactive than the simple reception of purely visual information.2

Sight allows individuals to quickly and directly engage the external environment. Maurice Merleau-Ponty explains, "Everything that I see is in principle within my reach, at least within my reach of sight, marked on the map of the 'I can.'"3 Vision gives an individual the confidence and understanding that he or she can actively interact with the physical environment. In addition, it establishes a relationship in which the subjective self can begin to reflect upon his or her place within the objective world. But ironically, much of what is perceived today is not actually within reach nor is it able to be physically engaged, because so often, content exists only on a screen. Merleau-Ponty also writes that "[v]ision is not a certain mode of thought or presence to self; it is the means given me for being absent from myself, for being present at the fission of Being from the inside—the fission at whose termination, and not before, I come back to myself."4 Furthermore, the acquisition of visual knowledge originates from outside of the self, and once this stimulation is internally processed, "vision teaches us . . . that we are everywhere all at once, and that even our power to imagine ourselves elsewhere . . . borrows from vision and employs means we owe to it."5 In this way, seeing initiates imagination, understanding, and reflection.

Perception is the lens in which the action of the world is processed. And in order to begin to fully grasp the possibilities of what it can mean to exist in space, it is imperative to break from the familiar acceptance of what is already known. Thus, new forms of perception require a mind that is open and untainted by rigid predispositions.

LEARNING TO SEE DIFFERENTLY: CINEMA, CUBISM, AND ARCHITECTURE

Learning to see differently reveals external, objective unfamiliarities while enabling an

Portrait of Wilhelm Uhde. Pablo Picasso |image 01|

Play Time. Jacques Tati |image 02|

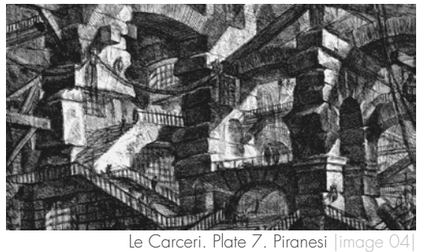
individual to develop a more comprehensive internal, subjective awareness. At several moments within the timeline of visual history, new developments in art and technology have dramatically altered perceptions. The invention of cinematography in the second half of the 19th century and the development of Cubism at the beginning of the 20th century profoundly influenced ways of seeing and instigated a shift in how individuals think about and relate to time, space, and form.

The moving image challenged traditional perspectives by presenting and manipulating spatiality and temporality simultaneously. Cinema produces an illusion of motion with the rapid, sequential projection of fixed images onto a screen, resulting in a form of media that is rooted in the representation of movement and time. Motion pictures are clearly perceived because of a phenomenon of human eyesight called the persistence of vision or the theory of afterimage, which means that the brain sustains anything that the eye sees for a fraction of a second after the eye stops seeing it.6 Instants of time appear to be continuously changing, and with movement, action, and duration purely depicted, cinematic visual stimuli establish a heightened awareness of time. While each film presents its own narrative, motion pictures are actually subjectively comprehended, because the objective projections also move through the spectator's own inner emotional space, producing an ability to render affect.7 Additionally, cinema presents its own reconfigurations of time and space through narrative, with editing, and by using the eye of the camera to capture unconventional perspectives with compositional framing. Cinematic projections are mechanical and, therefore, subject the spectator to "the time of its own inexorable and unvarying forward movement."8 Cinematic experiences are both seen and emotionally felt, and comprehension occurs as each film unfolds within its own guidelines of temporality.

Cubism radically calls into question the very basis of pictorial representation, moving beyond visual reality and external appearances.9 New conceptual wholes are created by deconstructing subjects and reconfiguring them into expressive simultaneities consisting of several different perspectives. In pursuit of a rigorous analysis of form, cubist painters dissected the optics of reality into constituent parts, creating fresh compositions of aesthetic objects. The artists selected and synthesized combinations of seen and remembered elements of a subject. With several juxtapositions or visual positions within a single painting, cubism accentuates rigorously different and discontinuous perspectives, schemas, or viewpoints.10 As a result, cubist painting attempts to reveal hidden truths about the objective world by teaching individuals to see another dimension of reality.

An inherent relationship exists between cinema and cubism, since cubist painters like Picasso and Braque attempted to translate the movies' revolutionary portrayal of time, space, and motion into fine art. Inspired by motion pictures, cubism revolutionizes radical changes in form and vision, because films enable visual artists to capture blocks of time and analyze the resultant images at varying speeds.11 Consciously examining cinematic motion, the cubists strive to capture that same movement in their paintings by creating fractured surfaces

Barcelones. Borja Bonaque |image 03|



Le Carceri. Plate 7. Piranesi |image 04|

Musée des Confluences. Coop Himmelb(l)au |image 05|

and multiple perspectives within the subjects of their work. Picasso and Braque were not only captivated by films, they were also artistically competing with them.12

Together, the two arts established revolutionary changes in the ways in which time and space are conceived, documented, and analyzed. Both cinema and cubism generate opportunities in which visual knowledge engages viewers in ways that challenge traditional modes of perception. As both art forms present unfamiliar content, the process of analysis and revelation allows an individual to imaginatively perceive alternative possibilities outside of the norm. As a result, one can comprehend and reflect upon each external visual stimuli while intuitively internalizing meanings and interpretations.

Both cinema and cubism have influenced and inspired architectural design. But it must be mentioned that this is actually a rather peculiar situation, as Sergei Eisenstein has noted that "film's undoubted ancestor [is] architecture."13 And clearly, cubism's predecessor is cinema. Thus, architecture influenced cinema, which inspired cubism, and in time, ideas from both cubism and cinema were translated back into new conceptions of architectural space and time.

The process of designing architecture is quite similar to the art of making a film, because, as Jean Nouvel states, "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, framings and opening . . . ."14 Here, the architect plays multiple roles similar to those of the director, set designer, and editor, respectively imagining, constructing, and manipulating a framed setting in which time and space can unfold through motion and perception. The individual can and will experience action, but unlike a cinematic spectator passively watching a film on a screen, the architectural spectator actively engages with and moves through a constructed environment, creating an experience that is dictated by curiosity and purpose.

Architectural experiences can be equated to cinematic experiences, as the moving spectator may replicate the perceptual cinematic framing qualities of a moving camera. Likewise, cinematic projections are collectively received by large groups of people, much in the same way that architecture is experienced. Additionally, space can be perceived in terms of thickness, similar to the ways in which the lens of the camera is sensitive to depth of field. Different screens, planes, and openings can be superimposed as intermediary joints of passage layered upon one another that implement moments of focus and blur. This architectural experience is quite similar to the cinematic montage: a process in which specific sections of film are selected, edited, and pieced together to form a continuous whole. A cinematographic montage links various fragments, filmed from several positions, at different times, and in diverse dimensions, into one sequence. Likewise, a cubist painting can be understood as being cinematic in that it employs montage in its own way. With multiple, simultaneous perspectives, cubist painters shifted several points of vision into a cinematic sequence, representing several projections in a single picture plane.15 Previously, with the movie camera, cinema recognized and mimicked the fact that a subject navigates through space, but with cubism, the subject itself is presented with a multi-faceted viewable object, simulating actual movements in space and replacing the passage of time.

In a cubist painting, form is suggested and not clearly defined, but at the same time, a strong linear quality still remains within the body of work, providing an opportunity for the viewer to synthesize the information of a depicted object. Similarly, some architects have attempted to collapse several points of view into a single work. This technique can establish multiplicities in architectural communication: ". . . plan, section, and elevation of an object could be laid or drawn over each other, and then adjusted and fused to form a single, legible and highly informative image."16 Conceptually, architecture can strive to capture the dynamism of a sliced model by establishing spatial relationships that exist with exploded, unfolded, and projected components which inhabit the same space at the same time without actually interfering with one another.17

Emulating some of the artistic intentions found in cubism, architecture can be fragmented and fractured, featuring an array of formal, spatial, and material facets. Similarly, architects like Coop Himmelb(l)au have "found ways to project the chaotic dislocations from the virtual space of cubist painting back out into real space."18 Architectural space is being reconfigured, revealing new essences about its internal structure and reconfiguring any preconceived notions of what architecture ought to be. Just as cubism taught individuals to see differently, new forms of architecture must also inspire a similar type of perceptual learning and comprehension, since speculative spaces do not coincide with pre-established architectural schemas. Cubism continues to inspire persistence in reinventing the possibilities of what architecture can become. Thus, the cycle of artistic and experiential influence persists, because cinema is architectural, cubism is cinematic, and architecture can be cubistically cinematic.

SPATIAL AND PERCEPTUAL EVOLUTION

Anthony Vidler has observed that, because of digital technology, previously unimaginable and unrealizable designs are now projected into the built world. Ideas, words, and forms are conceived within visionary virtual space, as spatial thought is integrated with psychoanalytical thought. Existing at this intersection are representations and productions which result in what Vidler calls "warped space."19 Spatial warping disrupts established architectural schemas, and these subject and object disturbances distort conventional descriptions of space. Forced fusions of different media, like photography, film, art, and architecture, also create spatial warping which breaks the boundaries and separations while depicting space in unprecedented ways. Specific objects materialize as intermediary works that, in order to be explicated, require an interpretative vocabulary based in other art forms. Traditionally, space is considered as a stable container for objects and bodies, but warped space, on the other hand, is produced by sub-

jective projections and interjections. It forces the formal and spatial to permeate with the psychological. The emergence of alternative architectural space begins with optical perceptions of spatial dimensions which are generated by the perceived dynamism of bodies and minds moving in space. Visual impressions or influential images reveal the primary perceptions of space, because sight is completely subjective.[20] Thus, spatial warping begins with an image.

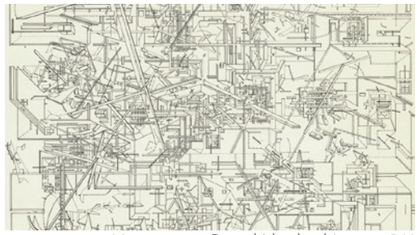
The image is an integral element of architectural education, presentation, and critical discourse. Moreover, it is an essential, visual point of reference which attempts to illustrate an architect's spatial or formal intentions, while at the same time, captures the essence of a critical idea. But it is also important to note that images are not simply a preliminary step in proposing an architectural project, nor do they merely capture a moment in the timeline of architectural history. Rather, certain architectural images can be visual manifestations of ideas. And it could be argued that, often, it is quite difficult for built architecture to even come close to reaching the complexity of some forms of experimental, hybrid representation, composed of strategic combinations of various forms of media. Nevertheless, this breed of images expressively continues to alter the architectural canon while inscribing strong, intellectual effects within the conversation of architecture.[21] The warping of architectural realities may begin with a two-dimensional image, but it doesn't have to end there.

Warping perspectival space is an abstract process of thinking in architecture, and now, these distorted representations, which are similar to those of cubism, as well as futurism and abstract expressionism, have penetrated both physical and representational architectural space. Additionally, film continues to present imaginary space, and at last, contemporary architecture can actually embody these seemingly impossible visionary constructions. Inspired by cinematic imagery, designers continue to try to represent both movement and temporal succession in architecture. And with these warped designs, cinematic architecture can produce entirely new ideas: exploding time and space, embracing depth and movement, reformulating the real and the imaginary, and fusing the physical with the mental. One can expect the unexpected.[22]

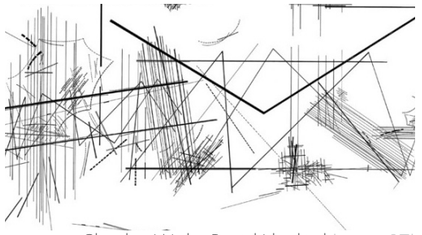
ALTERNATIVE VIEWS IN ARCHITECTURAL THINKING AND PRODUCTION

DANIEL LIBESKIND

Experimental, investigative architectural thinking requires alternative methods of production, because ideas are not indubitable. Daniel Libeskind writes: "Disorder, the arbitrary, born from the delirium of order pushed beyond its limits, by a strange paradox, discovers its own logic; a structure which like an inaccessible and secret truth has been prefigured in the alluring depths of chaos. When we deploy the arbitrary, we confront necessity—our own and the world's . . . [and] In the words of [Soren] Kierkegaard: 'The whole truth lies in arbitrariness.'"[23] Design is an uncertain exploration, and with his drawings, Libeskind expresses advanced, inquisitive architectural thinking in a set of academic representations. They are warped expressions, because for Libeskind,



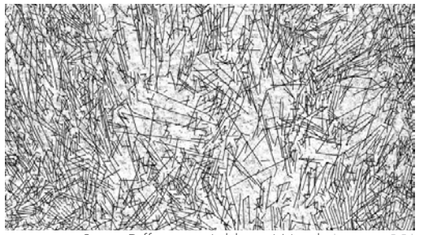
Micromegas. Daniel Libeskind |image 06|



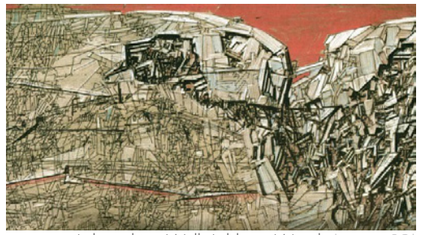
Chamber Works. Daniel Libeskind |image 07|

"[a]n architectural drawing is as much a prospective unfolding of future possibilities as it is a recovery of a particular history to whose intentions it testifies and whose limits it always challenges."[24] Libeskind's drawings look at the relationship between intuitive geometric structures which have the potential to be manifested in experience as well as in the possibilities of formalization. He expresses movement within the imagination, giving an impression of discontinuity, while at the same time, rendering reciprocal moments or alternative viewpoints out of ontological necessity. Reflecting upon his process, Libeskind adds that "[t]he act of creation in the order of procedures of imagination . . . coincides with creation in the objective realm. Drawing is not mere invention . . . It is a state of experience in which the 'other' is revealed through mechanisms that provoke and support objective accomplishments and the one who draws upon them."[25] His work attempts to express the richness and mutability of perception, because the work itself is indefinite, expressing architectural thinking that exists in both continuity and change. The drawings convey a dynamic transmutation of movement and abstraction that aspires to attain a vectoral going beyond. Libeskind proclaims, "I am a fascinated observer and a perplexed participant of that mysterious desire that seeks radical elucidation of original precomprehension of forms—an ambition that I think is implicit in all architecture."[26] Further, the drawings disclose an experience which uncovers modes of awareness that are absent from rationality. They look to reveal an inner, deeper level of consciousness which is established by a relationship with the images and is capable of both giving and receiving a dynamic visual experience. Libeskind approaches architecture in an analytic, interpretive, symbolic, non-representational manner, because for him, design is initiated by the search for valid objectives, and his drawings initiate an inquisitive methodology.

Rigorous imagination instigates the process of discovery in which design is a "projective poetics of architecture" yielding invention and understanding.[27] The work breaks into the excitement and mystery of architecture, as he drops ideas of form, function, and program, allowing the dynamics of building and design to explore new dimensions. At the start of each project, the goals are unknown, and the ends are indeterminable, because for Libeskind, the wandering process of designing a spirited, dream-like architecture is fascinating and enigmatic. In attempting to create a phenomenological experience that is completely out of the ordinary, Libeskind's architecture expresses fragmentation, filled with irruptive forces and imaginative geometries which challenge the common repetition of the built environment. His dynamic diagonal lines both cut through and embody time and space. Exteriors are unrecognizable, because shape and form cannot be understood from any specific or privileged vantage point. Interior spaces are unmappable, much like an interpretive montage that might be found in a film. Visual points of view are collapsed and multiplied, disrupting perspectival space, and logic is thrown into disarray, as warped spaces induce experiential vertigo. Libeskind's built space recognizes its own temporality while nurturing interludes of experiential reflection and challenging the modern psyche with fractured "post-spatial void[s]."[28] Because of this, Daniel Libeskind continues to cinematical-



Same Difference. Lebbeus Woods |image 08|



Labyrinthine Wall. Lebbeus Woods |image 09|

BMW Welt. Coop Himmelb(l)au |image 10|

Energy Roof Perugia. Coop Himmelb(l)au |image 11|

ly challenge perceptions within architectural space.

LEBBEUS WOODS

Lebbeus Woods critiques existing architecture, and in doing so, he completely shatters it into volumetric configurations of shards. Woods imagines radical reconstructions of space, and his futuristic visions exist at the edge of architectural thinking. His images are murderously forceful and frightening, yet at the same time, realistic and liberating. Nevertheless, they border dream and reality.[29] Woods is concerned with inventing new conditions for living, and at the same time, he realizes that "As electronic technology extends perceptions of the invisible, the visible necessarily becomes more precious, more intense. The architecture of tactility cannot be separated from the architecture of ephemerality, either in concept or in implementation. Steel and images on a computer screen are of the same material, perceived differently, each requiring the extremities inherent in their separate material presences."[30] Therefore, both physical materiality and virtual technology are equally relevant in designing and understanding new conceptions of architectural space. Woods proposes an architecture that is a representation of knowledge which is thought and drawn, but not built. In fact, he shows little interest in actually building his abstract architectural fantasies. Further, his renderings are free from all restraints of the real world. He is showing models of reality, because his ideas are his reality.

Woods's drawings are visual guides which intend to stimulate transformations, as "architects . . . invent geometries and methods of construction, in this way provoking new ways of moving or resting in space, new and always transforming relationships between both people and things."[31] He sees opportunities for radical transformation in the spaces of extreme aftermath from natural disasters or warzones. In these conditions, architecture becomes a process of creating knowledge as a reactionary response. As a result, the structures are radically dynamic. Destruction creates voids where new structures can be injected, and reconstructed cities require ingenuity, energy, inventiveness. This type of spatial warping creates an architecture of turbulent fluidity, of shifting forces, and of changing minds. It is incomplete, in a constant state of flux. Space is conceptually invented. Likewise, it is constructed and inhabited differently, requiring new modes of existence. This architecture creates spaces within spaces, disrupting spatial order and thought while providing systematic voids which can only be filled in over time.[32] Architecture is imagination. It is thinking. And for Woods, it is drawing. Ideas are enlivened on paper and perceptions of space are confronted and engaged.

WOLF D. PRIX + COOP HIMMELB(L)AU

Coop Himmelb(l)au seeks to practice architecture against architecture, and in doing so, the team is experimenting with entirely new languages of form. Wolf D. Prix and Helmut Swiczinsky are dedicated to an uncompromising counteraction against the architectural status quo: "We assume that architecture does not have and is not meaning. It is a three-dimensional representation of a building problem, and thus the solution. Inasmuch as there is a solution."[33] Their work proposes a radical departure from all previous theories, traditions, and academic formulas. It accommodates nothing. Furthermore, in 1968, Coop Himmelb(l)au proclaimed: "Our architecture has no physical ground plan, but a psychic one."[34] Speculative architectural designs detach the body as well as one's subjective existential being from any existing ground plan. Perceptions are warped, as this mental architecture seeks to exist where thoughts react faster than the body can move. By designing mentally stimulating architecture with fragmentary form, Prix and Swiczinsky are able to establish a simultaneity of comprehensible and incomprehensible spaces that require reconstruction within the walls of the brain.

Prix asserts, "Architecture is dangerous . . . It is the defining responsibility of an architect to keep the power of architecture out of the hands of those who would use it to lull us into complacency."[35] Keeping this power, Coop Himmelb(l)au seeks to transport the individual into revolutionary spaces by focusing on immediate experience. Hence, the architecture presents a previously unknown sophistication. It is designed in such a way that one must look, feel, and experience these new spaces in a completely different way, so as to perceive an architecture of fantasy. Prix and Swiczinsky's architecture is "a world to be entered with eyes closed. Himmelb(l)au's trembling hand, guided only by the unconscious resonance of the void, inscribes the paths of yet unexplored energies in automatic writing that bears the traces of panic and anxiety. Himmelblau has consistently worked to return to the innerscape of the mind—treating drawing as a kind of seismographic exercise."[36] Contriving this mental architecture, both men use drawing and writing to generate direct pathways into the imagination, to unlock what it means to visualize psychological space. Architecture is put into words, and the drawing is something to be experienced. Sketching is the first opportunity to envision, with specifics, what it means to see, feel, and experience untapped architectural possibilities. In fact, their sketches or scribbles are interpreted as a "form of psychic hieroglyphics of space." And in designing, Coop Himmelb(l)au looks at the sketch as the first opportunity to confront and build the psychic and emotional aspects of a project. Because for them, "architecture lives for seconds at the moment of design. It can never be past, because at this moment becomes future . . . Architecture is now."[37] Driven by an unconscious, intuitive, explosive process, Coop Himmelb(l)au's architectural warped forms escape explicit definitions. On the contrary, they appear as objects to be experientially desired. Their work is fragmented and fractured much like a cubist painting, as spatial relationships are exploded and projected upon one another. Spaces appear to be chaotic and disjointed, but in doing so, they reveal inventive dimensions of architectural space. Coop Himmelb(l)au has taken the cinematic tenets of cubist painting and exploded them into three dimensional space, time, and form. As a result, Prix and Swiczinsky's architecture challenges established definitions of architecture, inasmuch as the team wants architecture to be something more: "Architecture must blaze."[38] Coop Himmelb(l)au defiantly warps spatial conditions, capturing emotional and psychological energy. And at the same time, they continue to shatter all prior expectations while establishing avant-garde architec-

Wolf D. Prix |image 12|

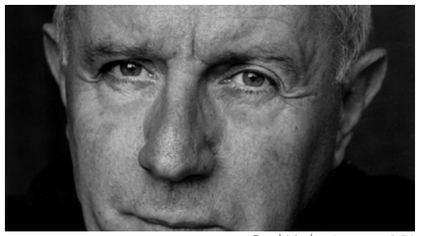
tural thoughts and ideas as the new standard.

THE DIGITAL CONTEXT

As noted, contemporary architectural space is already being warped. But spatial perceptions continue to be disrupted by the external forces and temporal consequences of digital media technologies. The speed of transportation and technology as well as various modes of camera reproduction have altered perceptions of architecture, and the current environment has evolved into what Mitchell Schwarzer calls a "zoomscape." Furthermore, the zoomscape triggers an optical mode of perception marked by speed and surface. The appearance of architecture becomes graphic and pictorial when it is viewed through any number of frames like a window, a viewfinder on a camera, or a screen. As a result, architecture has become "mediatized." And as technological mediation continues to change perceptual contexts, cityscapes, in order to be noticed, "must be viewed in states of mediated perception—energized in velocity or dazzling light and sound effects. Architecture must merge into the flow of information, into the spectacle of media."[39] Consequently, architectural space and form must evolve with these evolutionary forces.

Architecture is experienced within a technologically expanded visual and perceptual field, "not just as objects in continuous space, but also as variable assemblages in intermittent space. To live in a world in which one's everyday perception is composed of imagistic fragments drawn from all over the globe is to participate in a profound perceptual transformation."[40] Architecture within a zoomscape has the potential to rearrange space with time while relocating and redefining place. It is imagistically transformed from site to flow, from object to event. Likewise, Bernard Tschumi desires to "offer a different reading of architecture in which space, movement, and events are independent, yet stand in a new relation to one another, so that the conventional components of architecture are broken down and rebuilt along different axes."[41] Furthermore, the zoomscape enables individuals to view and experience architecture in ways that were never previously imagined.

With the rapidity and instantaneity of today's audiovisual transmissions, the cognition of mental images is becoming much quicker and more elaborate than ever before. But with this overstimulation, individual mnemonics are declining, and it is becoming an expectation for the informative screen to simply fill in the blanks. According to Paul Virilio, ". . . the three tenses of decisive action, past, present, and future, have been surreptitiously replaced by two tenses, real time and delayed time, the future having disappeared . . . in the corruption of this so-called 'real' time which simultaneously contains both a bit of the present and a bit of the immediate future."[42] Digital video records the future and presents it as the present before it happens. Likewise, a recorded event may appear to be live while it is projected on a screen, even though it is really only a digital preservation of an event that has already occurred. With digital technology, the perception of time and action is distorted. Real time no longer exists. Rather, time is governed by what is being projected upon a screen by means of the optics of a digital video camera



Paul Virilio |image 13|

or the internet. As a result, it is possible to see without going 'there' to see, and one can perceive without actually having experienced what has happened 'there.' Time passes, but it also collapses upon itself. High speed experiences and moments of technological instantaneity have annihilated traditional notions of time and space, resulting in sensory and perceptual evolution.

Virilio's phenomenological logistics "discovers perception to be made of breaks, absences, dislocations as well as the capacity to produce patchworks of various contingent worlds."[43] Perception is never fully complete, and cinema, acting both as a supplement and a substitution, permeates these absences in human perception by using external productions of speed, displacement, and luminosity. The movie spectator has been equated to one who oscillates between reality and the dream, but "[l]ike Deleuze, Virilio understood cinema as part of a crisis of belief, in which we no longer believe in the world."[44] The cinematic deceives vision, causing uncertainties in the veracity of speed and time. The senses function, but external impressions are repressed. At any given moment, action may be interrupted and the passage of time goes unnoticed. Humans consciously think in blocks of duration that are made up of various combinations of speed and time. Likewise, poet Charles Baudelaire observes: "Countless layers of ideas, images, feelings, have fallen successively on your brain as softly as light. It seems that each buries the preceding, but none has really perished."[45] Cinematic thoughts, ideas, and experiences converge with those perceived in reality, establishing sensory reactions that are illusively distorted. Consequently, viewing moving images on screen requires acute visual attention, and with obligatory movements of the eye, inevitably results in the inhibition of bodily movement.

The interface of the screen, devoid of any actual depth, disrupts the idea of distance by presenting a new depth of field through representations of visibility, causing cinematic experiences to be confused with reality. Furthermore, according to Virilio, ". . . architectonic elements begin to drift and float in an electronic ether, devoid of spatial dimensions, but inscribed in the singular temporality of a singular diffusion."[46] Perceptions of speed, on screen, defy both temporality and physicality. What it means to be here or there no longer exists. The screen, with its luminous emissions, presents false perspectives, and these conditions subject architecture to "technological space-time." The day has changed with the establishment of an "electronic false-day." And this new 24/7 time maintains no relationship to real time.[47] As a result, "[a]rchitectural plans are displaced by the sequence plans of an invisible montage . . . [and] time is now organized according to imperceptible fragmentations of the technical time span."[48] Momentary interruptions and cuts replace continuities in time and space. Moving images and projections produced by the camera act as missing links in this perceptual disjunction. Physical materiality is progressing towards digital abstraction: "After the aesthetics of disappearance of cinema, the time is now upon us of the aesthetics of disappearance of real-estate 'architectonics.'"[49] But in response to this potential technological erosion of architectural space, Virilio reasserts that "[a]rchitecture is more than an array of tech-

niques designed to shelter us from the storm. It is an instrument of measure, a sum total of knowledge that, contending with the natural environment, becomes capable of organizing society's time and space. This geodesic capacity to define a unity of time and place for all actions now enters into direct conflict with the structural capacities of the means of mass communication."[50] Therefore, architectural design must confidently establish a presence that both adapts to and competes with the evolutionary forces of technology. Architecture cannot revert to introversion and timidity, but rather, innovative designs must be compelled to react to these changes. If architecture once measured itself with the natural landscape and existing built environment, it now measures itself against the latest technologies that continue to redefine time, space, distance, and speed. Nevertheless, a visible, reactionary transformation is essential to solidify continued architectural relevance.

Within the digital age, a totally new environment has been created. On screen, electronic light radiates a profusion of information. Media is an extension of the mind and the body, and according to Marshall McLuhan, the effects of technology "alter sense ratios or patterns of perception steadily and without any resistance."[51] And to truly understand these changes, astute awareness and sensory adaptation is essential. Media is compelling, because it can translate experience into new configurations. And the future of architecture is rooted in adapting to the perceptual configurations of digital technologies. McLuhan adds: "The hybrid or the meeting of two media is a moment of truth and revelation from which new form is born . . . The moment of the meeting of media is a moment of freedom and release from the ordinary trance and numbness imposed by them on our senses."[52] Therefore, when explored through the lens of digital technologies, new potentials for alternative architectural realities can begin to emerge.

As cinematic projections and architectural spaces are visually perceived as external stimuli, internal interpretation transpires. The mind reacts and adapts to what is seen and experienced. Juhani Pallasmaa writes: ". . . cinema constructs space in the mind, creates mindspaces, thus reflecting the inherent ephemeral architecture of the human mind, thought and emotion. The mental task of buildings and cities is to structure our being-in-the-world and to articulate the surface between the experiencing self and the world."[53] Thus, in both instances, mental reconstruction occurs as the mind seeks to comprehend and interpret what is being shown on screen or experienced in reality. Elongated concentration results in personal immersion. Pallasmaa adds: "Lived space resembles the the structures of dreams and the unconscious, organized independently of the boundaries of physical space and time. Lived space is always a combination of external space and inner mental space, actuality and mental projection. In experiencing lived space, memory and dream, fear and desire, value and meaning, fuse with actual perception. Lived space . . . inseparably integrates with the subject's concurrent life situation."[54] Since each individual brings his or her own unique perspective, a profusion of alternate realities can be construed. Architecture has the potential to alter perceptions of existence within traditional lived space. Avant-garde designs that challenge perception can

cinematic sketch 01

cinematic sketch 02

inspire irregular combinations of mental space and physical space where ideas and thoughts merge with experience. Under these circumstances, the limits of ordinary space and time are vanquished. New ways of seeing arise, fresh interpretations are considered, and perception evolves.

IMPLIED METHODOLOGY

With contemporary digital technology, architectural representation is evolving rapidly, and as a result, imaginative ideas can be expressed with advanced methods of communication. The evolution of architectural thought is craving to be set into motion, to catch up to the speed and immediacy of contemporary society. Digital video is the ubiquitous medium in which moments are captured, ideas are shared, and entertainment is distributed. In the same manner, architecture can be explored with and expressed through motion pictures. It is time for this type of evolutionary action. This is the future of thought, communication, and architecture.

Intriguing possibilities exist at the intersection between architecture and digital video, and curiosity can initiate inquisitive and experimental methods of creation. Using video in the design process gives the designer an opportunity to see new potentials for architecture. Motion pictures can reveal elements of space, time, and form that are unable to be experienced or even conceived within the limits of reality. Thus, it is evident that there is an inherent interconnection that exists between digital imagery and the lived world. Video documents space and form, but it also reveals motion and the passage of time. Architects can take full advantage of this engaging connection by translating these same ideas into the designing of architecture. By responding to the momentum of the existing conditions that have begun to catalyze evolutionary adaptations in perception, architects can redefine what it means to experience architectural space.

Architecture can be designed with motion pictures. Perceived spatial revelations that appear on screen in digital videos can be mentally processed and conceptually translated into innovative proposals for architecture. Video can help an individual see things that may have never even been imagined. Further, digital video has the potential to be a powerful, revelatory design tool. Motion pictures can teach the designer to see and think differently, because in the design process, ideas are transmutated into something else, something new, something unexpected. And in this sequence or cycle, inspiring, creative, perceptual surprises emerge.

Sketching with video relies upon the idea of transmutations. And transmutation occurs by taking bits of reality and various forms of captured content, like drawings, still images, and video clips, and transforming these raw materials into fresh, cinematic, digital ideas. With this type of content, video can be an extremely useful design tool, because it can help the designer to see these images, thoughts, and ideas in an entirely new way. Simply put, video communicates a different perspective. It allows designers to explore and manipulate the potentials for alternate architectural and spatial realities.

As the designer creates exploratory media and manipulates digital imagery, some impressions are revealed and grasped, while other concepts encourage further questioning. With the acquisition of new ways of viewing architectural space, the contemporary designer's ways of thinking, working, and making are constantly evolving. By creating and presenting intriguing digital imagery, both still and in motion, the architect can stimulate a suspension of disbelief, prompting an altered state of curiosity. This state is partially and simultaneously connected to reality, to memory, and to the imagination. New perspectives generate new ways of seeing— and possibly more importantly—new ways of understanding. Consequently, architectural imagery can engage viewers in ways that begin to explore potentials for alternate realities, as existing relationships with space, time, and form are openly challenged. Within this context, the designer is not someone who simply re-presents some aspects of the world as it is, but rather, with manipulative explorations in digital imagery, he or she can trigger entirely new mental constructs, affecting thoughts, knowledge, memories, and imagination. With this process, the architect is creating space that exists at the intersection of digital imagery and architecture. Furthermore, the designer is initiating an architecture that exists in an unfamiliar, perceptual context.

This perceptual architecture could be interpreted as being a labyrinth, because there is no spatial schema to base an expectation on how this sequence ought to be perceived. It is a setting for unknown narratives and scenes to be scripted. Each experience will be unique and highly personal, and the only way to begin to grasp what this space means will be to simply pass through it and interpret it, possibly more than once. This type of experimental space is designed to expand the scope and depth of our experiences by encouraging individuals to encounter new dimensions of architectural space. That is its sole purpose, its only function.

These spatial conditions establish an environment which directly engages and responds to the individual's evolving relationships with space, time, and form, with memory and the imagination, and with reality and the screen. In the end, the designer is attempting to manipulate both architecture and space in ways that elicit responses similar to those felt with the manipulations of digital imagery. In this context, architectural space challenges perception and requires personal translation and mental reconstruction to be fully comprehended.

This is where it begins.

INCEPTION. Christopher Nolan |image 14|

let's get visual. visual.

At several moments in visual history, new developments in art and technology have dramatically altered perceptions. With each event, individuals have learned to see differently, and as a result, perceptions of space have evolved.

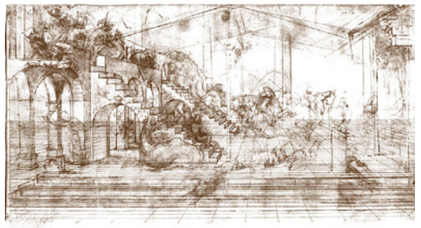
Looking back, four critical pivot points have emerged as being the most influential in historically shaping perceptions, and the following examples appear to be most relevant to the scope of this project: the development of perspective drawing and painting at the beginning of the 15th century, the invention of photography in the first half of the 19th century, the origination of cinematography in the second half of the 19th century, and the creation of Cubist painting at the beginning of the 20th century.

Each critical moment profoundly influenced ways of seeing and resulted in a shift in how individuals think about and relate to space. This analysis will attempt to lay the groundwork for the future of what can potentially come next in this perceptual timeline.

LINEAR PERSPECTIVE

Linear "perspective is one of the most important pictorial devices for organizing forms in space," creating an illusion of three-dimensional geometric and perceived experiential depth on a two dimensional, flat surface.[1] Perfected by Filippo Brunelleschi at the beginning of the Italian Renaissance in 1420, "linear perspective allowed artists to determine mathematically the relative size of rendered objects to correlate them with the visual recession into space."[2] As parallel lines converge, the viewer's eye is led to a vanishing point located along the horizon. Decreasing the size of objects makes them appear to be farther away from the viewer. But with these methods, it is important to note that perspectival projections are pictorial conventions.[3] These culturally accepted optical illusions only show the apparent and not true forms of objects, viewed from one, single vantage point.[4] Linear perspective transforms reality into an appearance, and humans have learned to accept this fictitious construct of vision as being relative to our actual, lived experience.[5]

Upon its invention, perspective drawing was "associated with architecture primarily because the regular geometry of architectural subjects enabled perspective depth to appear."[6] Often noted as being the most influential visual construct ever created, linear perspective has completely reorganized the architect's sense of space. Moreover, "since its inception in the Renaissance, it has fundamentally changed the way we represent, see, and construct our built environment," establishing a "unified homogenous space from a single fixed point in space."[7] With linear perspective, the aim was to produce illusionistic drawings that, previously, had never been produced for architectural communication.[8] As a starting point, architects built the space of their drawings using perspectival design tools to begin to thoughtfully imagine and efficiently organize their ideas about the potential of actual architectural space. Linear perspective enabled an advanced organization of three-dimensional space and architecture on a two-dimensional surface. In thinking about spatial concepts, architects began to focus their designs on symmetry and the notion of a central axis, thus accentuating the perspectival potential of a given



Adoration of the Magi. Leonardo da Vinci |image 15|

Daguerreotype. Fontayne + Porter |image 16|

space. Consequently, by privileging a single experiential point, built architectural space actually began to reflect the methodologies of architectural perspective drawing.

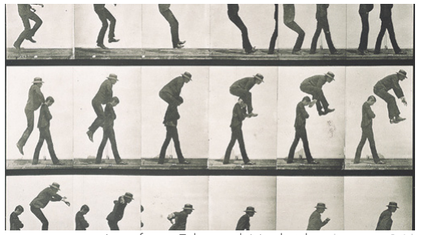
PHOTOGRAPHY

Photography captures time and space with light.9 With each still image, the eye of the camera allows individuals to reflect upon a reproduction or interpretation of reality by preserving isolated moments of lived experience. The photographic process was developed by Louis-Jacques-Mandé Daguerre and Joseph Nicéphore Niépce in 1839, and it allowed artists to finally capture, with breathtaking accuracy, the elusive qualities of reality, truth, and fact. Thus, with this newfound artistic veracity, "the photograph's documentary power was immediately realized."10 The snapping of the camera also catalyzed the drive to condense time and an aspiration for encapsulating instantaneity. With the touch of a finger, an event could now be fixed for an unlimited period of time.11 By arresting the flow of both space and time, and capturing a trace of the real, a photograph presents an appearance of what is now absent.12 This appearance is recognized as a representation of lived truth.13 Because the photograph preserves a moment of time, any given, singular, captured moment can no longer be superseded by any subsequent moment. Therefore, "photography might be compared to images stored in the memory," and these memories greatly expanded the notions of space.14

Fixing images allows one to begin to reflect upon the photographic reproduction of reality. Further, photography intensifies both the understanding and recognition of detail within the built world. But even more so, with the development of the camera, architecture began to reflect the fact that, unlike the fixed vantage point of linear perspective, humans actually move through space. Architecture is not experienced from one single point. Just as an individual physically experiences a space through mobility, the roving, mechanical eye of the camera is also able to capture an infinite number of varying perspectives of any given space. While it is true that, within each respective final fixed image, both "the centered space of perspective and the monocular aperture of the camera both have a singular 'point of view,'" the camera is actually able to move and capture multiple spectatorial views.15 Thus, photography both realized and fostered a moving, interactive relationship. This medium has had a profound effect on the ways in which architectural space is thought about and composed, because, by focusing on different ways of seeing, photography has inspired architectural evolution. As a result, modern architecture began to favor asymmetrical compositions which encourage movement and various perspectival revelations for the user. Furthermore, the camera's eye has revealed alternative spatial combinations in architectural thinking.

CINEMATOGRAPHY

Cinematography is based on the rapid sequential projection of fixed images onto a screen. Isolated and static frames, or instants of time, produce convincing illusions of movement and continuous time.16 The first cinematic projection was presented by Edweard Muybridge in 1878, and the apparent motion that is perceived is the result of a "a physical fact of human eyesight called persistence



Leapfrog. Edweard Muybridge |image 16|

Seated Nude. Pablo Picasso |image 17|

of vision. Stated simply, it means that the brain holds whatever the eye sees for a fraction of a second after the eye stops seeing it."17 Moreover, viewers see a rapid succession of different images merging one into the next, thus producing an illusion of continuous change.18 Working with "blocks of movement / duration," cinema reveals its own forms of time and space.19 And while each film presents its own narrative, motion pictures are actually subjectively comprehended, because the objective projections also move through the spectator's own inner emotional space.20 Thus, "film moves us and in us, producing an ability to render affect."21

Cinematic experiences have encouraged a reexamination of the ways in which time and space unfolds before us. Film also carries with it ideas of movement, duration, and narrative. In response to these developments, perceptions of space have evolved once again. While it is true that both the Renaissance perspectival spectator and the cinematic spectator hold fixed positions, this observational fixity is experientially quite different.22 Rather than highlighting one point of view, cinema reveals a profusion of altering vantage points. Each new camera angle provides new visual insight and an ideological positioning for the viewer.23

CUBISM

Cubism, founded by Pablo Picasso and Georges Braque in 1907, radically calls the very basis of pictorial representation into question, moving beyond visual reality and external appearances.24 New conceptual wholes are created by deconstructing subjects and reconfiguring them into an expressive simultaneity consisting of several different perspectives: "these artists pursued the analysis of form, and they dissected life's continuous optical spread into its many constituent features, which they then recomposed, by a new logic of design, into a coherent aesthetic object."25 The concept of simultaneity stressed the role of the artist in selecting and synthesizing a mix of remembered and seen elements of a subject, representing the experience of modernity. With several juxtapositions or combinations within a single painting, cubism accentuates rigorously different and discontinuous perspective schemas or viewpoints.26 Thus, cubist painting reveals hidden truths about the objective world by teaching individuals to see another dimension of reality.

Cubism has had a heavy influence on architectural thought, because, in a similar way, architects have attempted to collapse several points of view into a single building. Previously, the camera recognized that the subject was moving, but now, with cubism, the subject was presented with multiple facets of a viewable object, as if it were moving. Architecture attempted to capture the dynamism of a slicing mode with exploded, unfolded, and projected components inhabiting the same space at the same time without actually interfering with one another.27 In this way, architectural space is being reconfigured, revealing new essences about its internal structure and reconfiguring any preconceived notions of what architecture ought to be.28 Therefore, it requires new mental understanding to fully comprehend these new spaces that, in fact, do not coincide with established architectural schemas. In this context, cubism inspired a re-invention in the possibilities of what architecture can become.

design will change.

Designing is not knowing. It is questioning.

And in this process, it's impossible to predict a specific outcome.

Intense design questioning has driven this project into an experimental method of creation where the process is examining the ways in which digital video can influence both the design and perceptions of architectural space.

This thesis is attempting to design architecture with digital video. And the project seeks to translate perceptions of moving images into experimental, unfamiliar architectural space. This fusion of ideas can inspire alternative forms of perception which require a mind that is open and untainted by rigid predispositions.

The project is focused on the idea of transmutations. And transmutation occurs by taking bits of reality and various forms of captured content, like drawings, still images, video clips, and 3-D models and transforming these raw materials into fresh, cinematic, digital ideas.

The design process begins with a video sketchbook. Video documents reality, but it can also present alternate realities. Physical materiality and virtual technology are equally relevant in designing and understanding new conceptions of architectural space.

But sometimes, pure video is simply not enough. Thereofore, drawing generates new content. Drawing is thinking. Lines on paper represent imagined spatial relationships, multiplicities of perspective, and intuitive structures.

The sketch is the first opportunity to confront and build the psychic and emotional aspects of a project. Drawing discloses experiences which uncover modes of awareness that may be absent from rationality.

Drawings can be morphed into video sketches, images, and 3-D models. Modeling is the first opportunity to envision, with specifics, what it means to see, feel, and experience untapped architectural possibilities. Both virtual modeling and drawing can be representations of knowledge which is thought and visually materialized, but not built. Drawing and modeling generate pathways into the imagination, to unlock what it means to visualize psychological space.

Thoughtful architectural design can generate a simultaneity of comprehensible and incomprehensible spaces that require reconstruction within the walls of the brain.

Emulating artistic intentions found in cubism and cinema, architecture can be fragmented and fractured, featuring an array of cinematic, spatial, and material facets. Further, the cinematic tenets of cubist painting can be exploded into an architecture of the mind.

In this context, architecture can be analytic, interpretive, symbolic, and even non-representational.

Architecture is imagination. It is thinking. And it is drawing.

Ideas become reality.

This is the process.

this is a test.

video sketchbook: preliminaries

Cinematic ideas require alternative documentation. They need a suitable place to be tested and stored. Therefore, a video sketchbook has been created to translate ideas into digital images and motion pictures, resulting in abstract forms of hypothesizing and sketching architectural space.

This sketchbook is an integral part of the design process, because video is not merely a novelty or simply a presentation tool. Rather, video is the project. And each video sketch is a passing moment in time.

The process of making a film is often a creative surprise. One starts with an idea and gathers supporting digital content. But then the manipulation begins, and, at this point, it is nearly impossible to predict what the outcome might be.

Footage is edited, and ideas begin to transform and take on new shapes. Here, the narrative for each video sketch slowly builds upon itself. Inspiration comes from the manipulated content, and creativity occurs in a stream of consciousness.

Musical sounds are added to supplement the original, captured audio. And as the sketch nears completion, a soundtrack is carefully selected to capture the specific emotion and tone of each individual idea. Finally, the cinematic sequence of various digital components is exported and merged into one single digital video file.

In this process of sketching, there is a back-and-forth between intuition and analysis. Initially, one instinctively works according to the ideas that have been generated. But it is also important to step back and critically observe the work that is being done. Therefore, each clip is actively analyzed for content until an initial idea matures into a completed video sketch.

This process is not linear, nor is it ever really complete. It is actually quite cyclical, as one can be continuously influenced by the work that has been done at any stage of the exploration. Ideas can always be reworked, and they can always influence other ideas while inspiring new questions.

Every video is a transmutation, representing exploratory media and manipulative digital imagery. Each sketch is an experimental test that contributes to a growing body of research, because making is learning. And, in the end, each video sketch is revelatory in its own way, because the intention is to stimulate a suspension of disbelief, prompting an altered state of curiosity, a state that is partially and simultaneously connected to reality, to memory, and to the imagination.

This is an open public space with temporary architecture. Individuals are attracted to spaces and sites that are out of the ordinary.

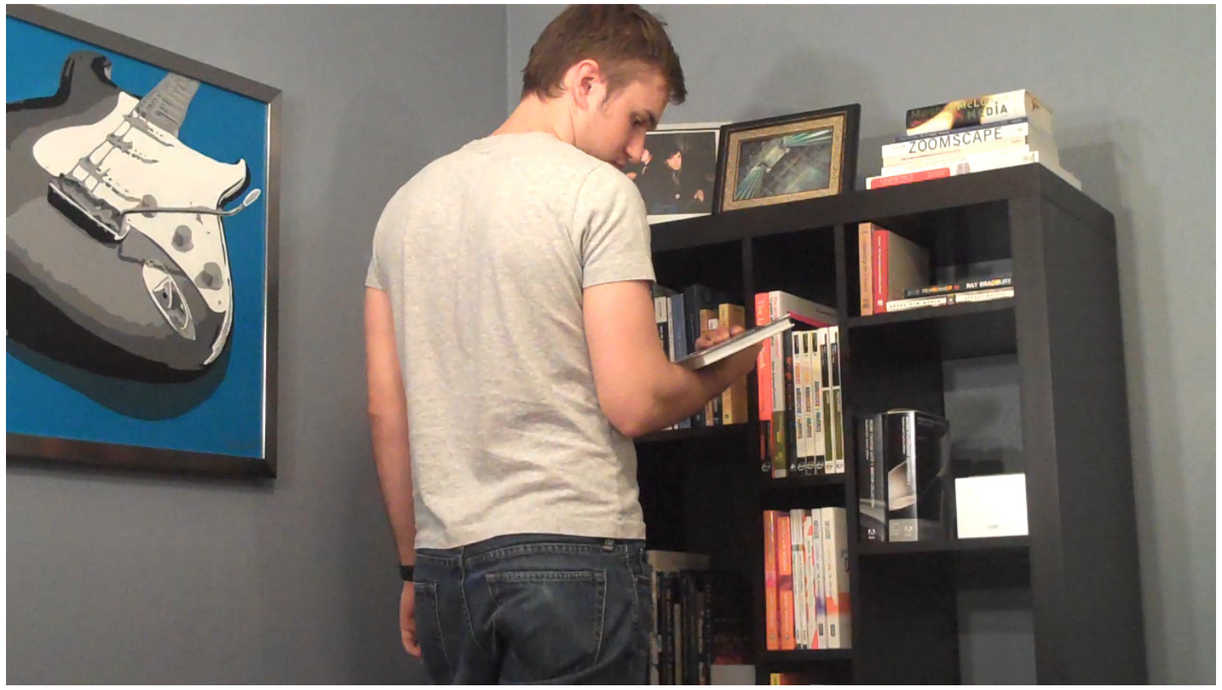
video sketch 01

still frame 01.01 | 02

One man is still. Everyone else moves.

video sketch 02

still frame 02.01 | 02



This is a quiet, personal space viewed from different camera angles. Books are ideas.

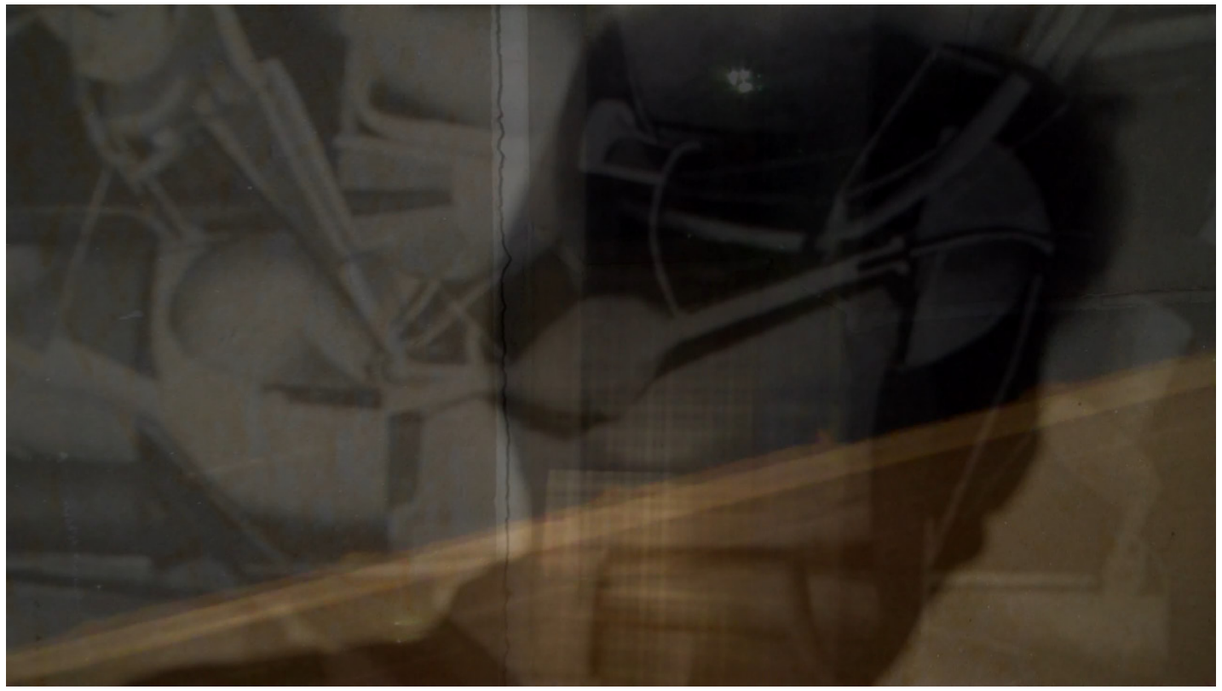
video sketch 03

still frame 03.01 | 02

Split seconds measure the topography of beauty. No quiver goes unnoticed.

video sketch 04

still frame 04.01 | 02



Architecture, time, and space are undone. Memory desires to make itself known once more.

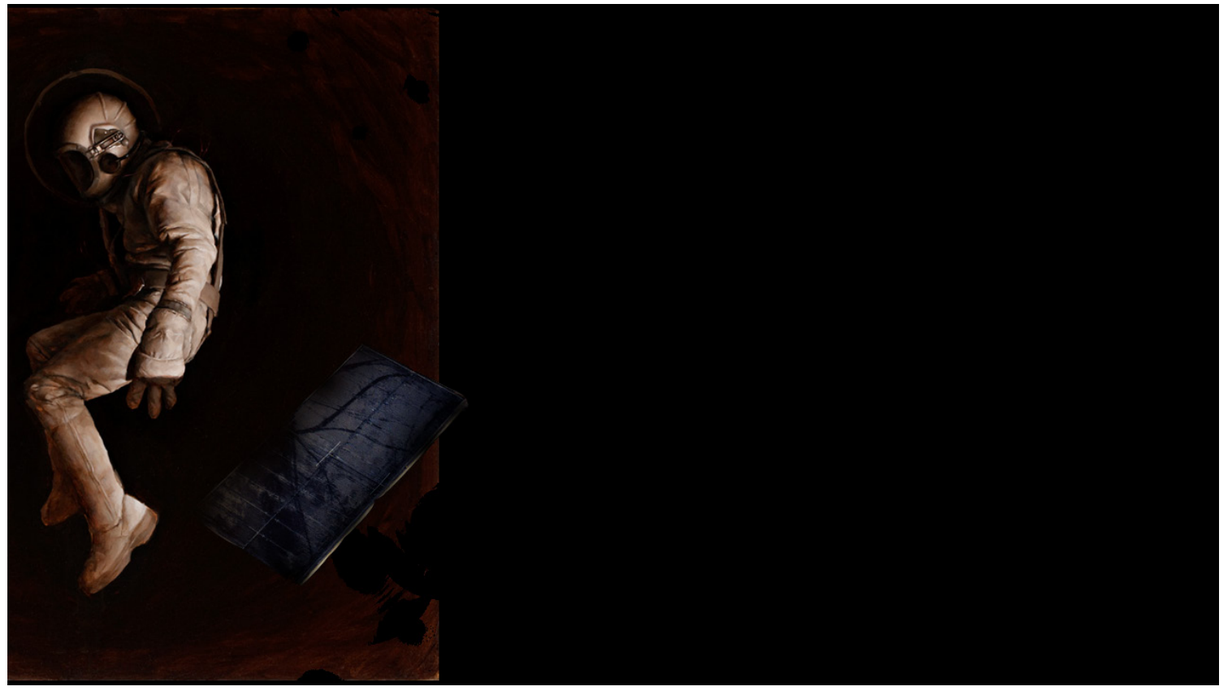
video sketch 05

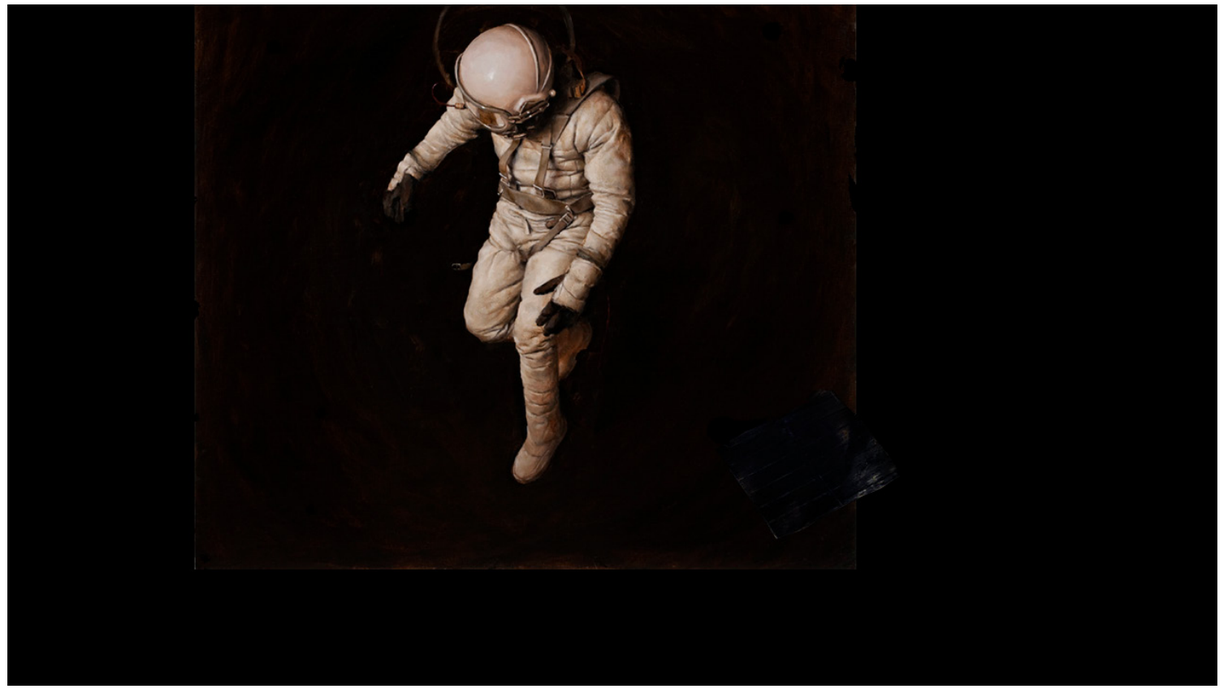
still frame 05.01 | 02

Found footage reveals something new. Will's scattered moments create new connections.

video sketch 06

still frame 06.01 | 02

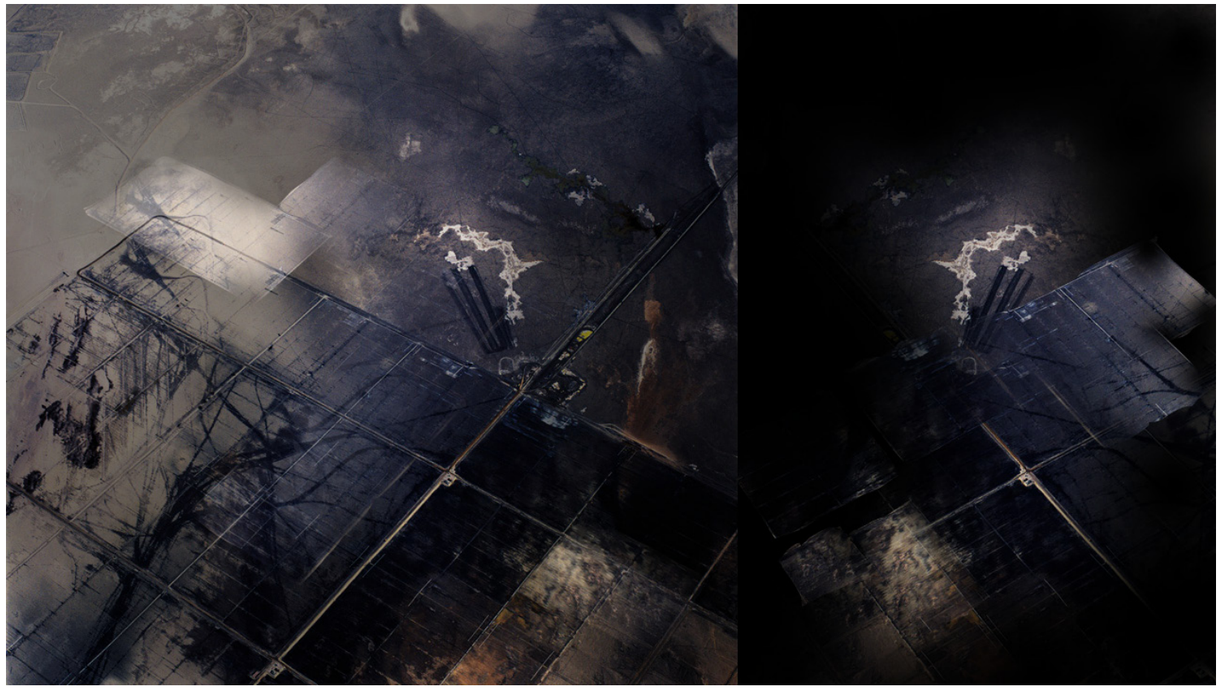




What is seen? What is remembered? Architectural space and outer space are layered.

video sketch 07

still frame 07.01 | 02



Light carves out space. Coordinate space flashes into cinematic space.

video sketch 08

still frame 08.01 | 02

you are here.

site | sight

The proposed architectural site is 44 W. Adams, which is in downtown Detroit, just off of Woodward, across the street from Grand Circus Park in the city's theater district.

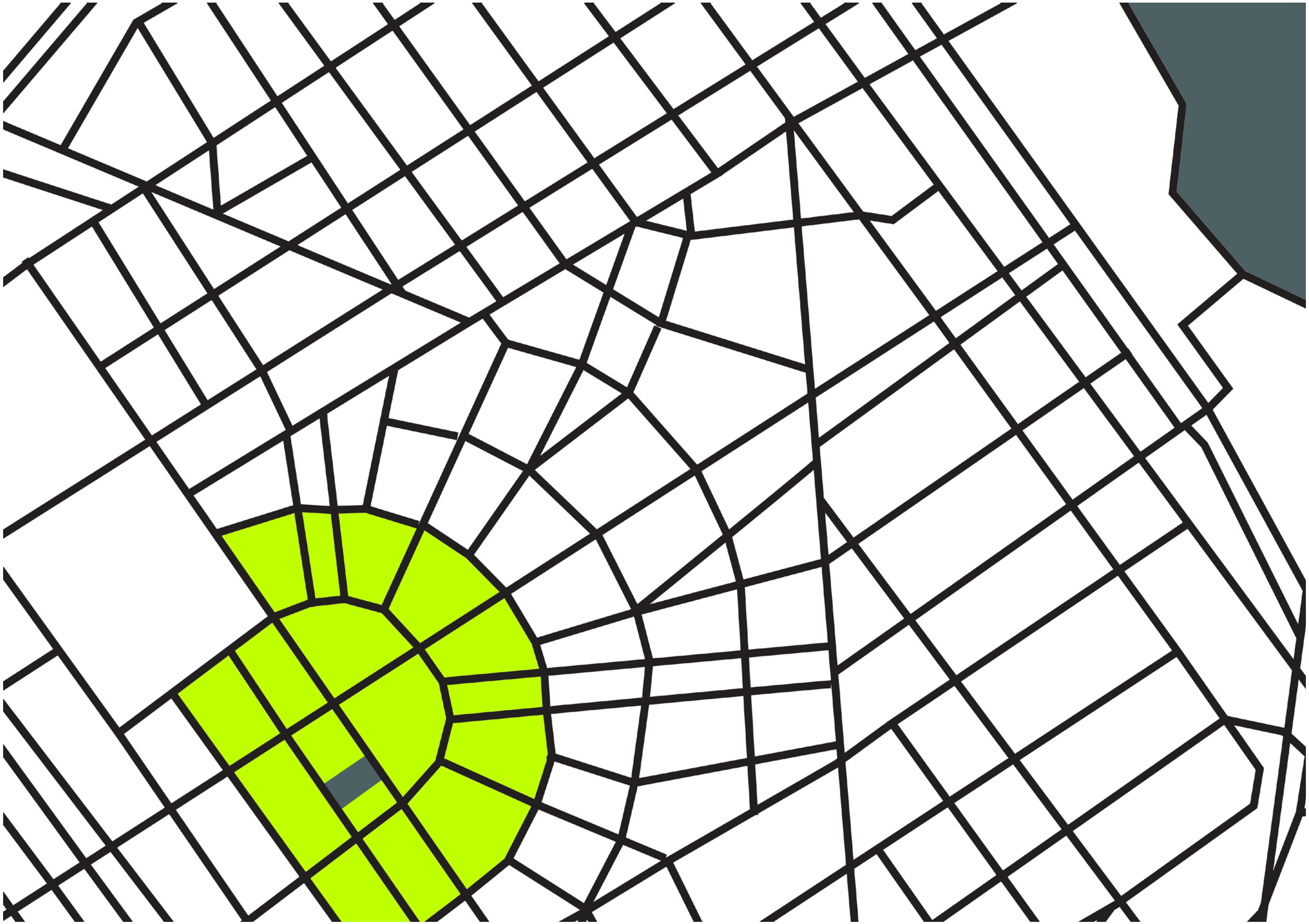
This is where the old Fine Arts Building and the once thriving Adams Theater used to be. But now, all that remains is the facade of the Fine Arts Building held up by a temporary, yet seemingly permanent, steel structure. It's like architecture without architectural space.

This ephemeral architectural artifact is captivating, because it simultaneously represents multiple, specific lived moments.

The site for testing these ideas exists in time and space. But right now, the sight is completely visual. It's flat, just like a projection screen. And to fully comprehend its complete existence, imagination is imperative.

Right now, the greater Grand Circus Park site serves as a passthrough to any of the nearby event spaces like theaters, athletic fields, and restaurants. The proposed architecture is attempting to assert itself within the context of the existing conditions, to inspire extended interactions within the site and with the architecture.

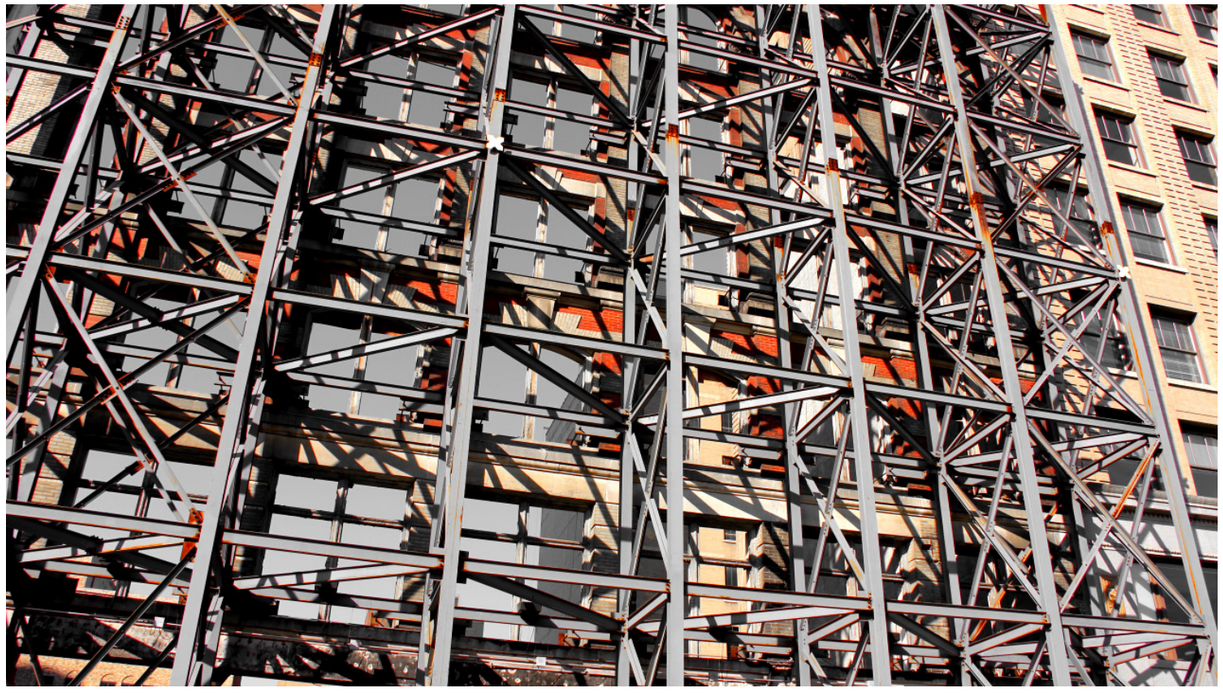
The project seeks to establish a heightened awareness of architectural design.



site 01 | 02 | 03

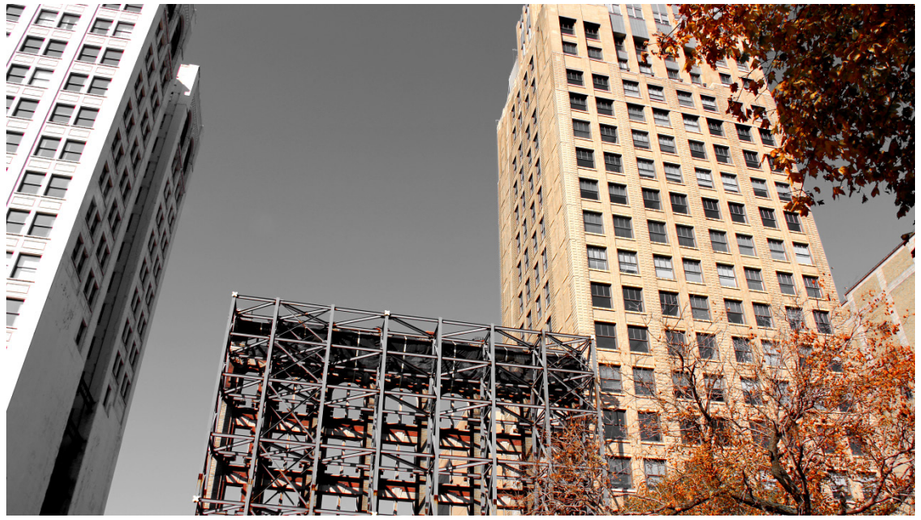
site 04 | 05

site 06 | 07 | 08



site 09

site 10 | 11



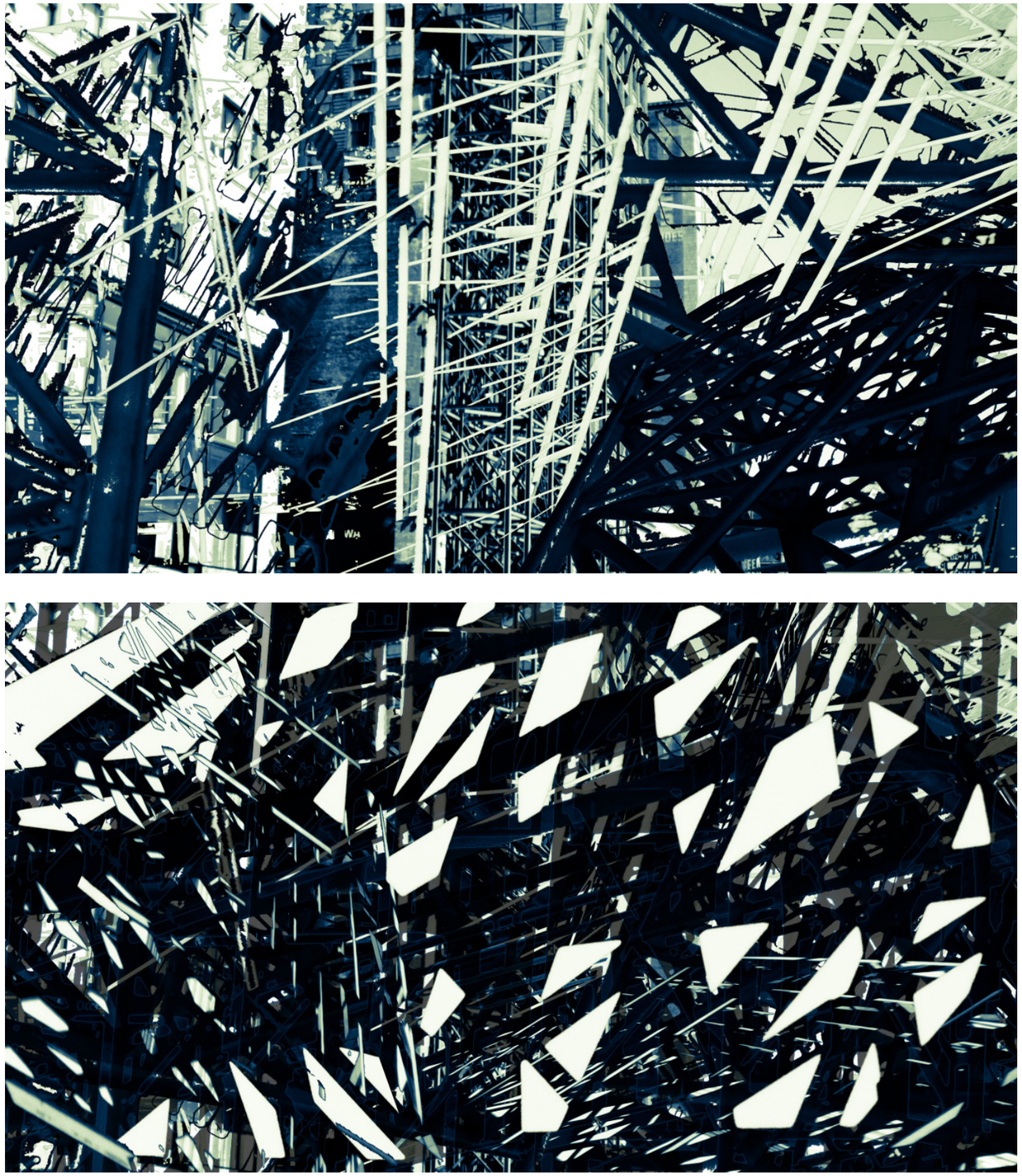
site 12 | 13 | 14

site 15

site 16 | 17 | 18

video sketchbook: site analyses

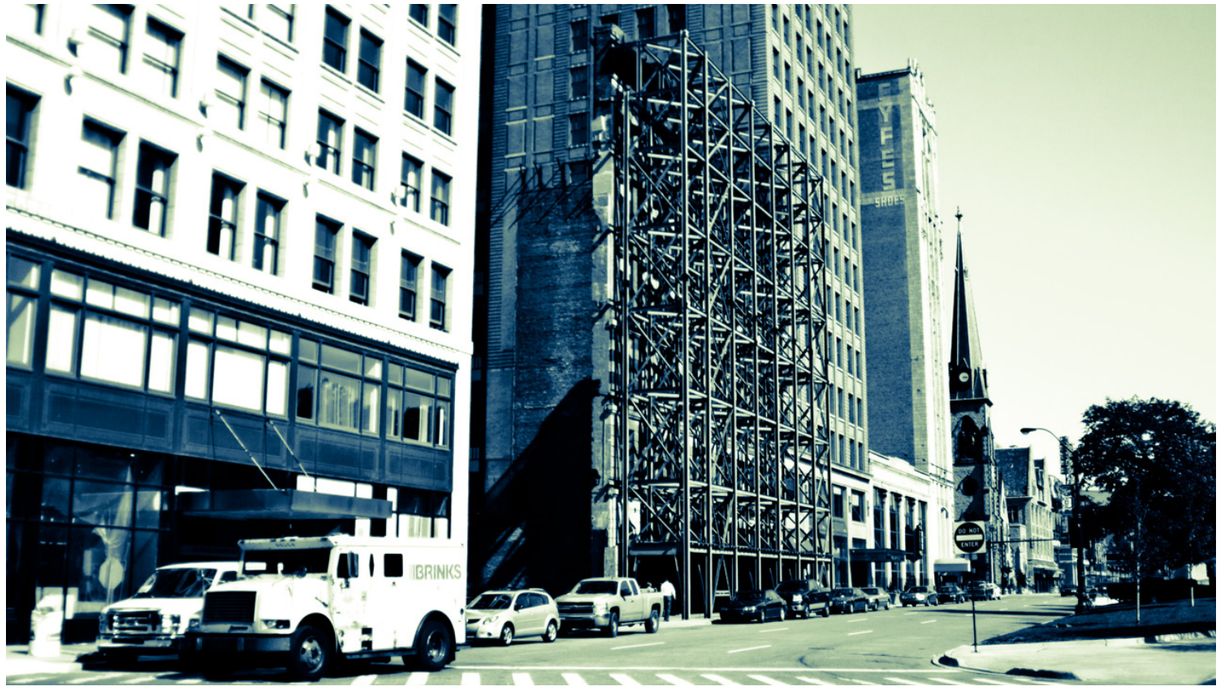
testing
in progress.

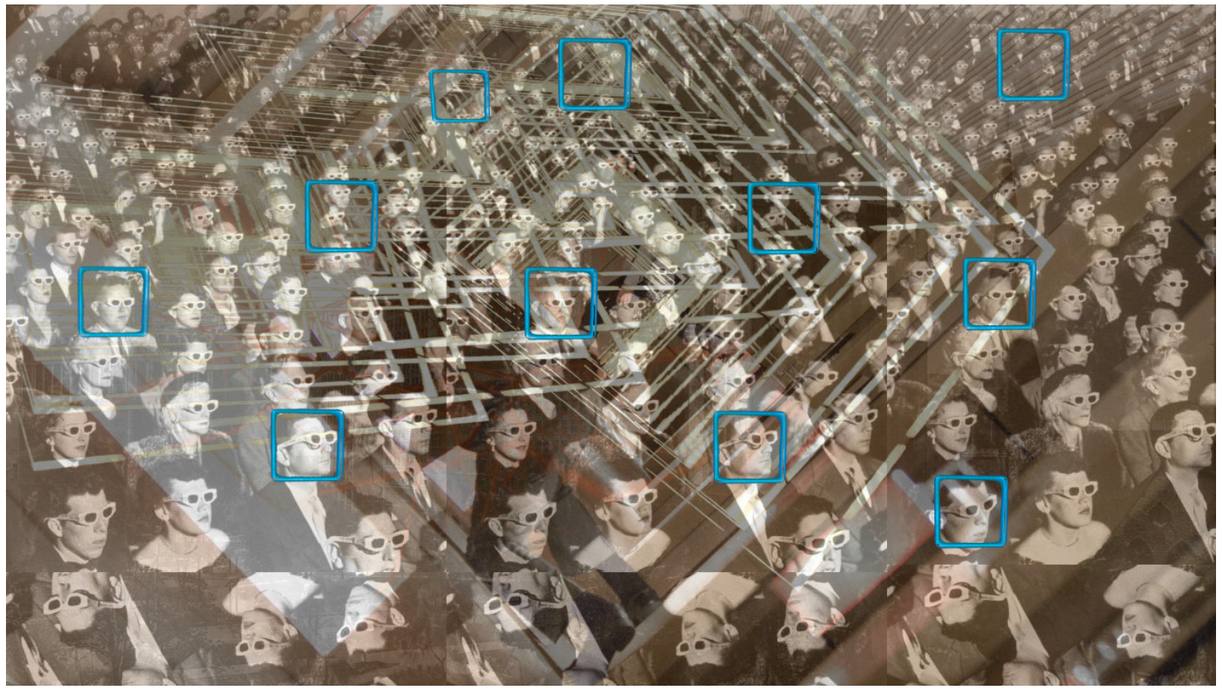


Establishing multiplicities of existence, time and space are exploded and stitched together again like a cubist painting.

video sketch 09

still frame 09.01 | 02





Architecture moves. On sight.

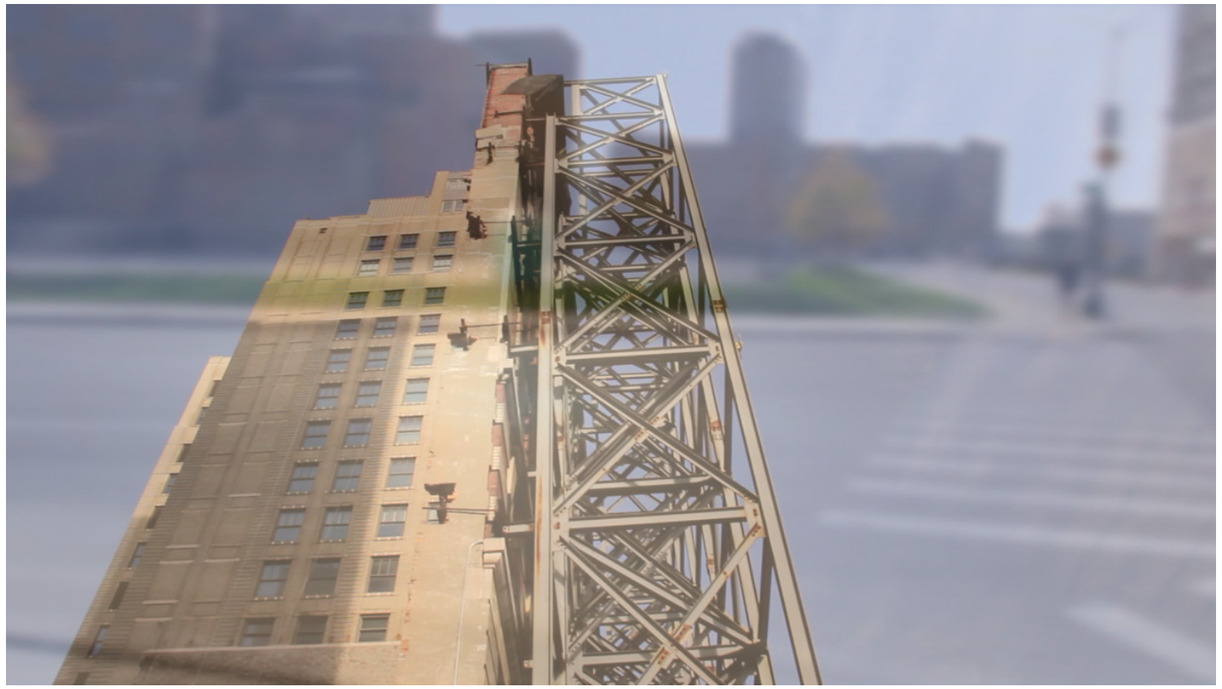
video sketch 10

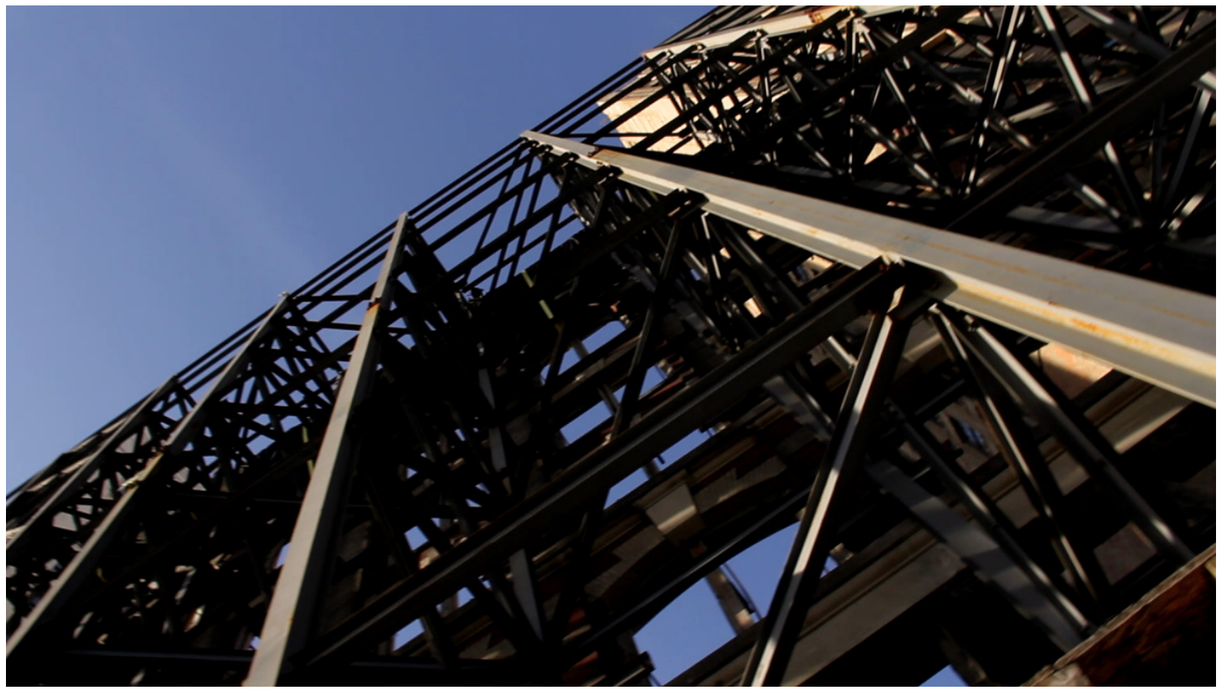
still frame 10.01 | 02

Cinema, history, and sketching—imagery controls the conversation.

video sketch 11

still frame 11.01 | 02





The site is the sight is the site.

video sketch 12

still frame 12.01 | 02

Video has replaced memory. Blurred, here, like memory.

video sketch 13

still frame 13.01 | 02

seek inspiration.

literary drawings

An alternative method of generating form can inspire new ways of imagining and seeing architectural space. Literature can serve as a loose starting point for beginning to draw unconventional architectural ideas. In this case, the short story sparks the imagination.

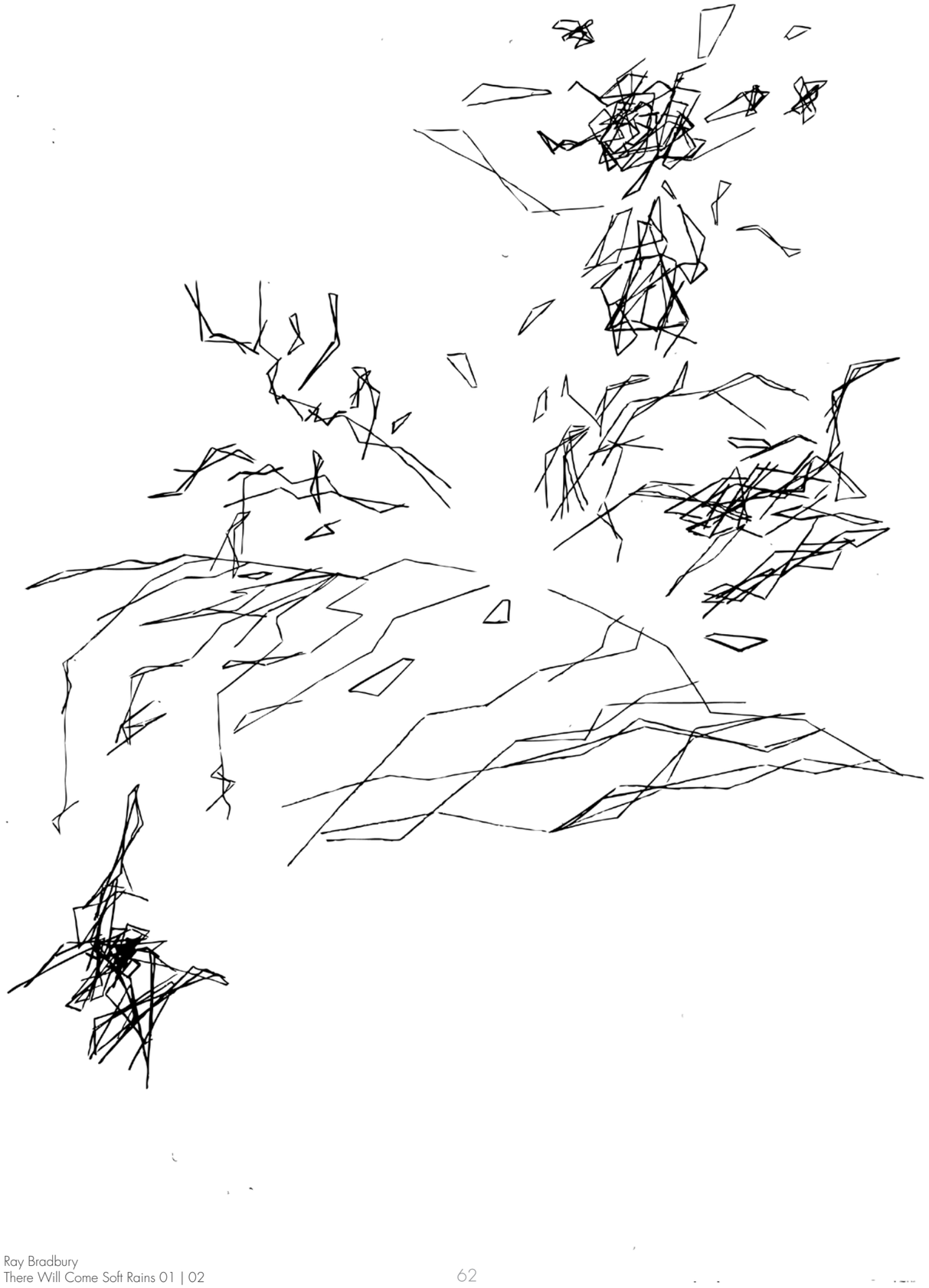
The work of Ray Bradbury, Franz Kafka, and Jorge Luis Borges established a means to define an event, a setting for action. Two short stories from each author were selected and looked upon as scripts.

Each selection was read with the intent of designing architectural space that was generated by the printed words. Specific moments in each plot, descriptive settings, and key lines or phrases were highlighted as starting points for creating an interpretive drawing.

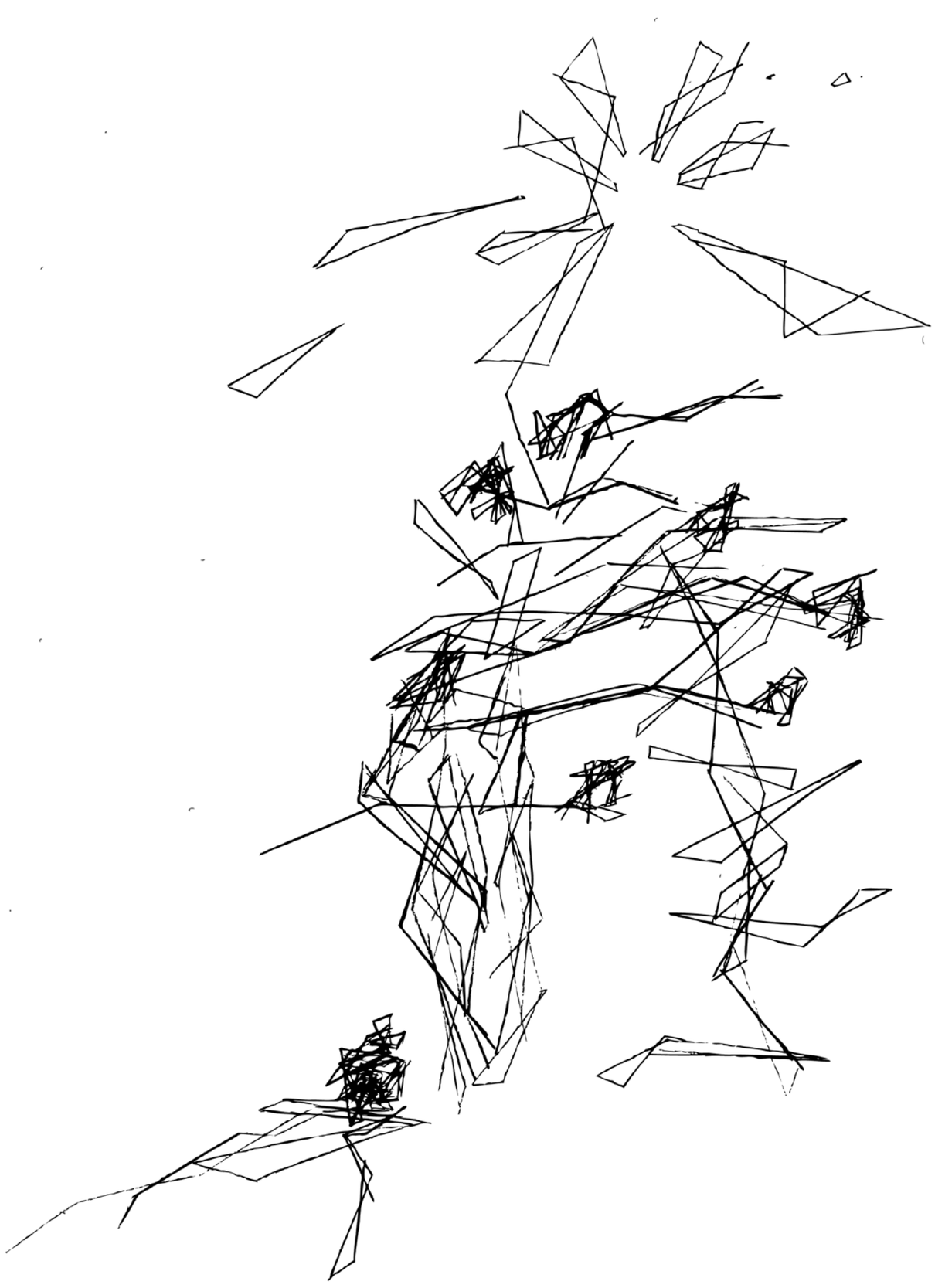
A series of abstract drawings was generated. Each line represents a moment in each short story. The spatial constructs intend to inspire architecture.

The drawings were transmutated into a second a set of digital representations which changed the scale, frame, and composition of the original sketches by completely reassembling the content. The literary drawings became something new and unexpected. New compositions were created through a process of reassembly, and the drawings were superimposed upon a pixellated, historical photograph of the Fine Arts Building and Adams Theatre in Detroit.

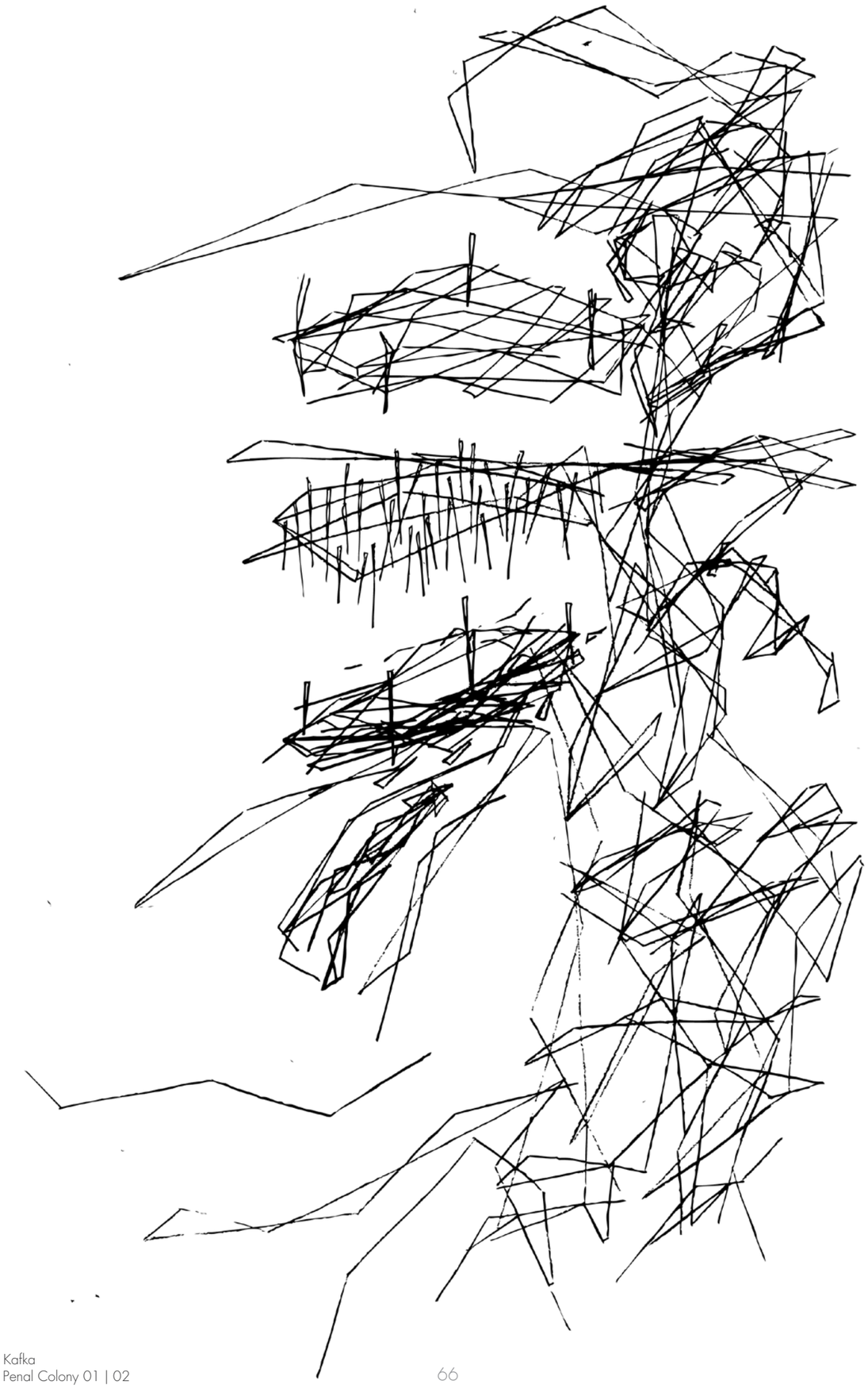
Ray Bradbury
The Fruit at the Bottom of the Bowl 01 | 02

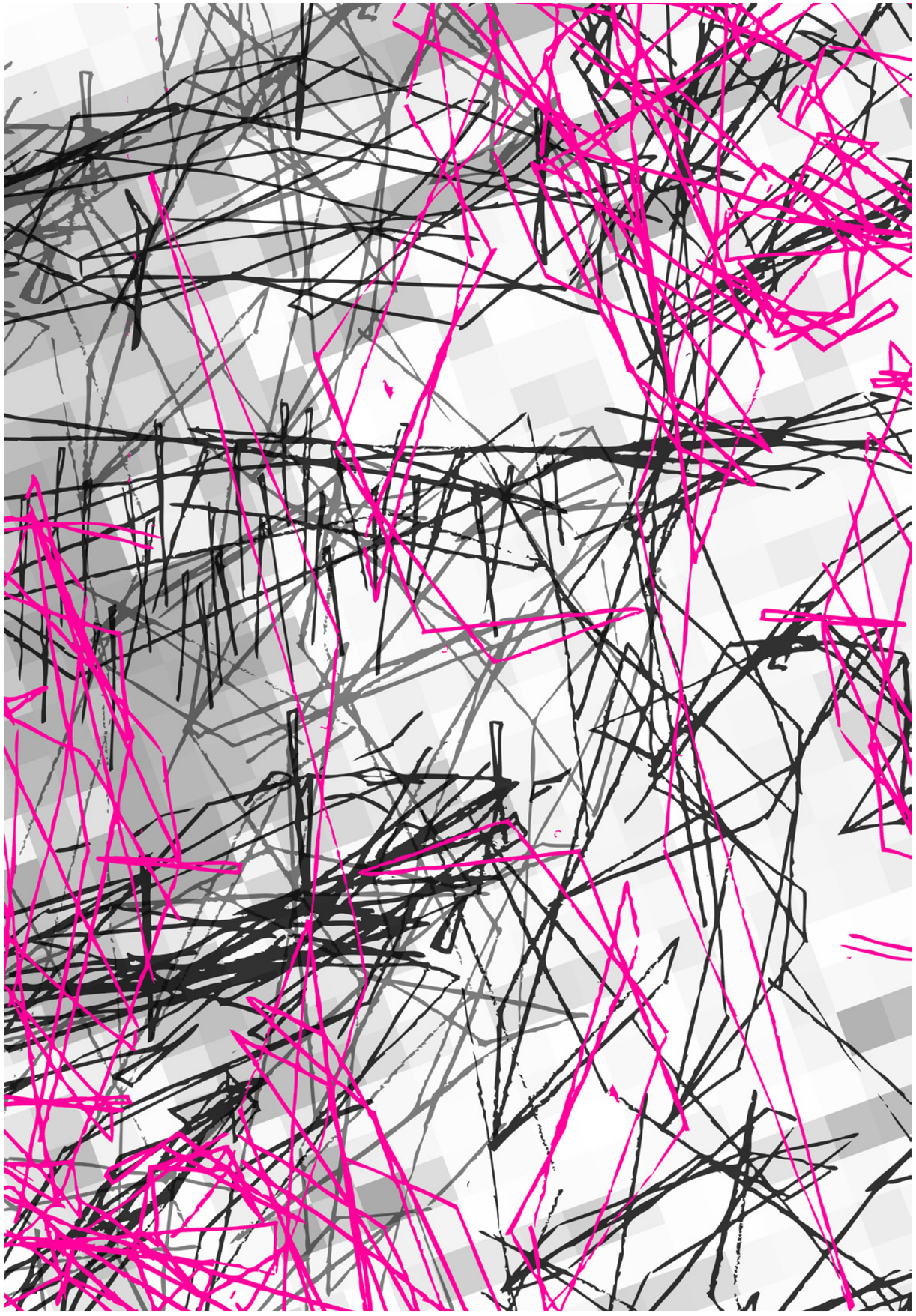


Ray Bradbury
There Will Come Soft Rains 01 | 02



Franz Kafka
Before the Law 01 | 02





Franz Kafka
In the Penal Colony 01 | 02

Jorge Luis Borges
The Garden of Forking Paths 01 | 02

drawing is thinking. on paper.

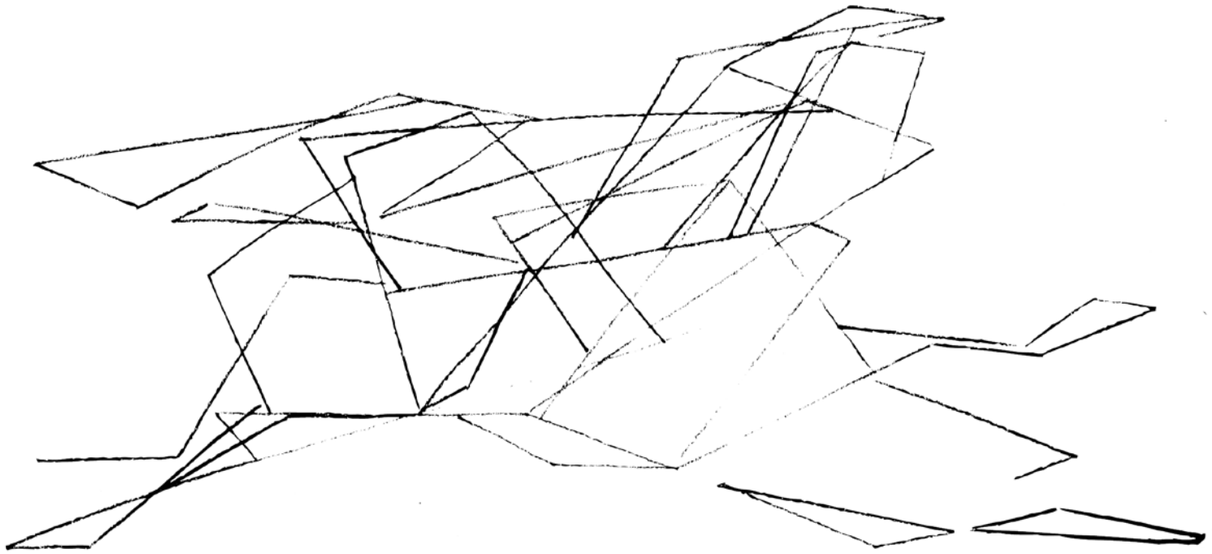
intuitive line drawings

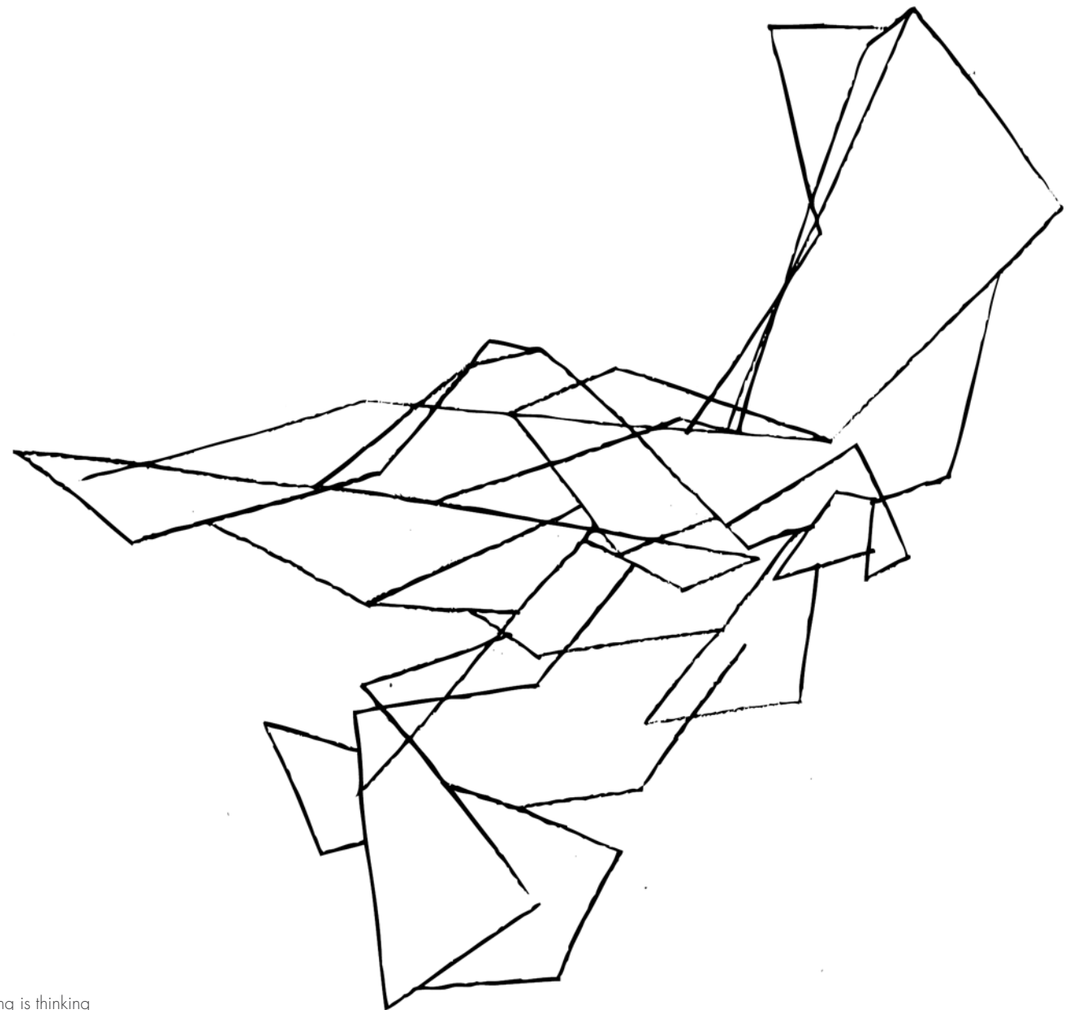
Following the first set of literary drawings, a new set of drawings was generated that was inspired by the methods and style of the previous set. The lines on paper represent imagined spatial relationships, multiplicities of perspective, and intuitive structures that have been influenced by the process. They attempt to convey the possibilities of architecture as event and architectural action.

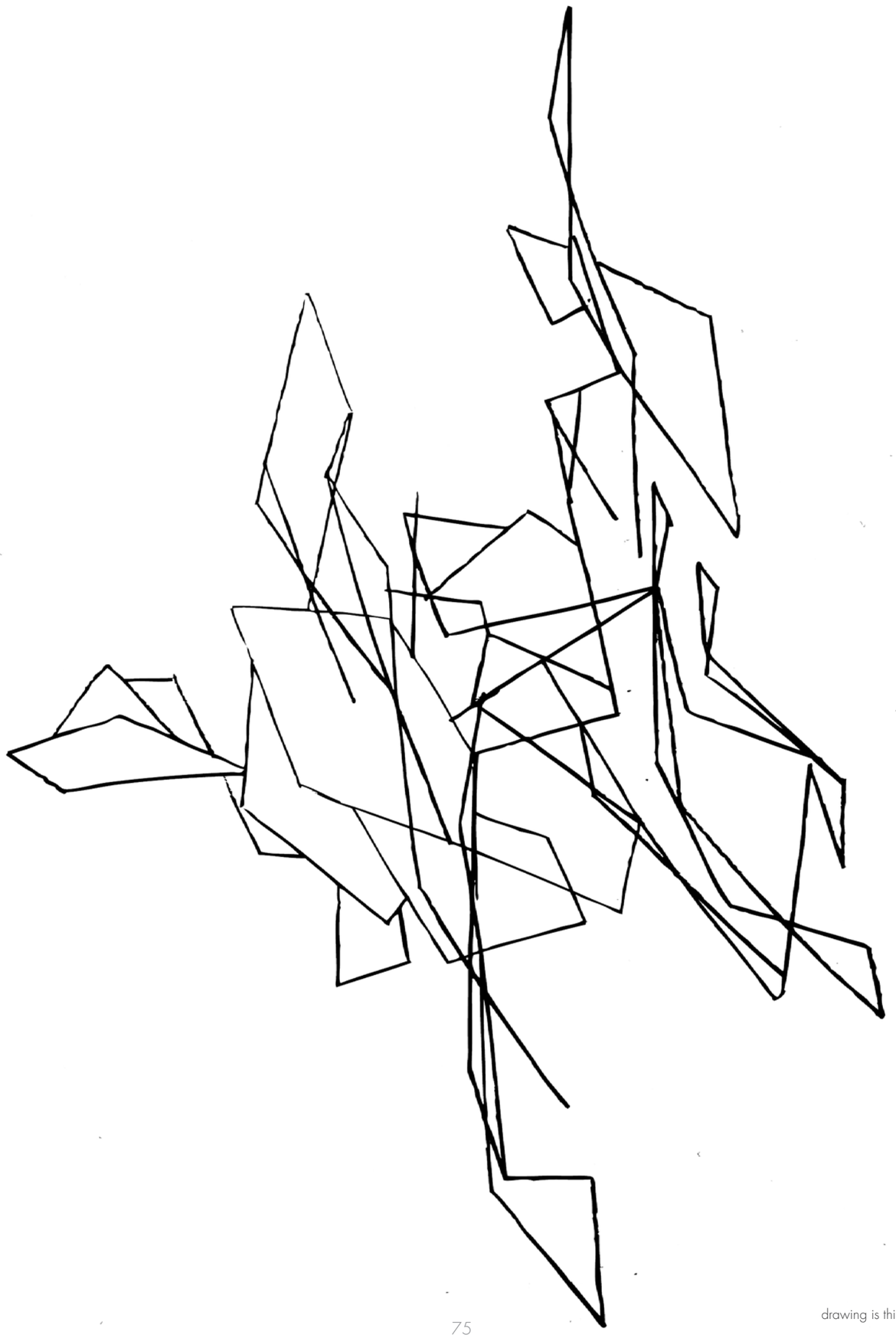
Drawing is thinking. Thinking with lines.

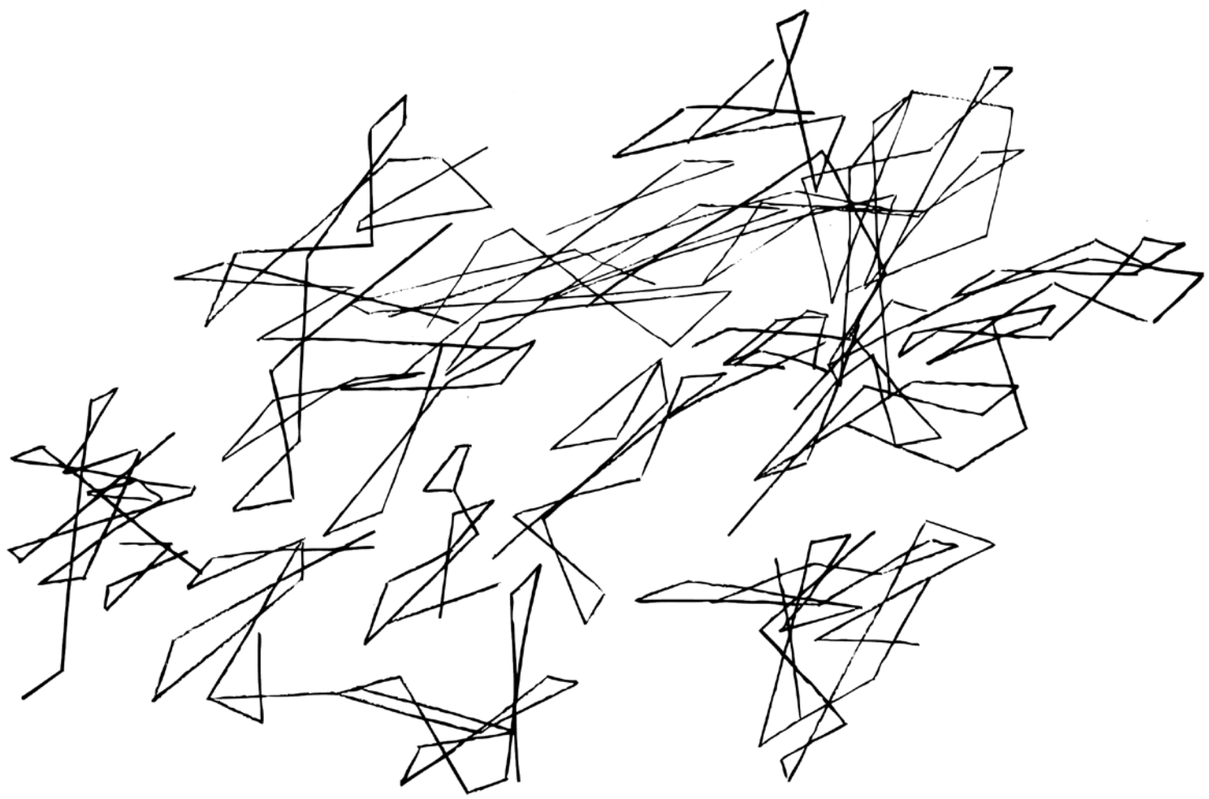
The lines on paper are interpretations of spatial thoughts. The lines are cinematic. Intuitive lines lead the way. Inspirational thoughts guide the process. Trust the process. At this point, nothing is arbitrary. Nothing is random. Everything has underlying meaning.

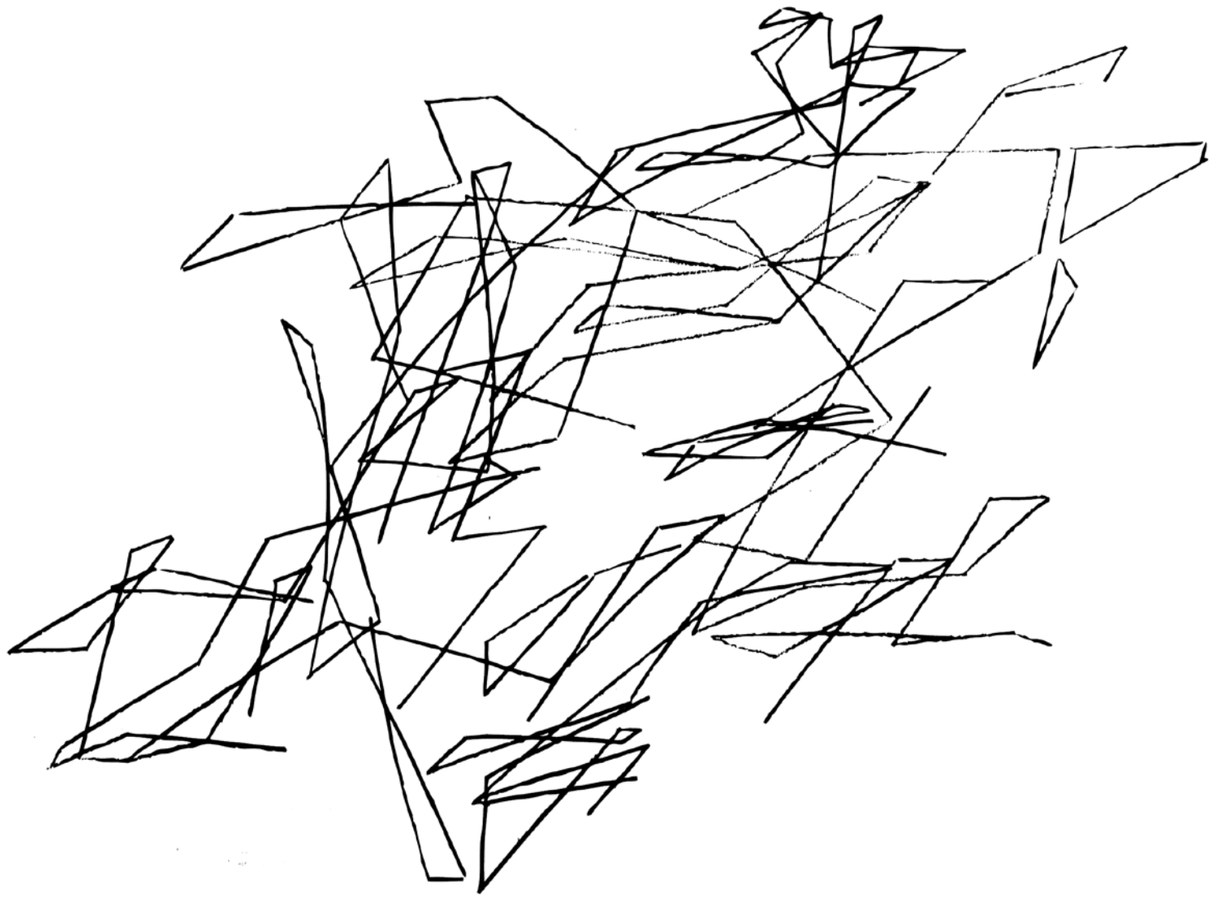
Every. Single. Line.

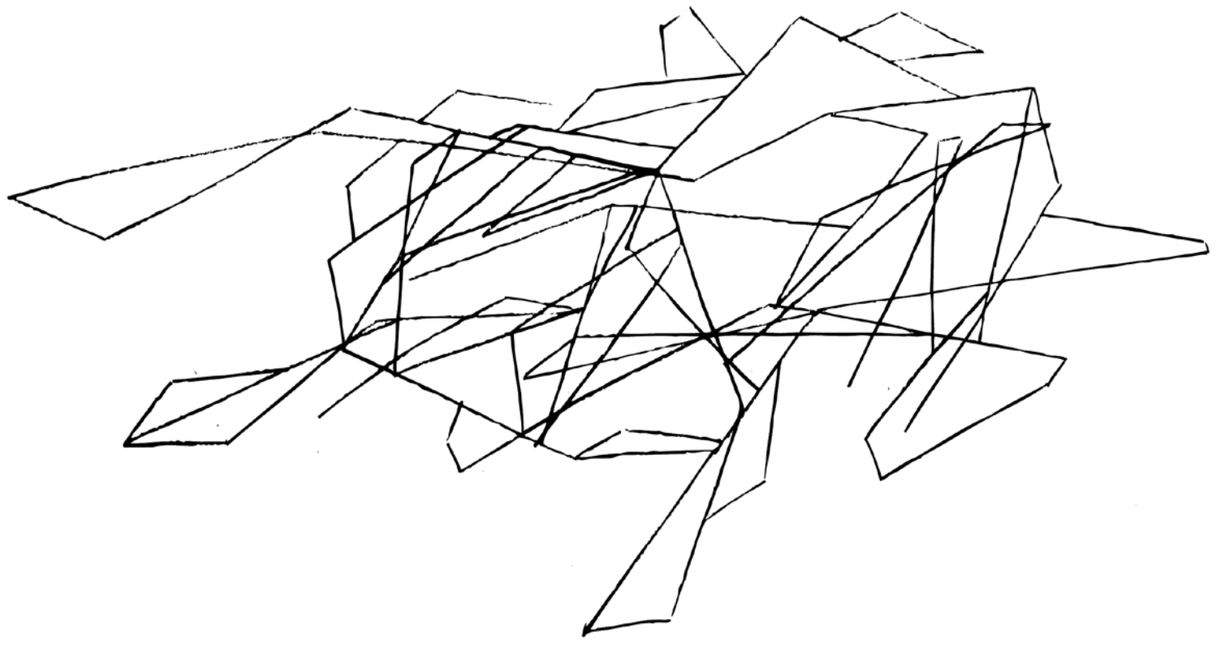


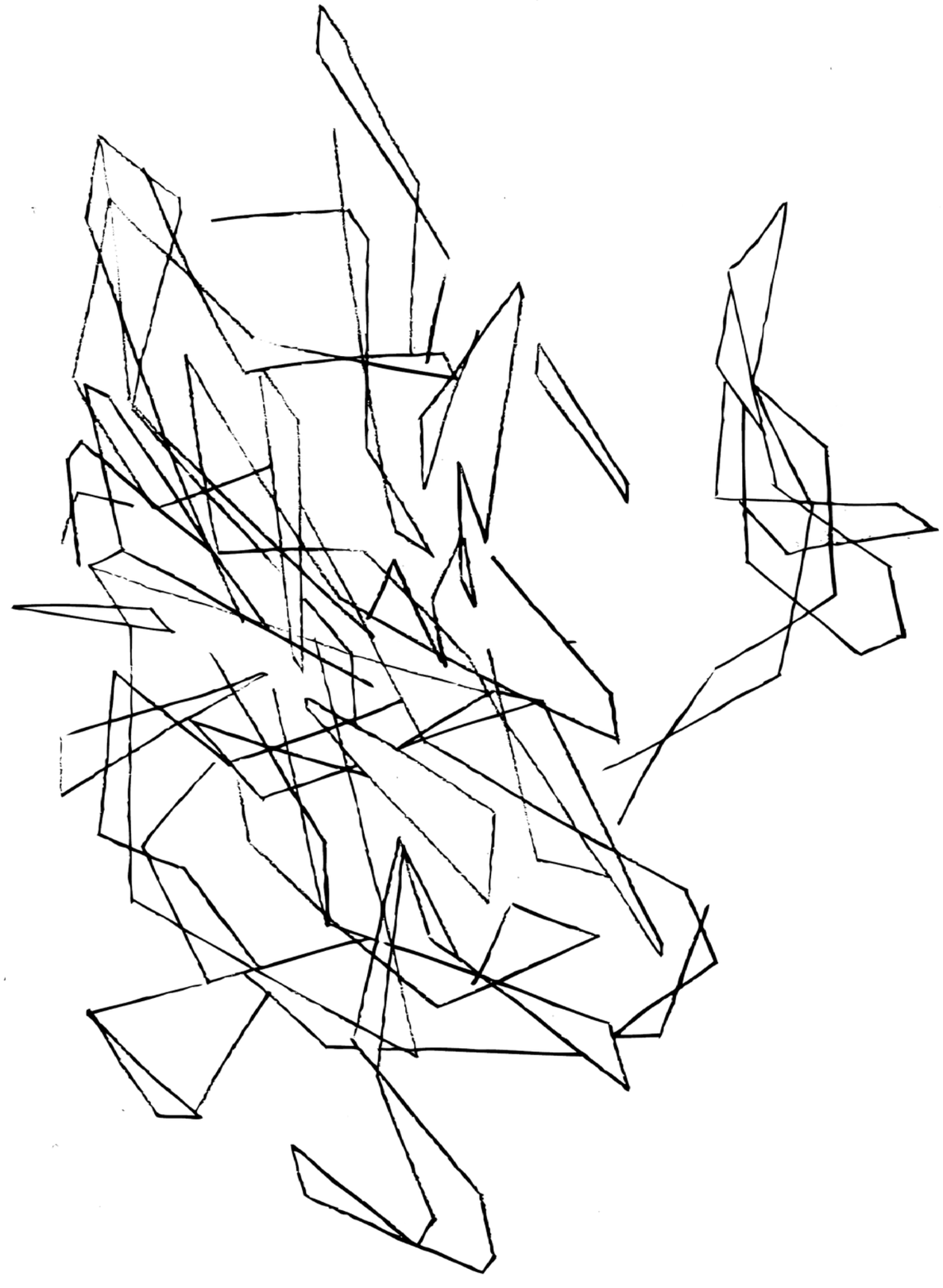


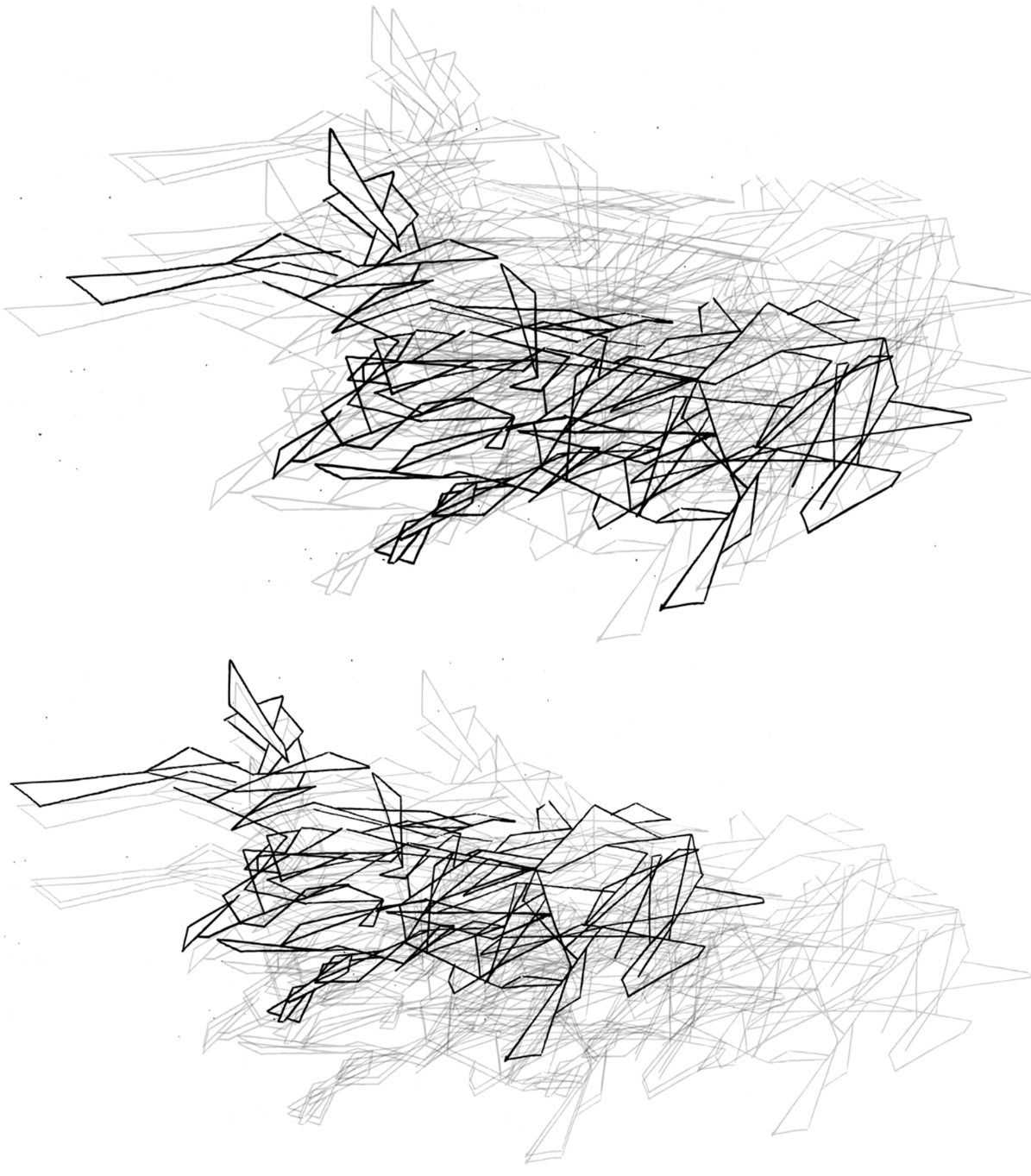




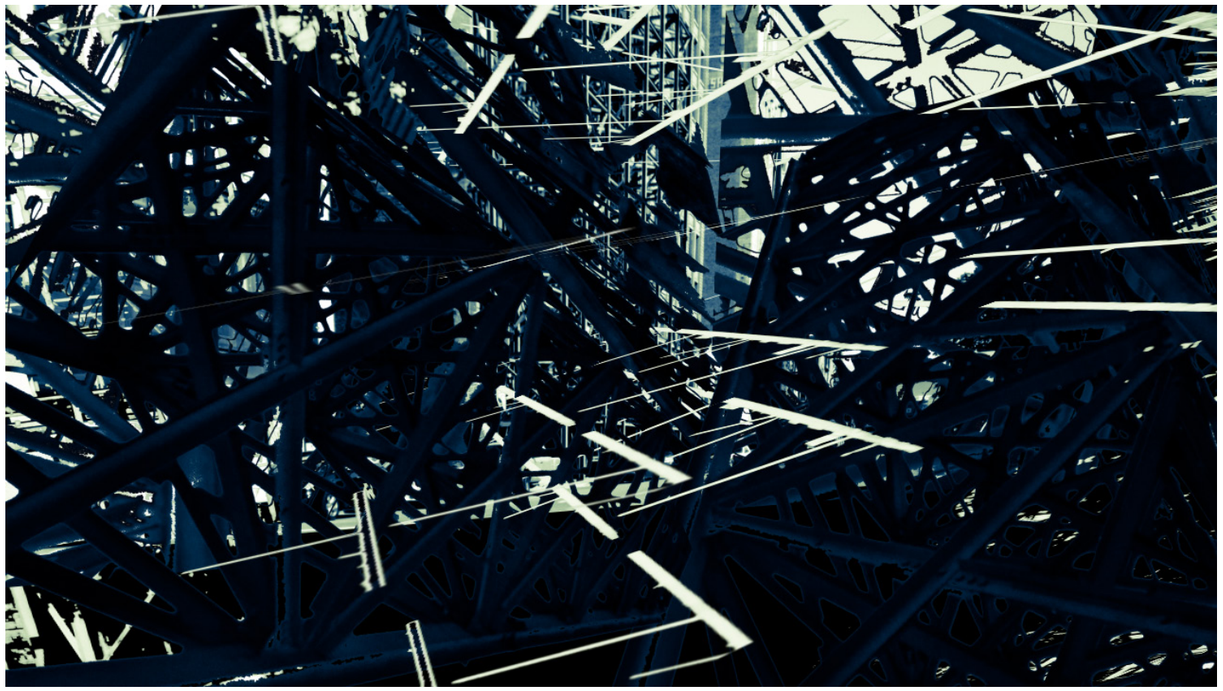


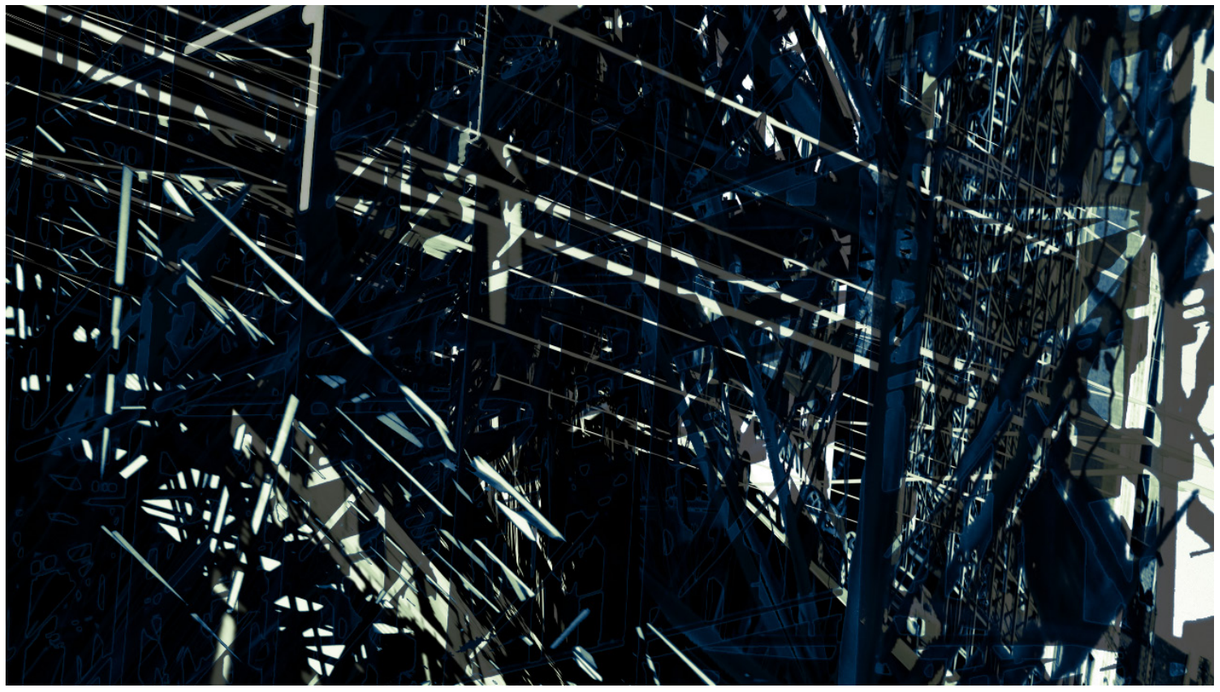






this is another test.

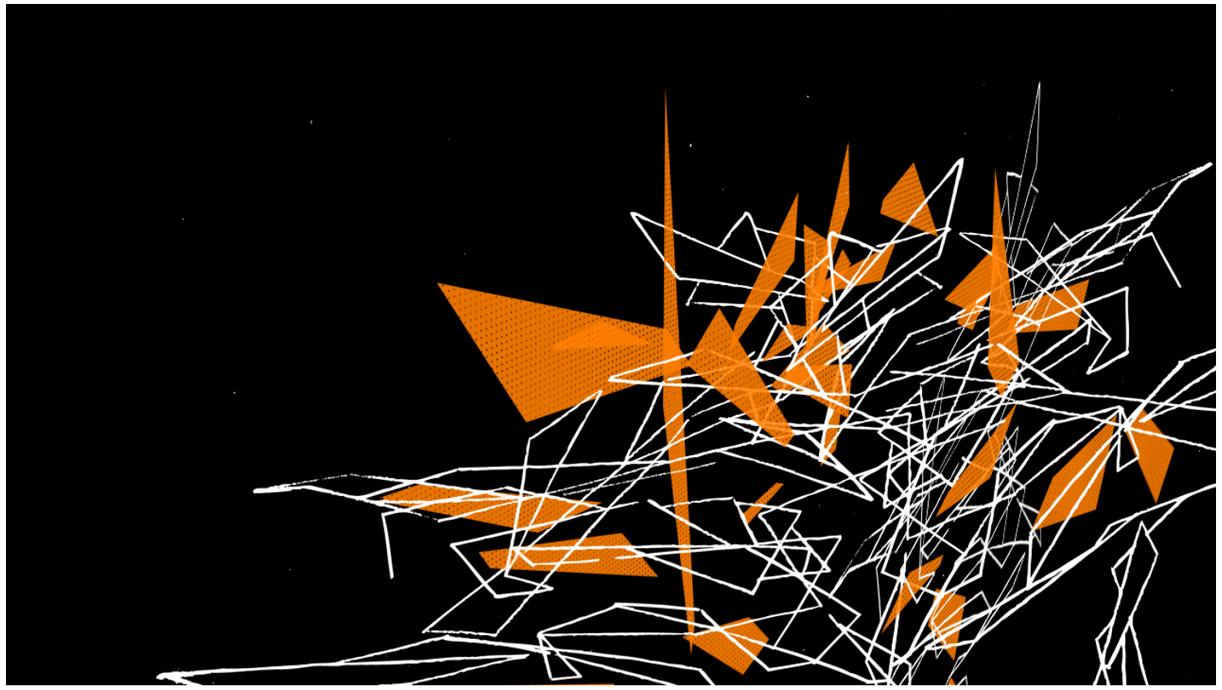


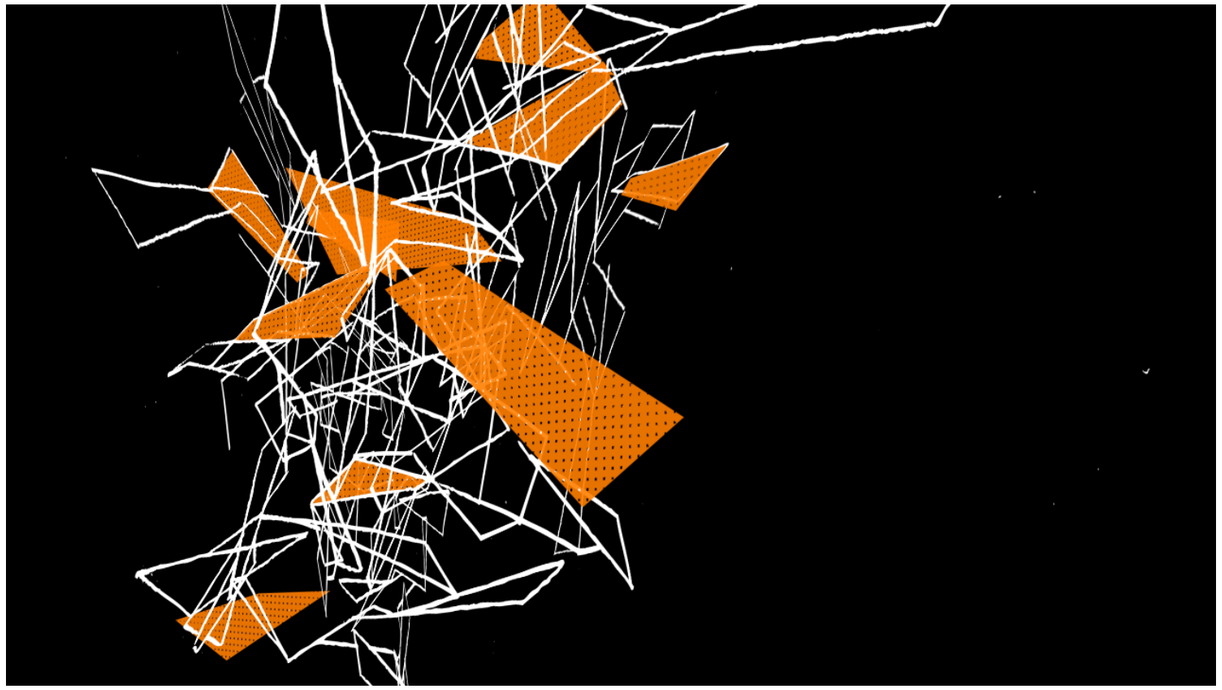


Cinematic, spatial, architectural construction alters perceptions of depth. The camera dictates the ways in which time and space unfold.

video sketch 14

still frame 14.01 | 02

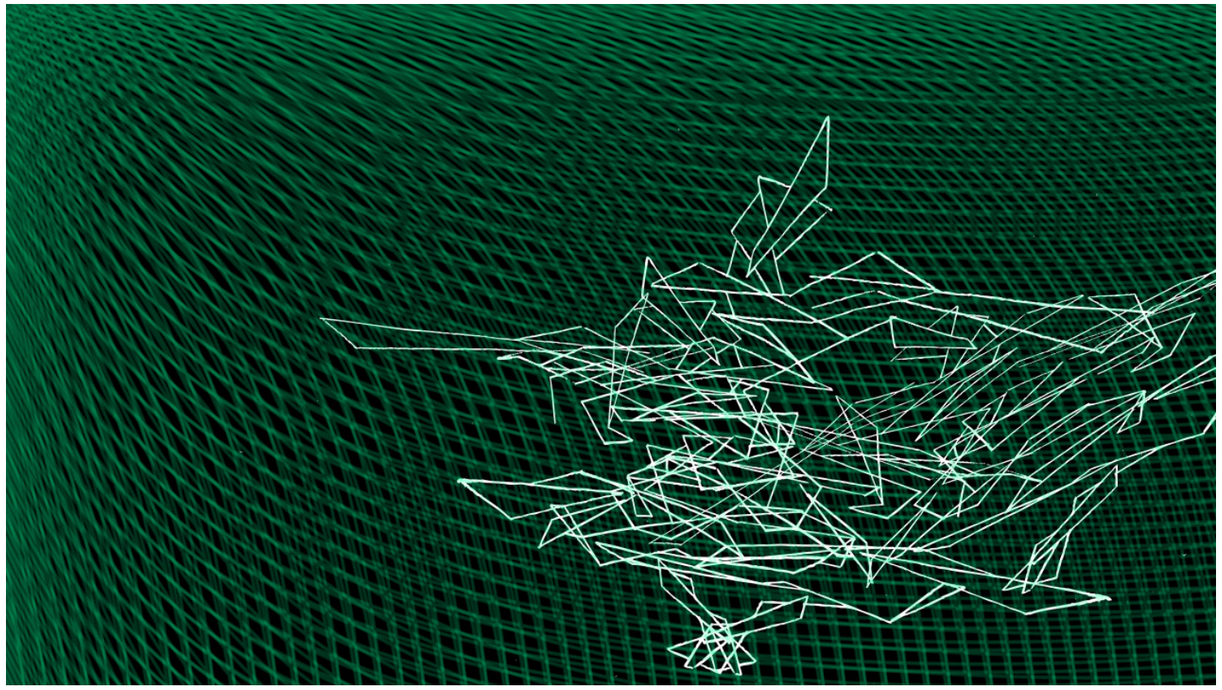


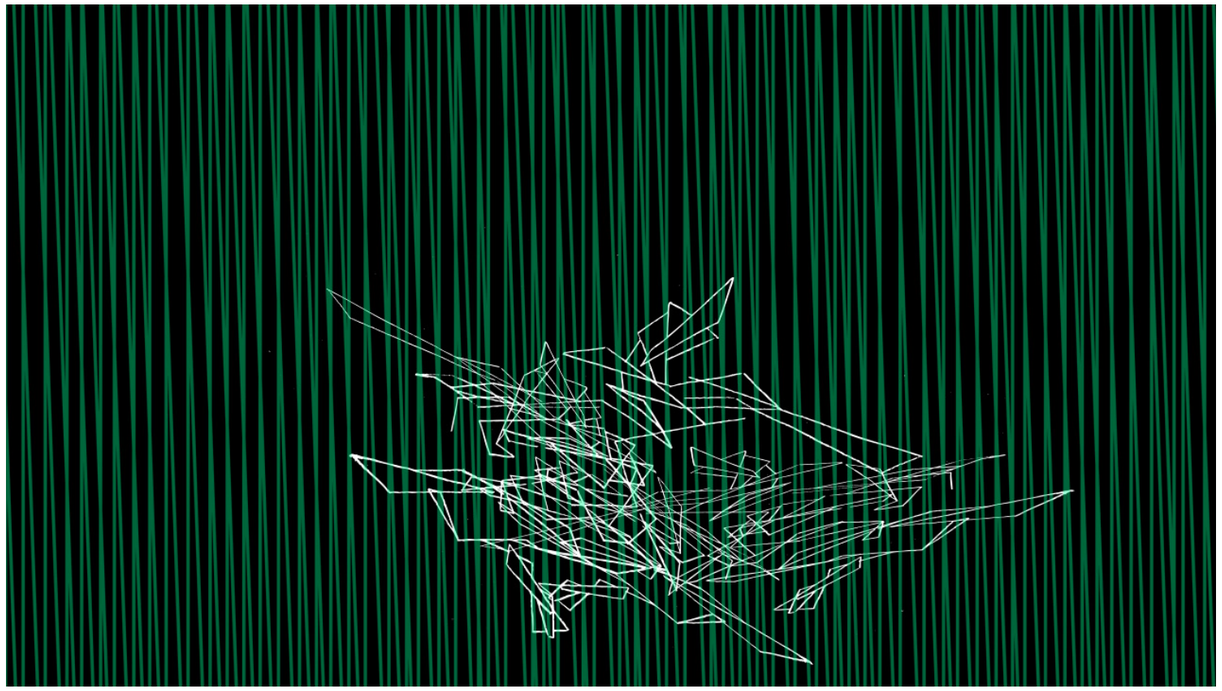


Perception is deception.

video sketch 15

still frame 15.01 | 02





Green is the event, an optical illusion of movement and speed. The static becomes cinematic.

video sketch 16

still frame 16.01 | 02

modeling is thinking, too.

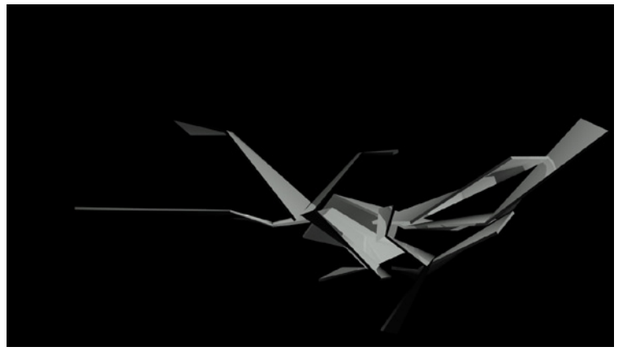
three-dimensional models

The intuitive, cinematic sketches were transmutated into a 3-D model, which was then broken up into eight individual models. Another transmutation. Then, these spatial complexities were cinematically analyzed from all sides. The intent here is for every movement to reveal a different spatial perspective.

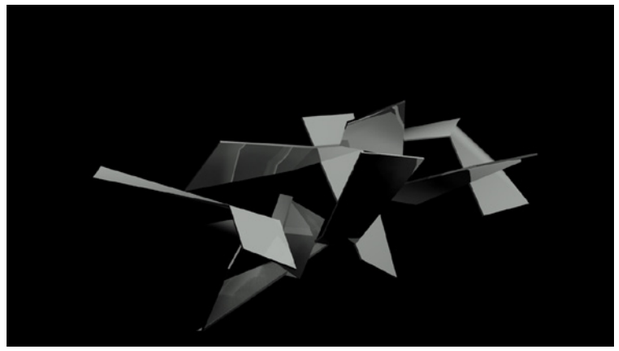
These three-dimensional models intend to be translated into potentials for architectural space, which can be manipulated into alternate spatial realities.

Once sited, these architectural sketches act as a counteraction to the existing spatial conditions in Detroit.

Using video to generate renderings, complex spatial relationships are established, and images challenge perceptions.



model 01



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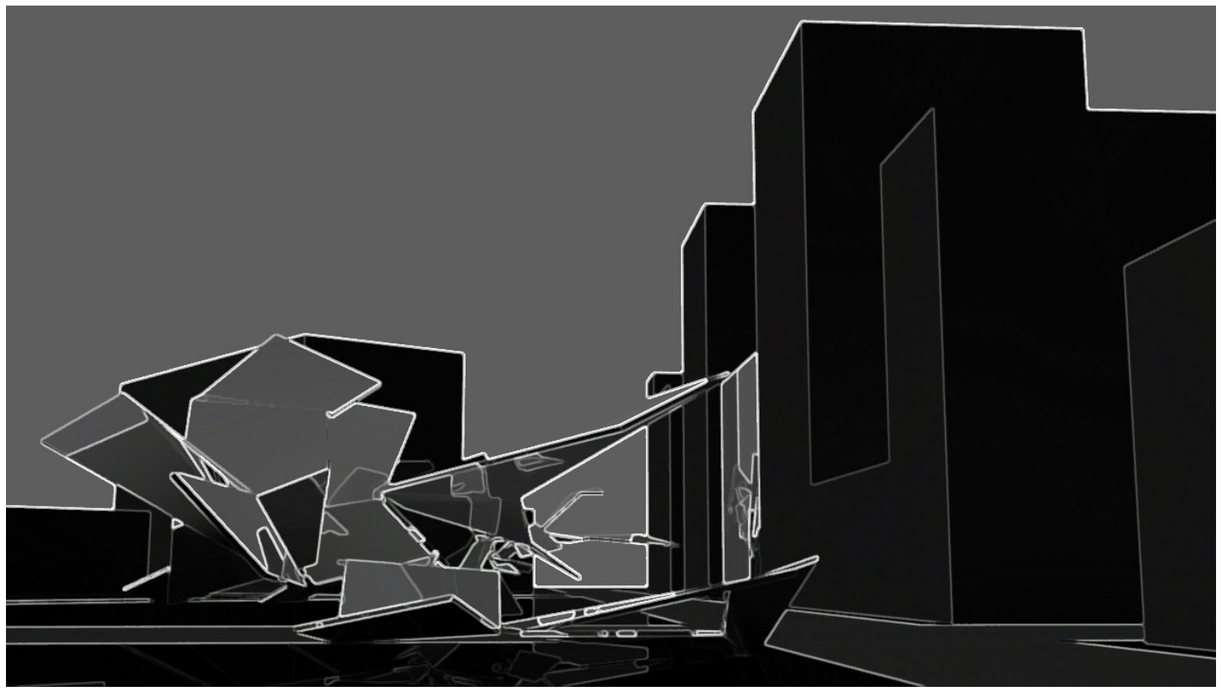
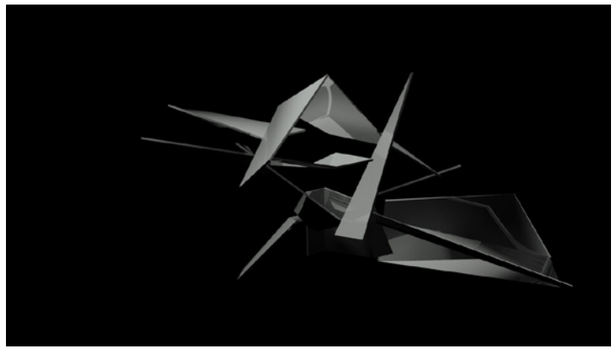
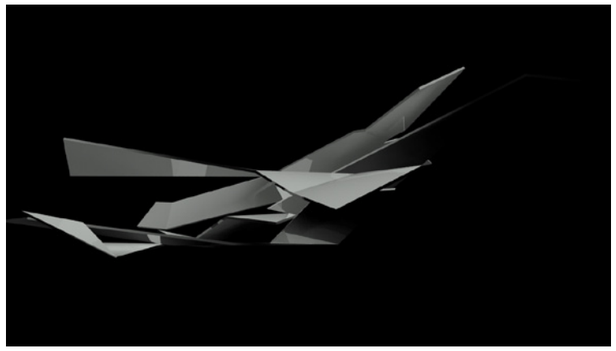


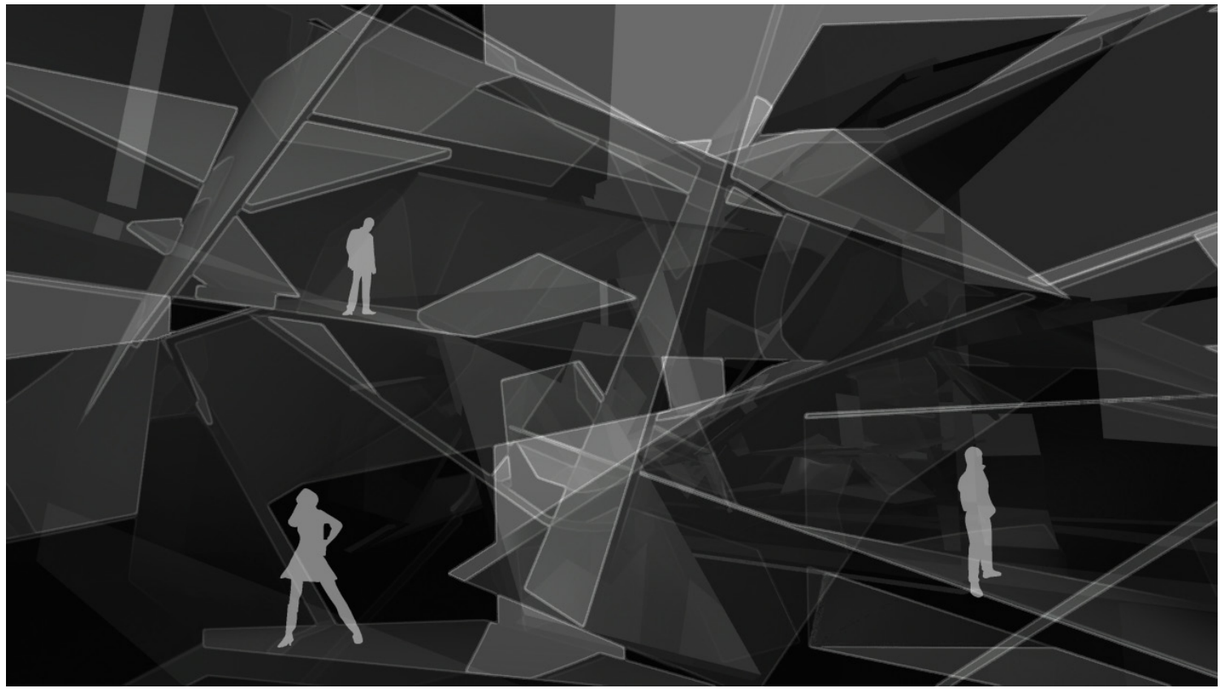
sited model 03 | 04

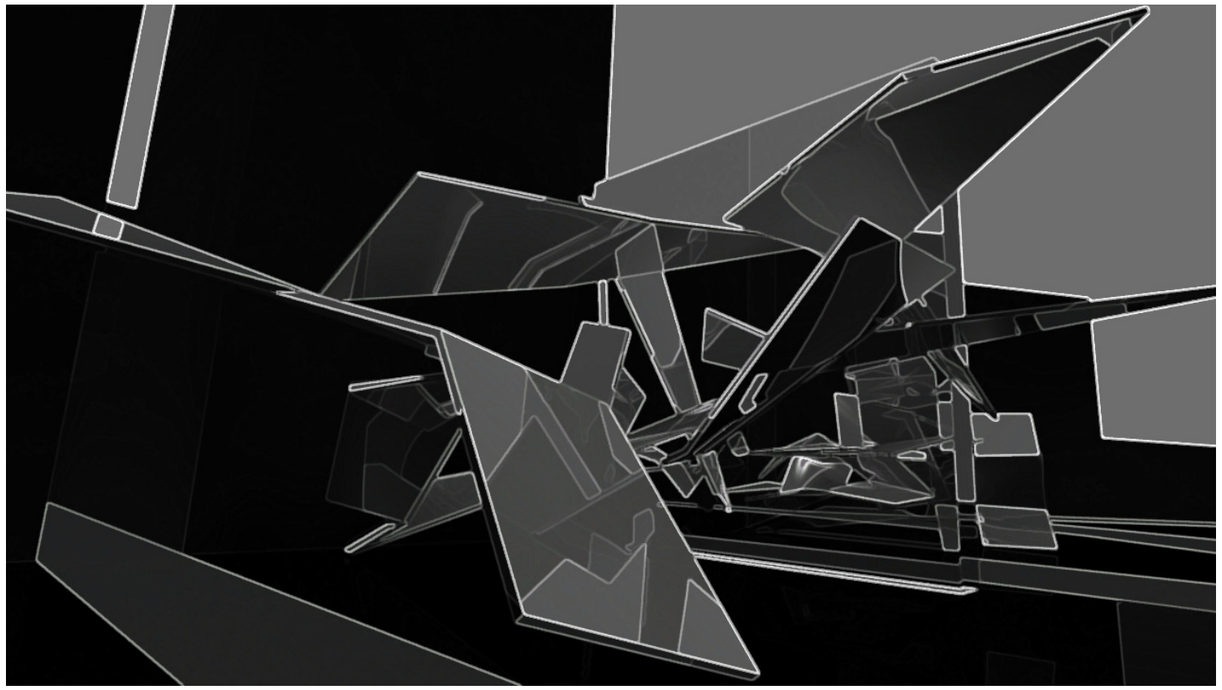


model 05



model 06





sited model 07 | 08

video extends architectural perceptions.

Sketching with video allows the designer to think and design with video.

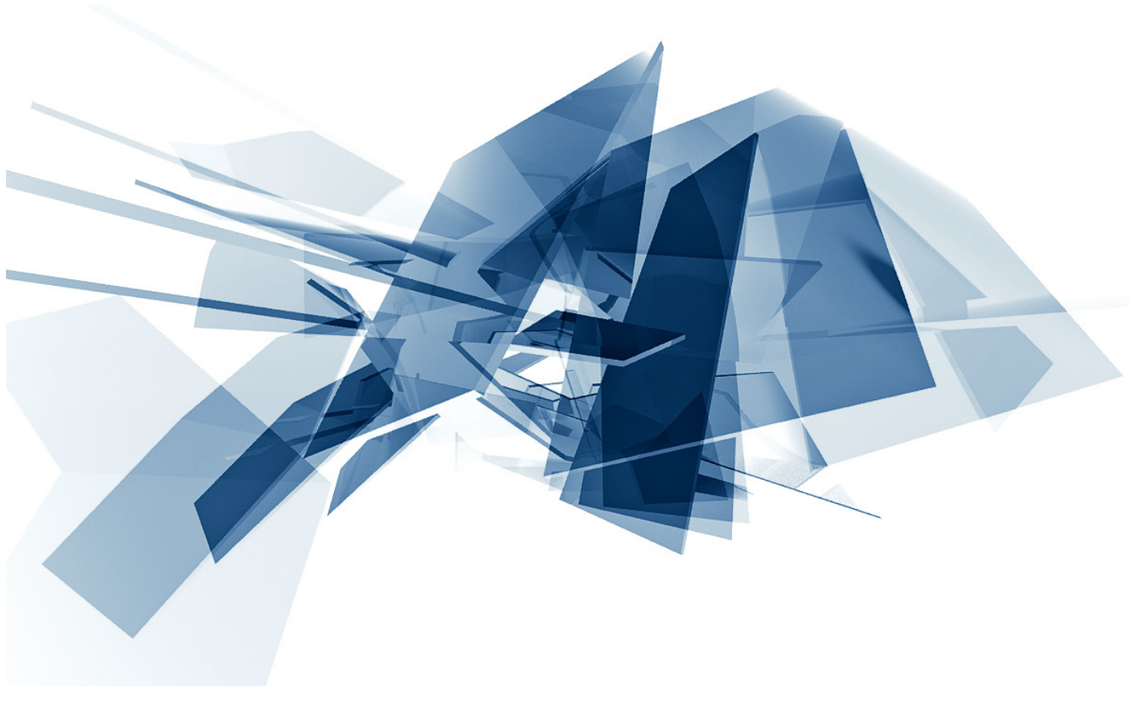
The following stills represent a creative surprise in the design process. Using the original three-dimensional models and transmutating them into moving images, a method of sketching architectural designs with motion pictures was established.

A short video was created by rotating each of the individual models on axis, revealing all sides and perspectives of the models in a cinematic sequence. Then, each of the 360 degree videos was layered upon one another, starting at a one tenth of a second delay and with a semi-transparent opacity.

By pressing play, multiple video sequences are played simultaneously. And at any given moment, by pressing pause, multiple perspectives of architectural time, space, and form are revealed in tandem.

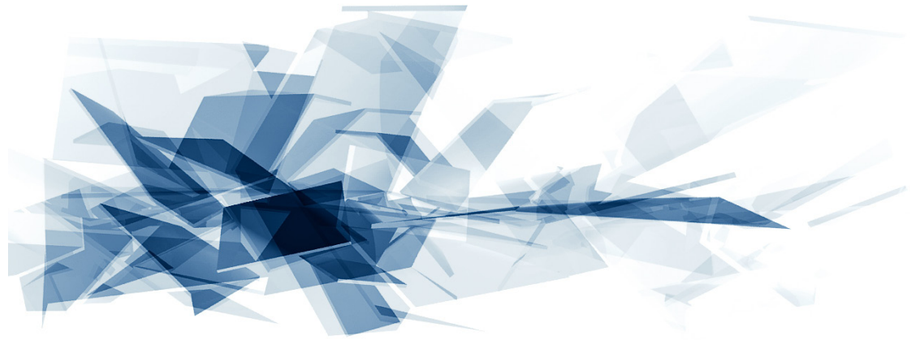
Video can teach the designer to see, think, and design differently. Digital video can be an extension of the imagination, an extension of architectural space.

Ideas are initially established and are then transmutated in the process of editing video. The architectural images are the result of various revelations along the way in this process of designing with video. The following images are not, by any means, complete, defined architecture. But rather, they are the expressive, architectural, and imaginative outcomes of a cinematic process.



cinematic sketch 01

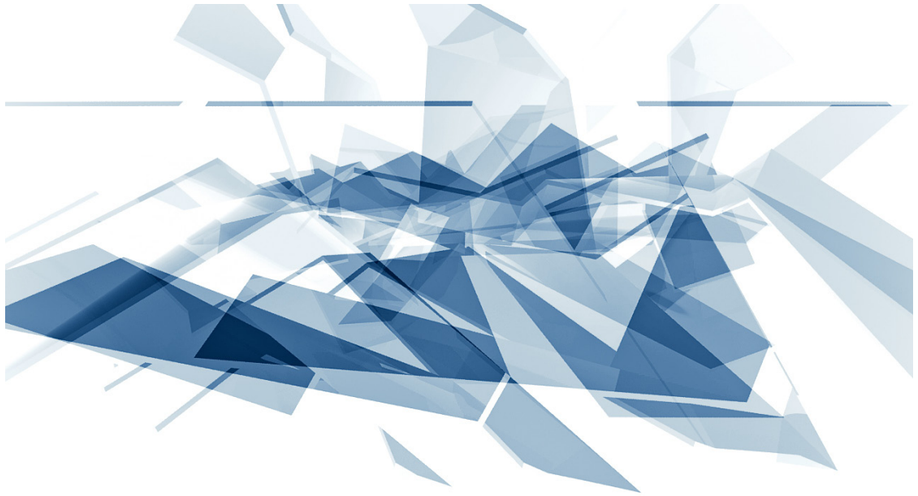
cinematic sketch 02

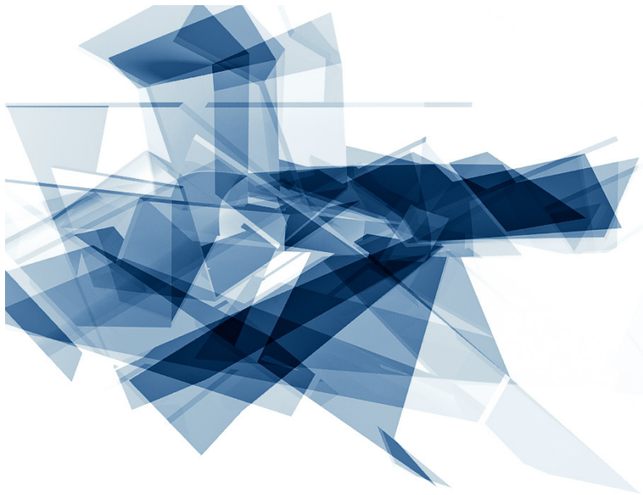


cinematic sketch 03 | 04

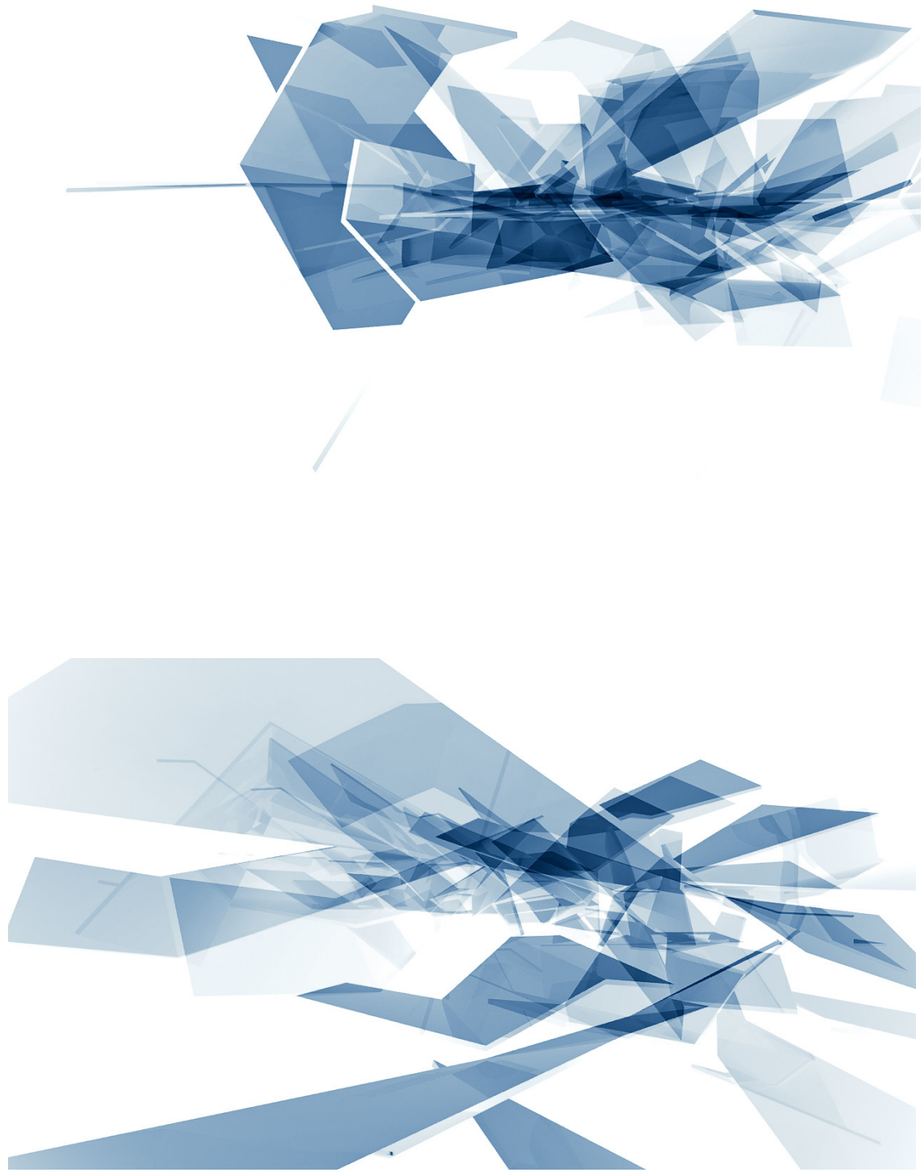
cinematic sketch 05

cinematic sketch 06

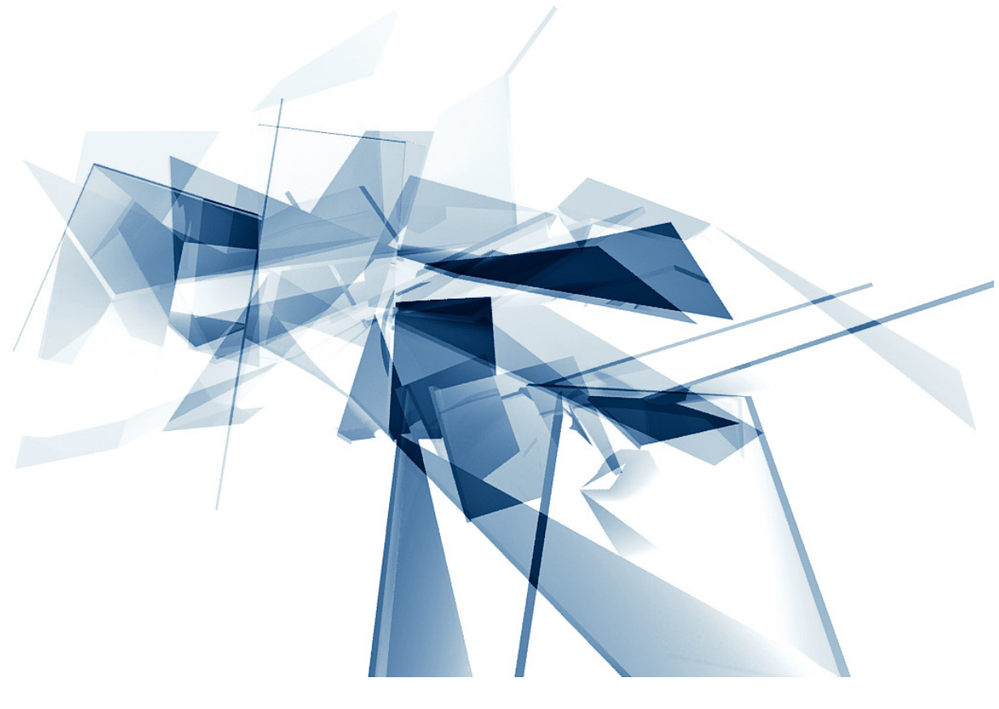




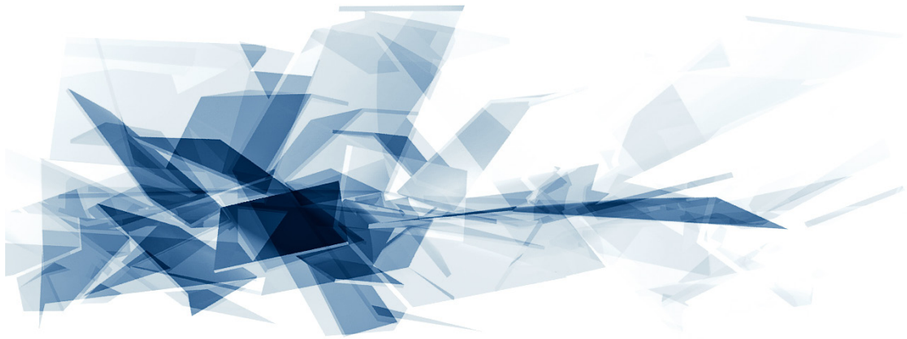
cinematic sketch 07 | 08 | 09

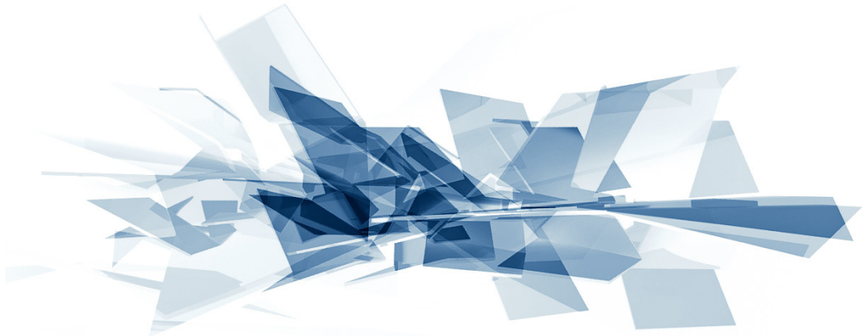


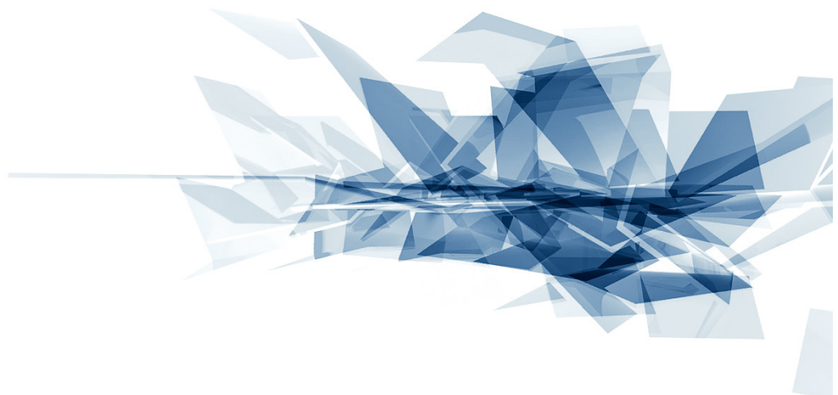
cinematic sketch 10 | 11

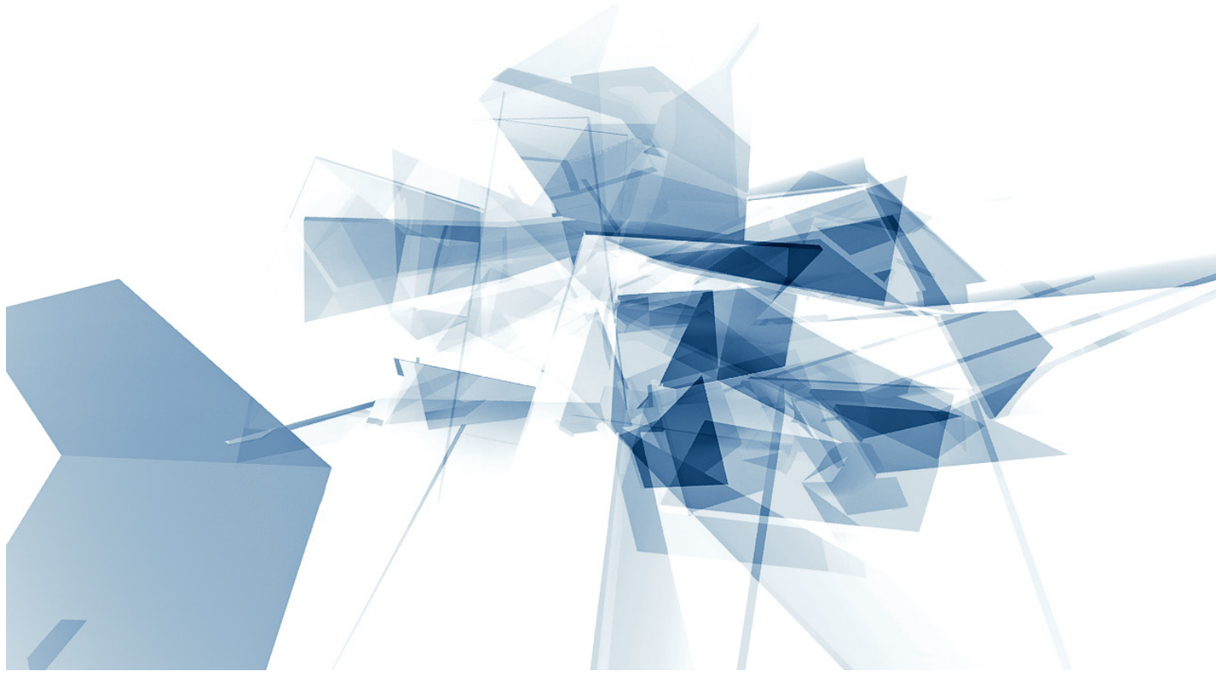


cinematic sketch 12

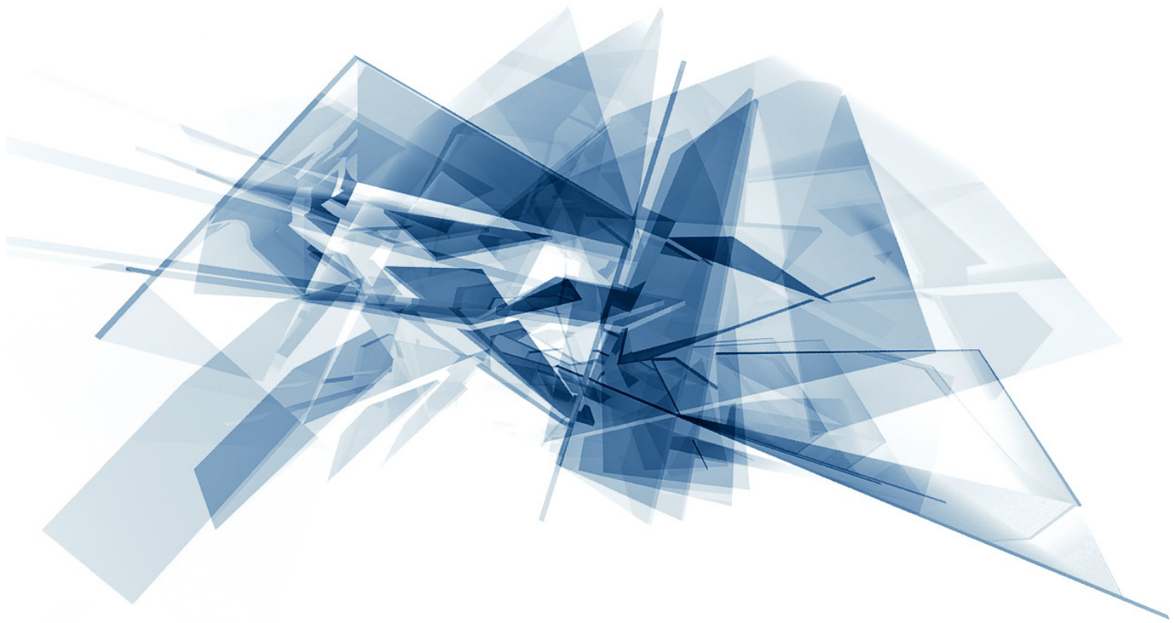








cinematic sketch 19



cinematic sketch 20

making is learning.

drawing, modeling, designing

The final stages of design development were driven by a process of experimental making. The objective was to craft an architecture which captured the essence of the cinematic video sketches.

The design process utilized both drawing and three-dimensional modeling. Cinematic sketches were assembled into scaled models on site. The models were transmutated into architectural section drawings. And finally, the drawings were transmutated into a series of three-dimensional models.

This process was not easy, since it involved both trial and error and a vast amount of uncertainty. It was all about production, and each drawing or model was thoroughly analyzed and compared to the previous set of video sketches. But for a while, they couldn't compare.

It was a process of learning by doing, and development was a direct result of making. This was a major breakthrough in the design process. Because eventually, the architecture began to take shape, and its spirit started to align with the perceptual excitement of the moving images.

A theatrical trailer was created to preview the architecture and interior spaces which continued to develop during the final phases of the design process.

At that moment, the architecture began to breathe, because it was alive.

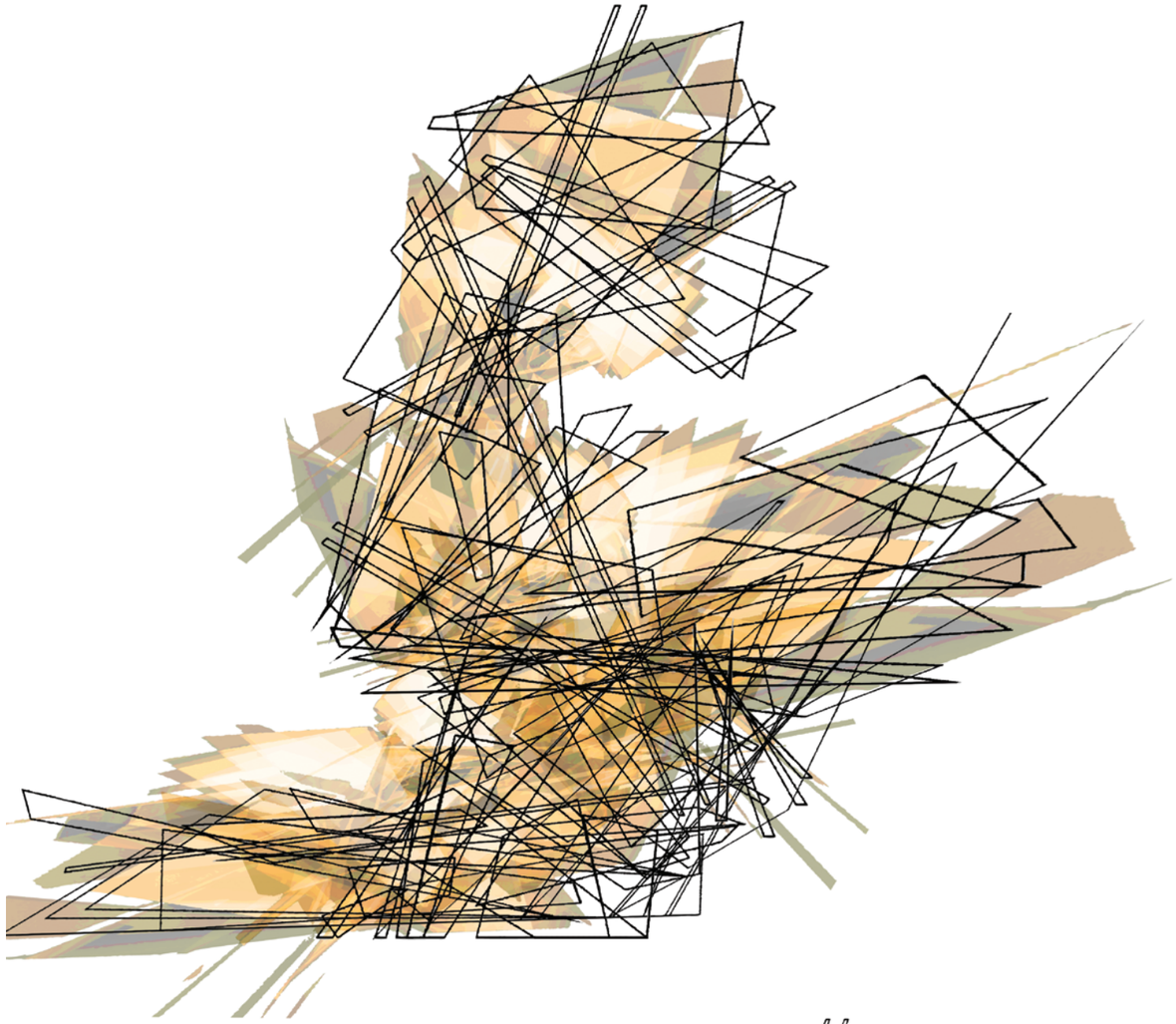
cinematic model 01 | 02

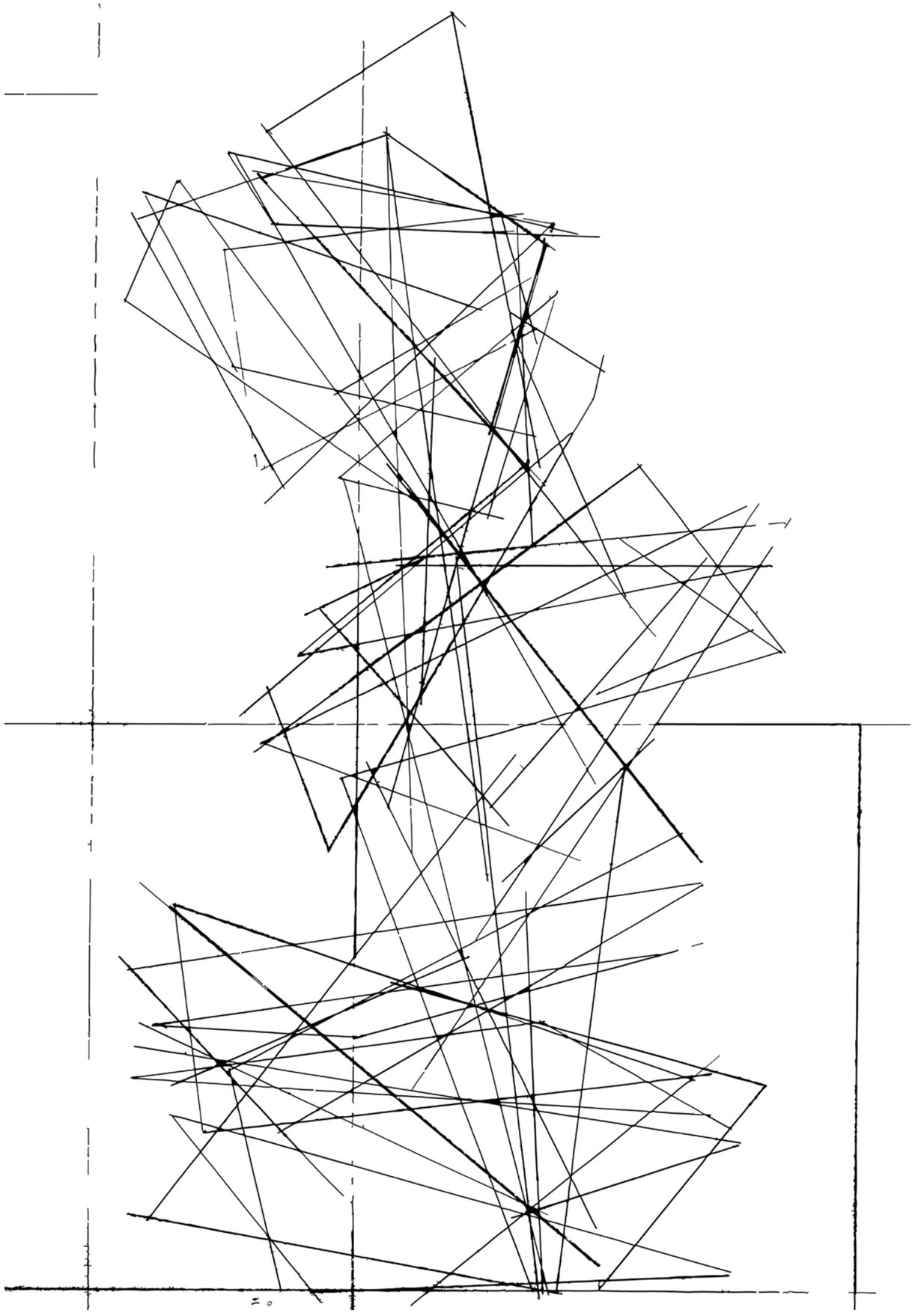
cinematic model 03

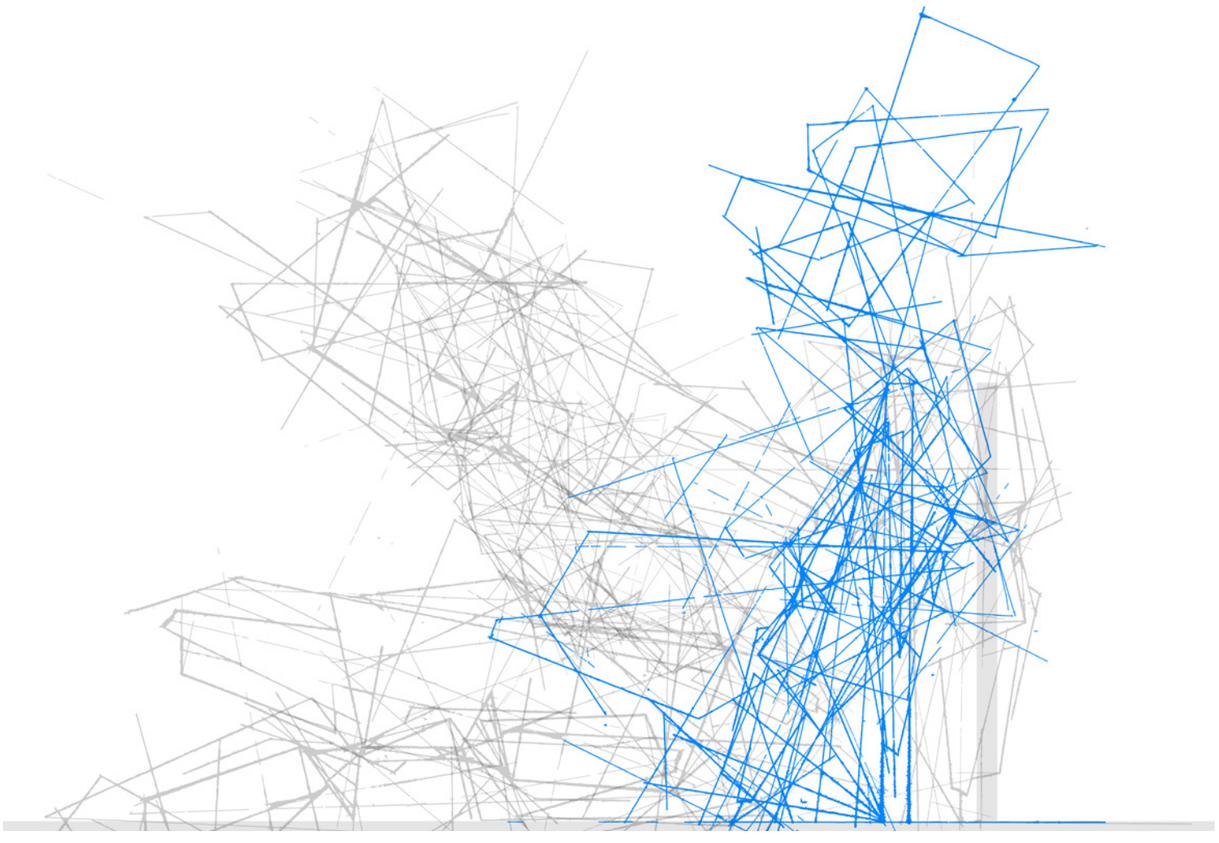
cinematic model 05 | 06

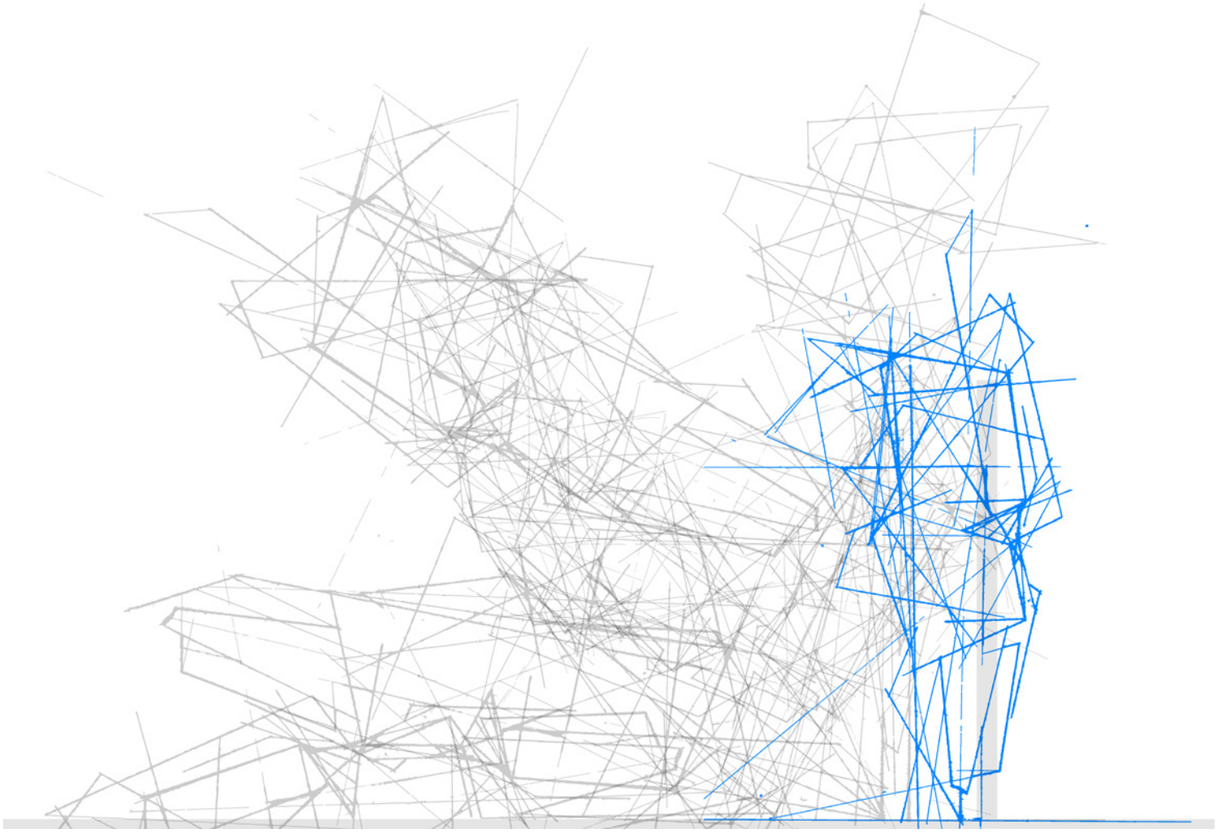
cinematic model 07


MIES'S MOVERS

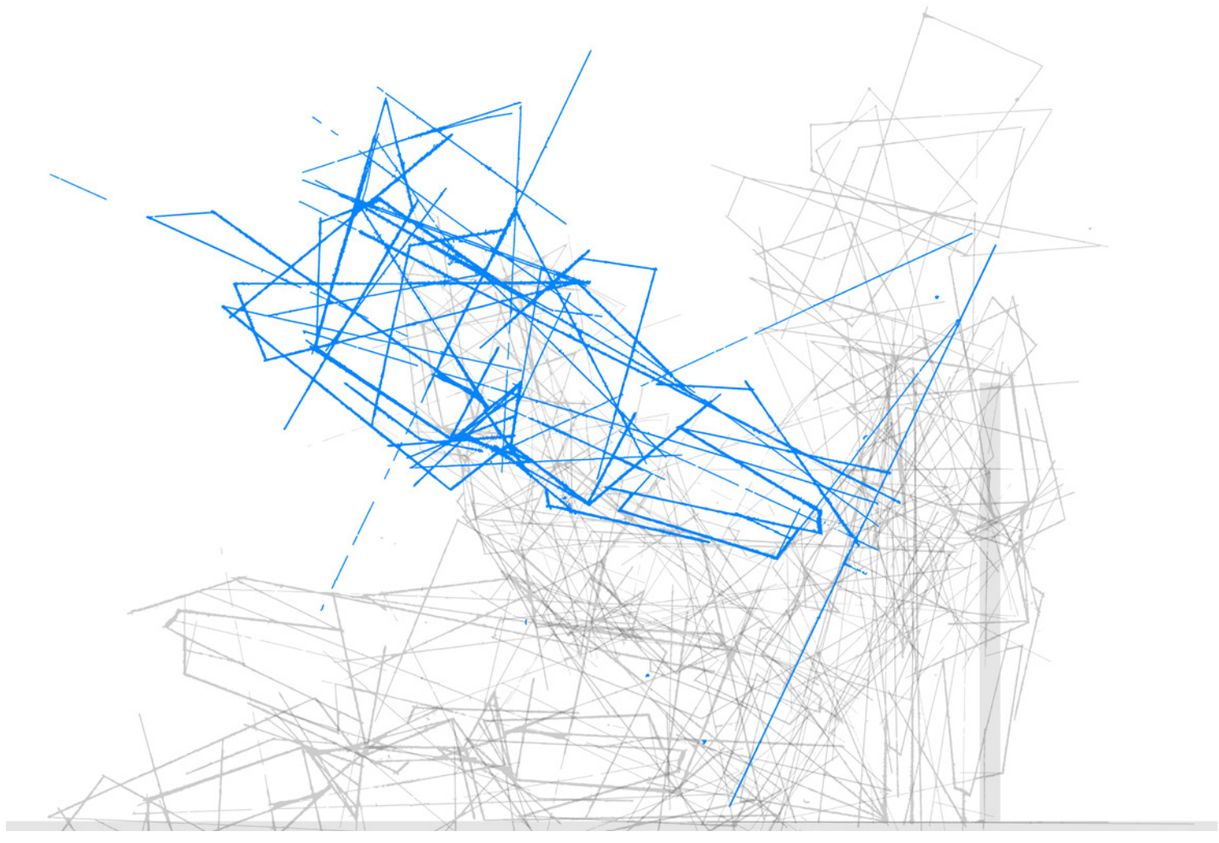


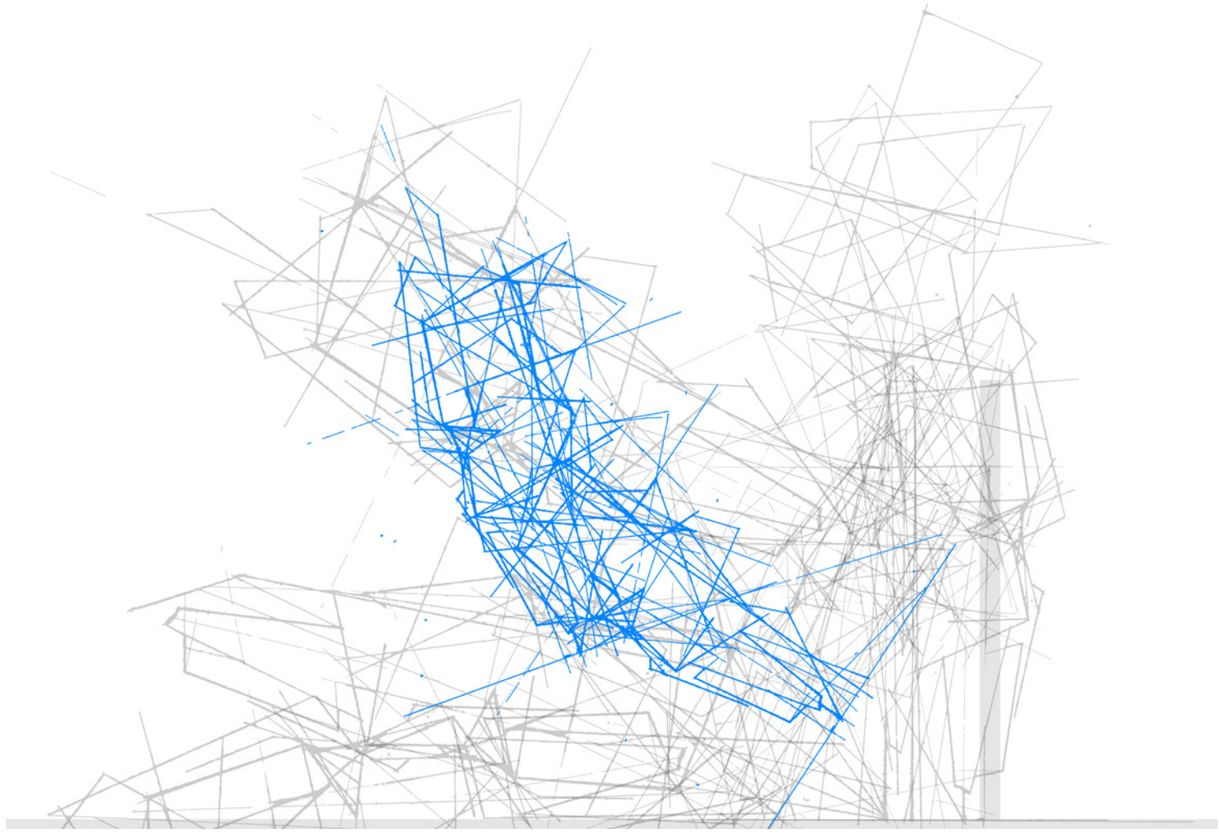




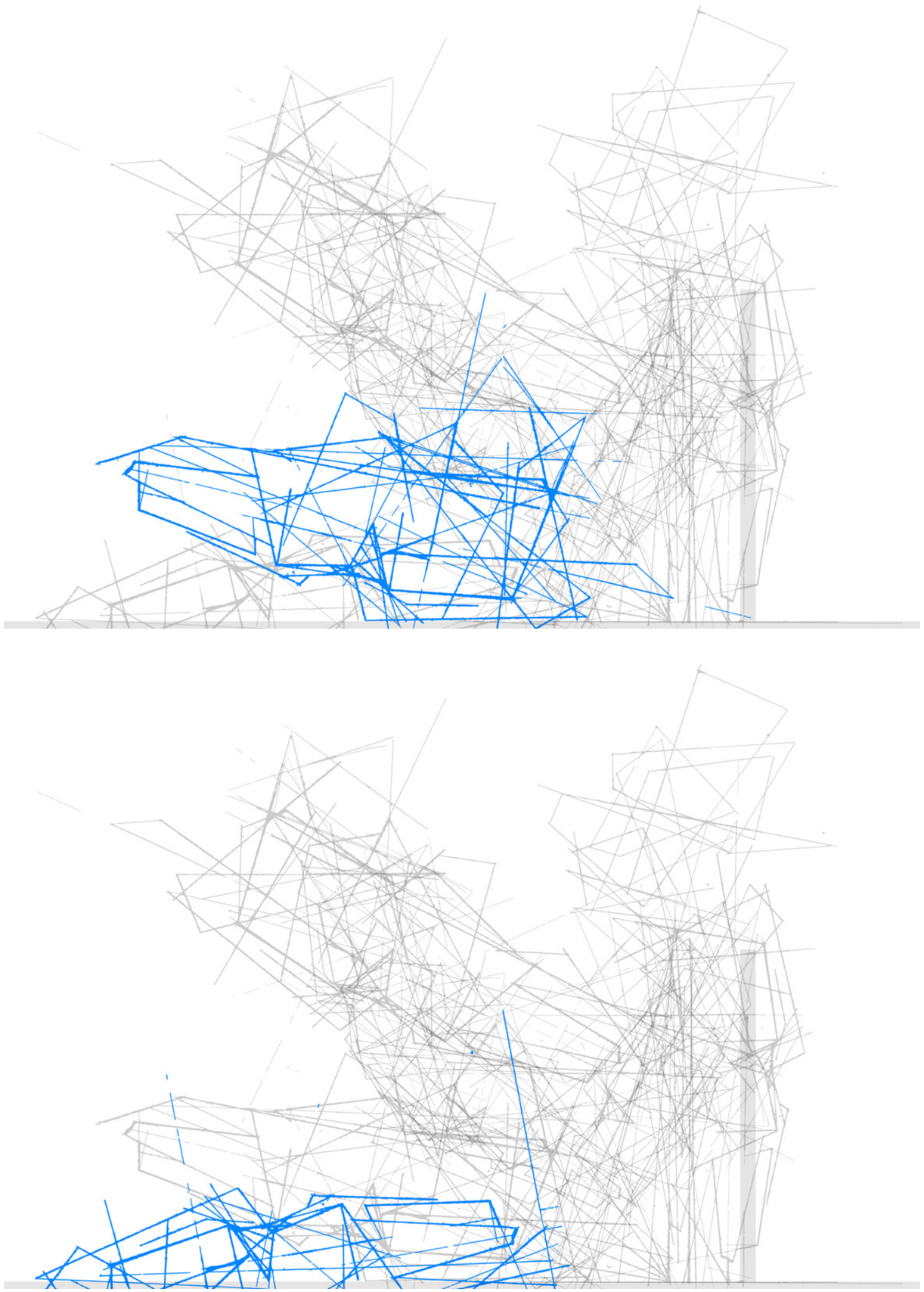


spatial section 01 | 02

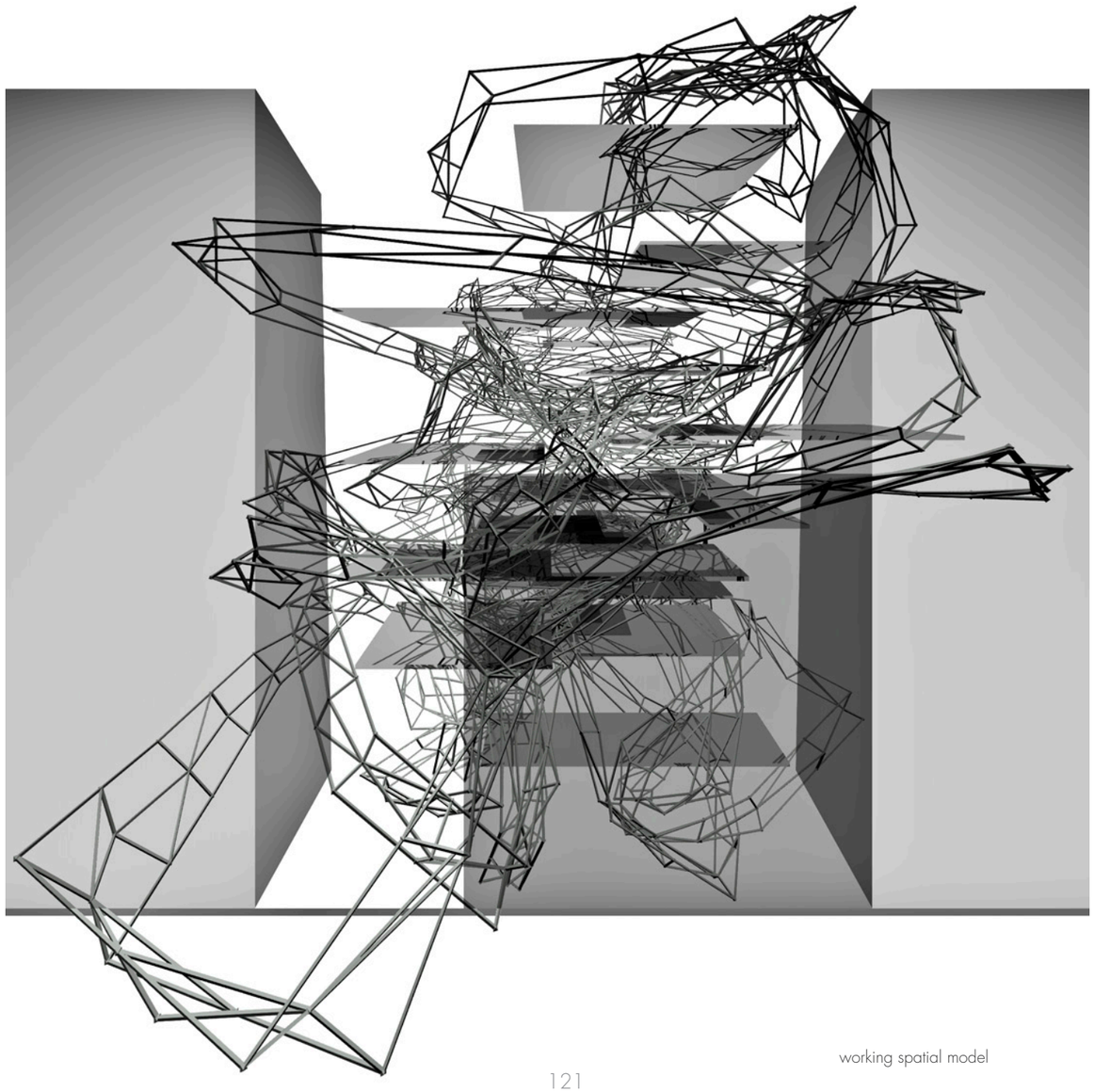




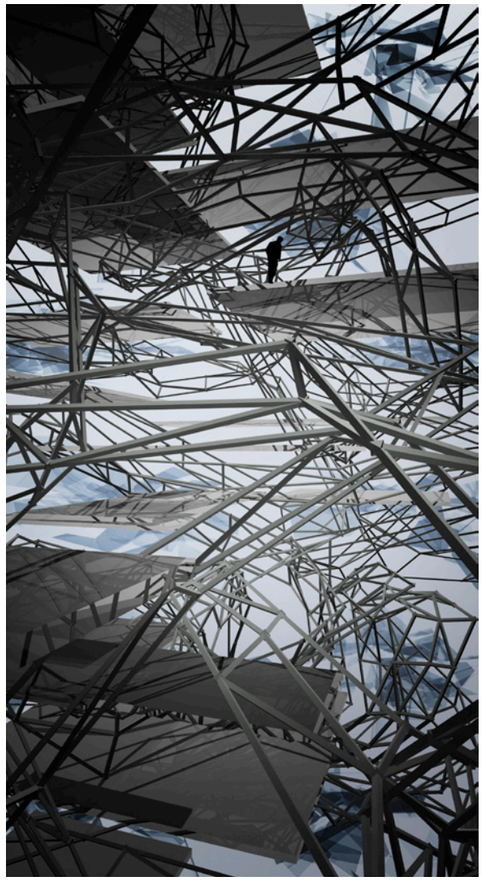
spatial section 03 | 04



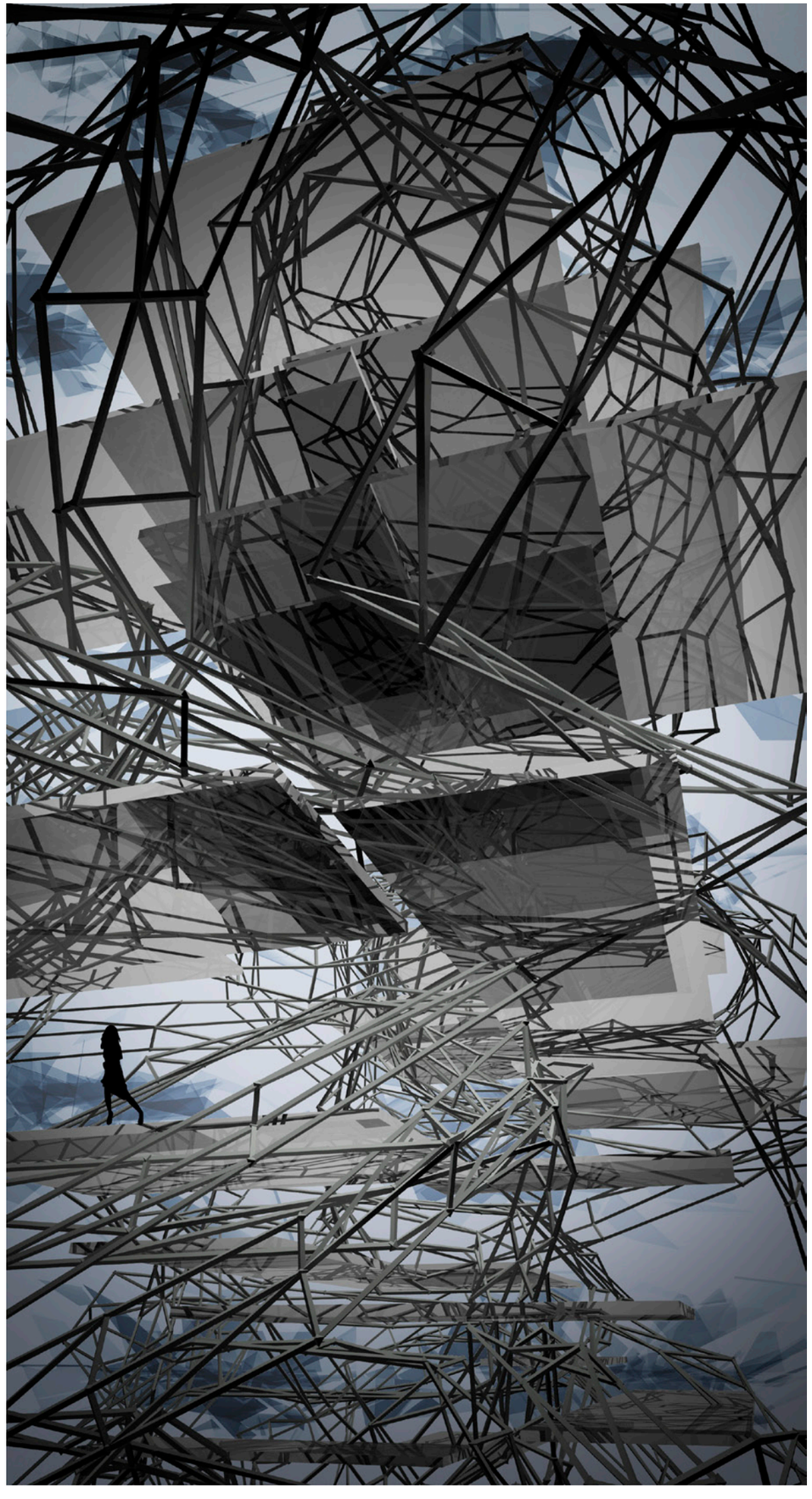
spatial section 05 | 06

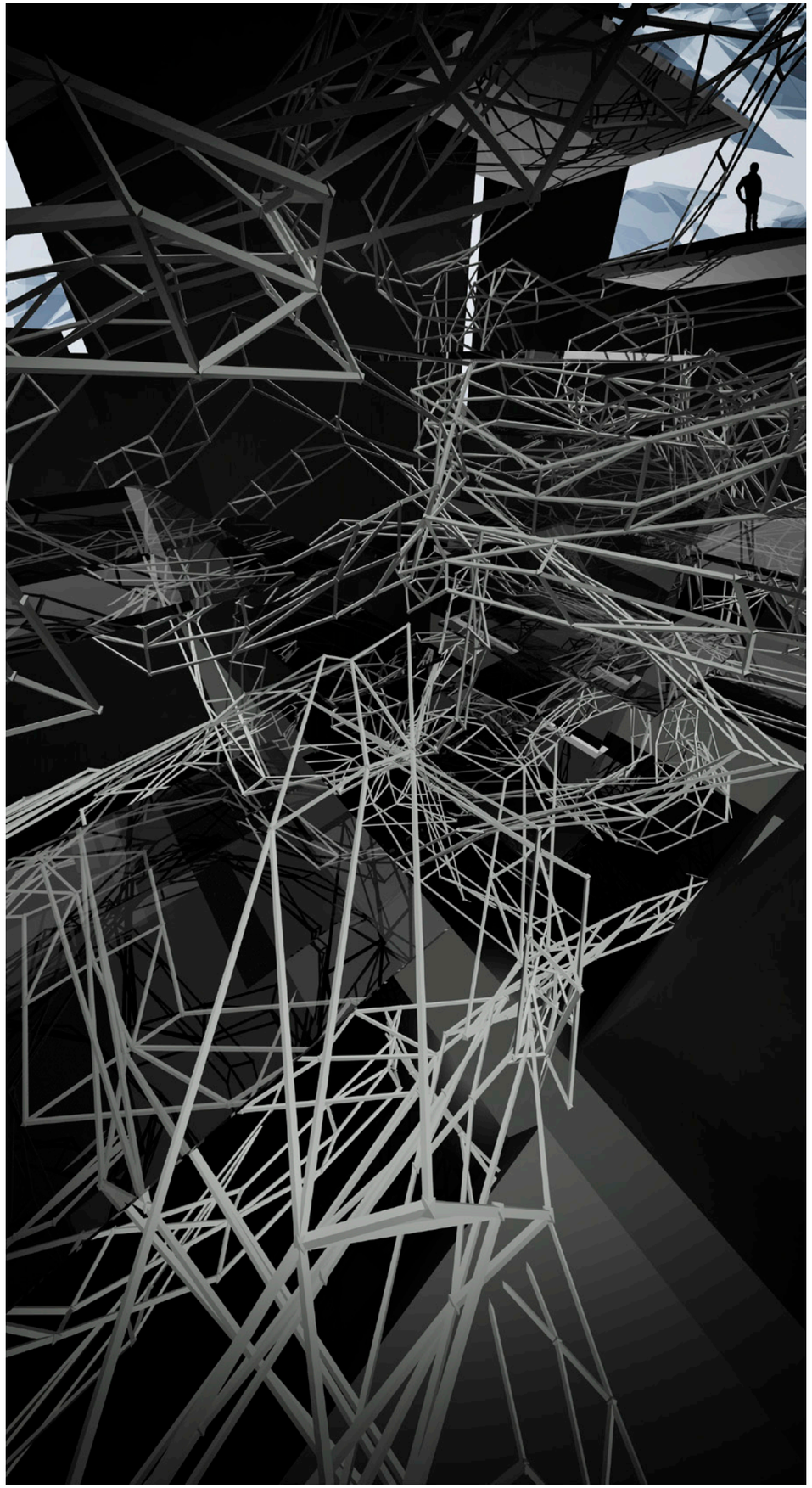


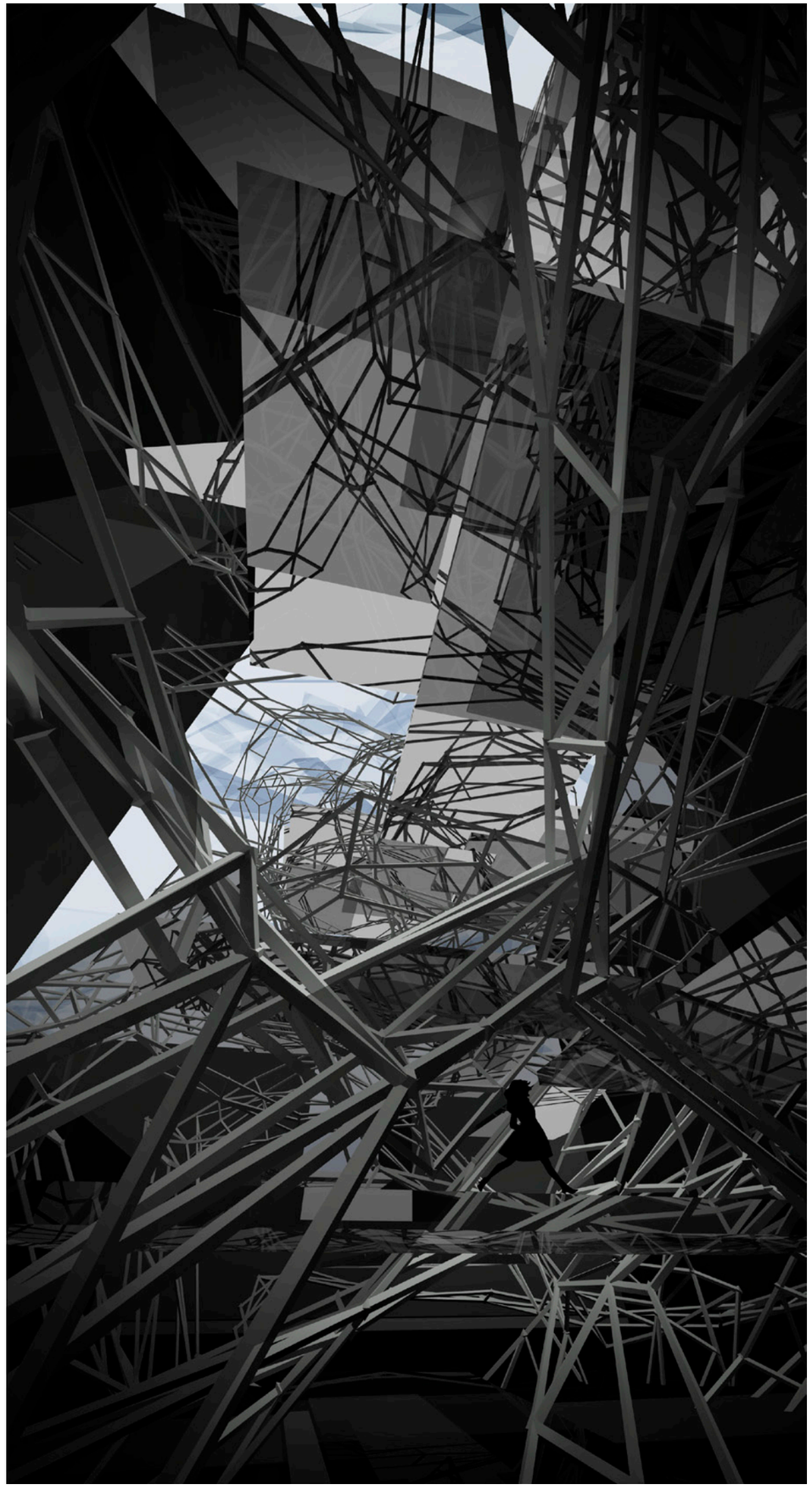
working spatial model

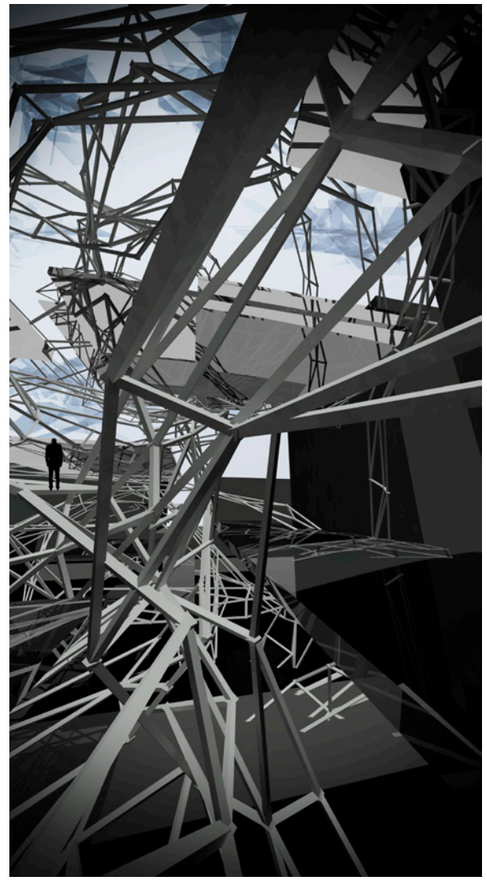


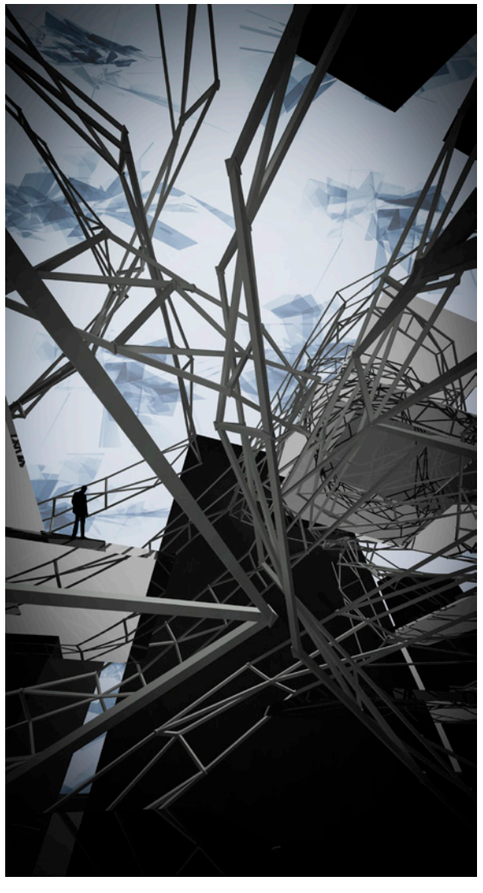
mind space 01 | 02 | 03



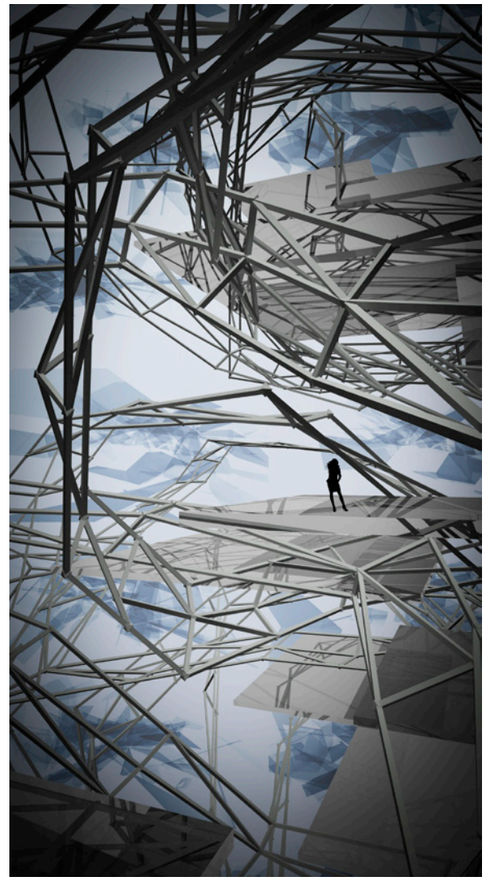


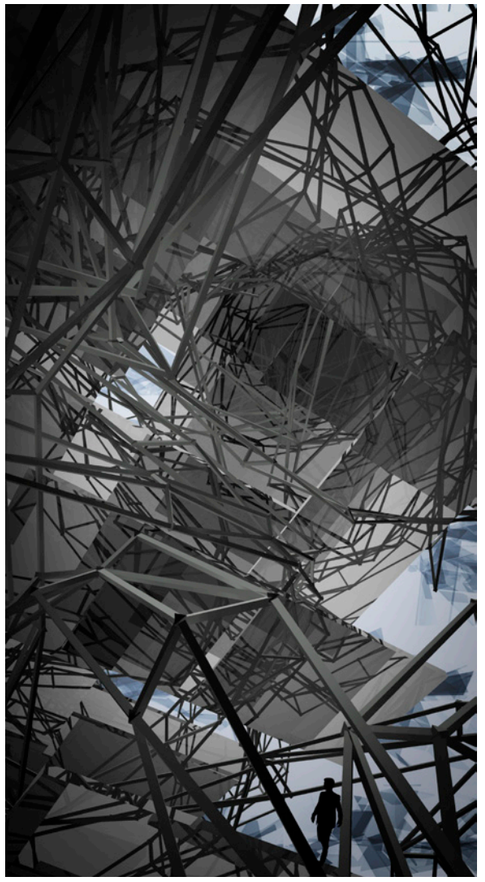




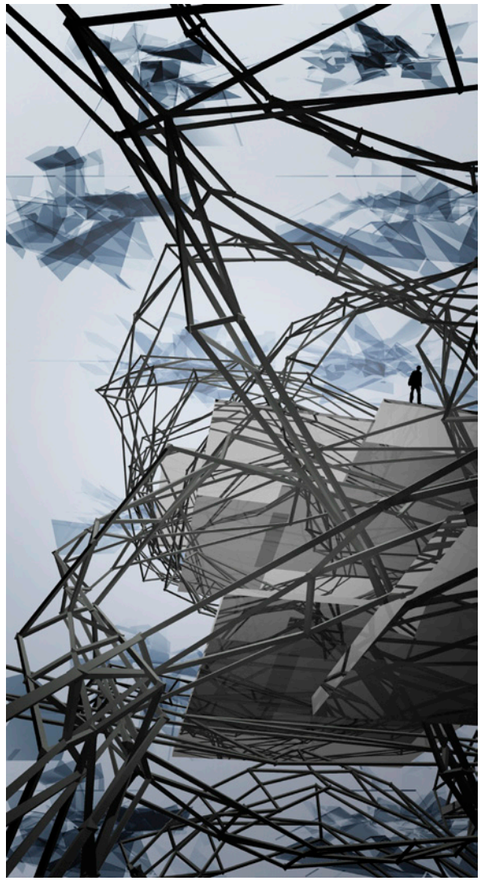


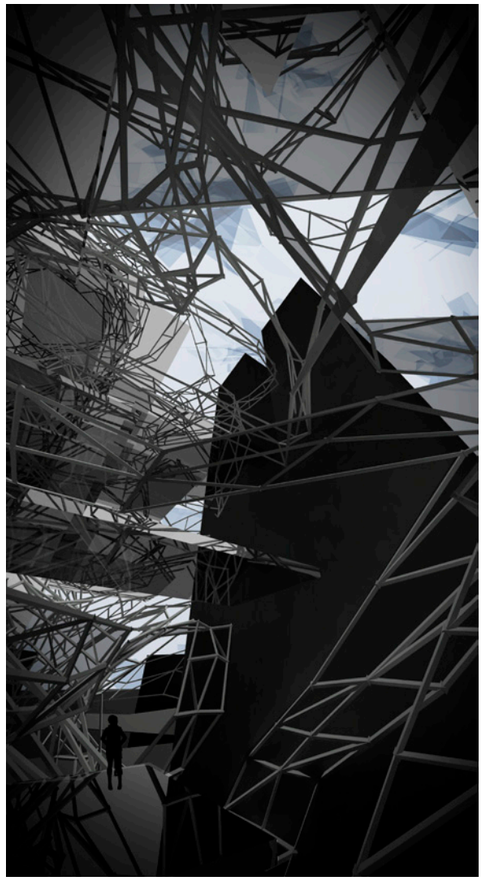
mind space 06 | 07 | 08



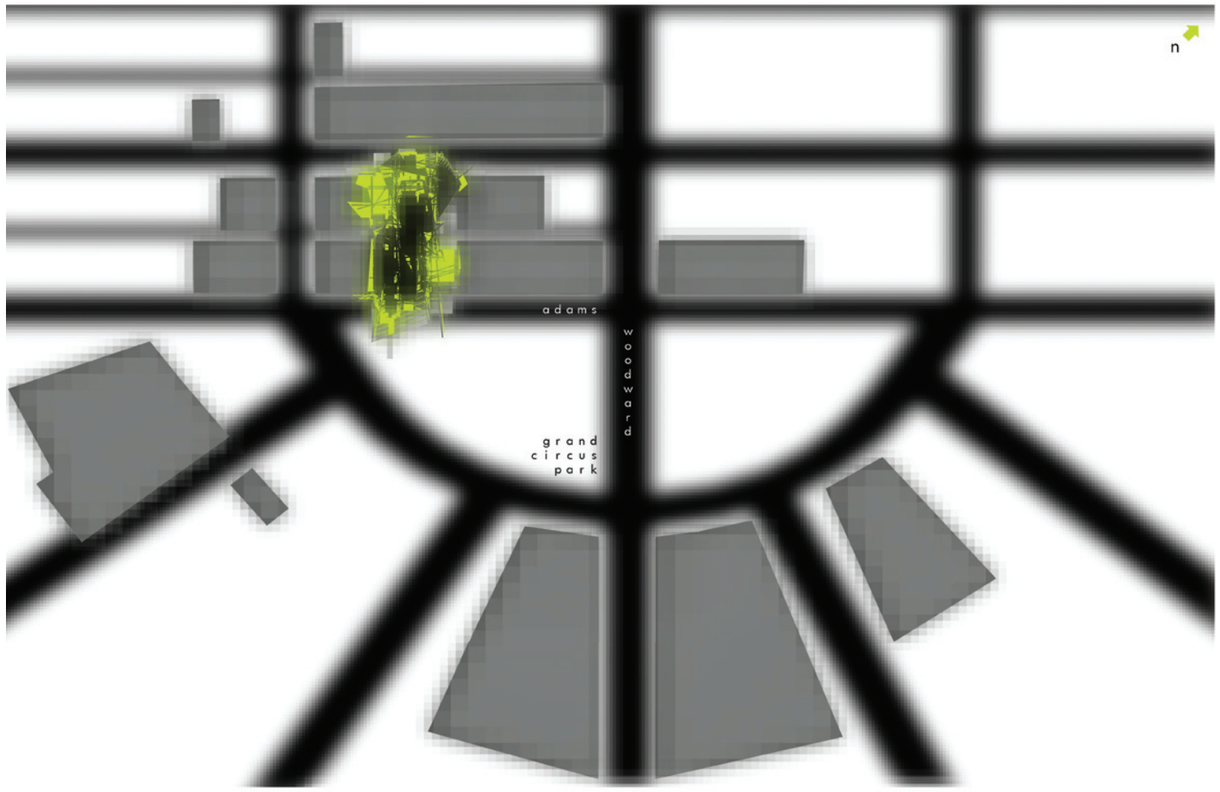


mind space 09 | 10 | 11

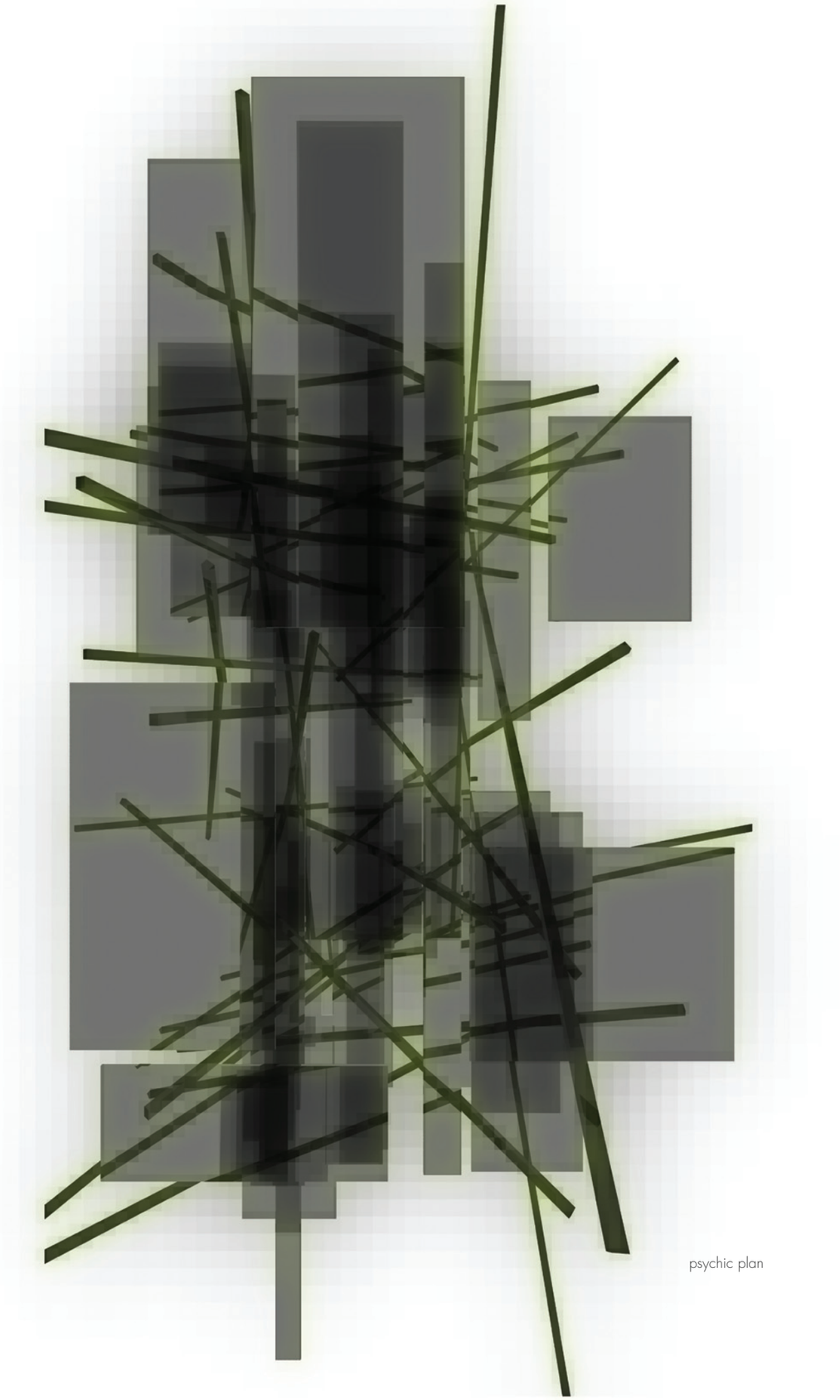




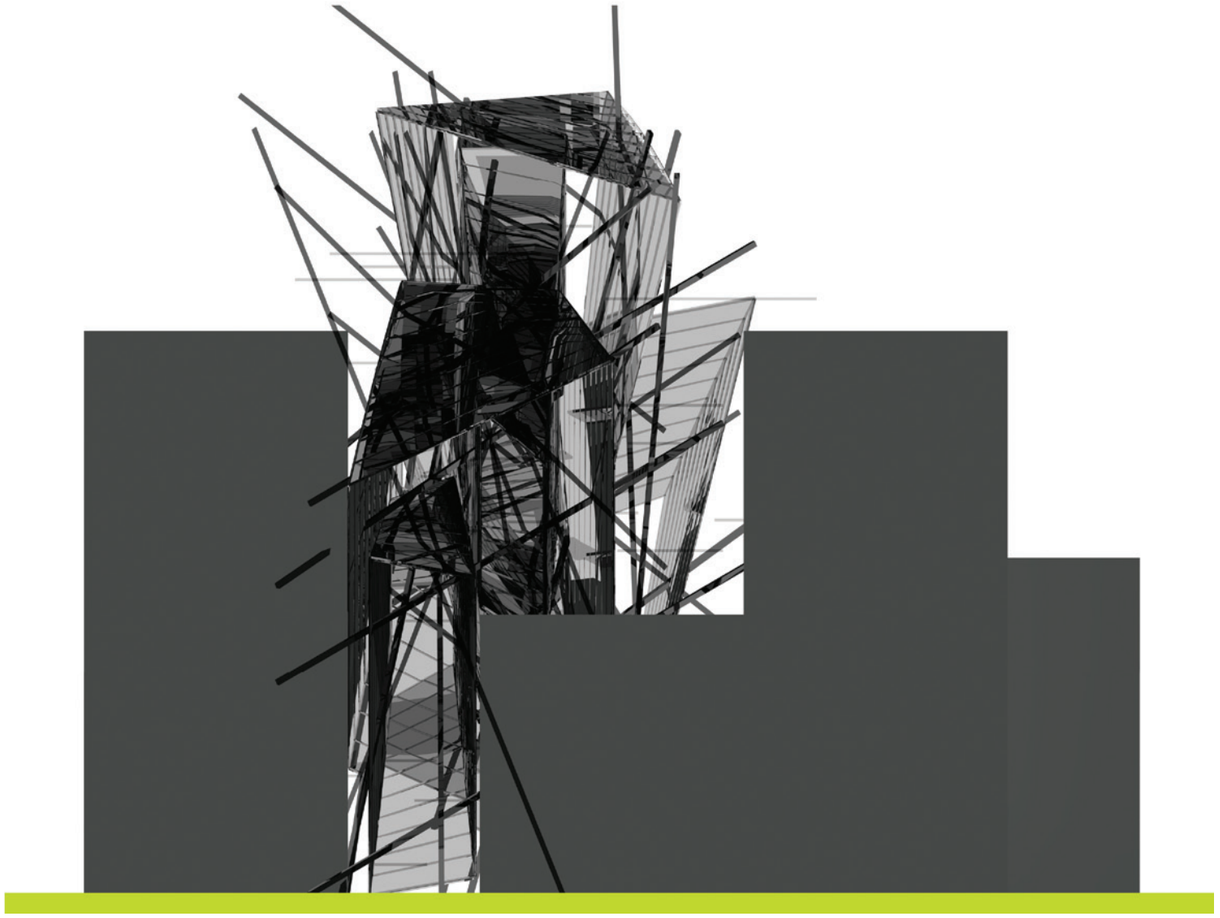
mind space 12 | 13 | 14



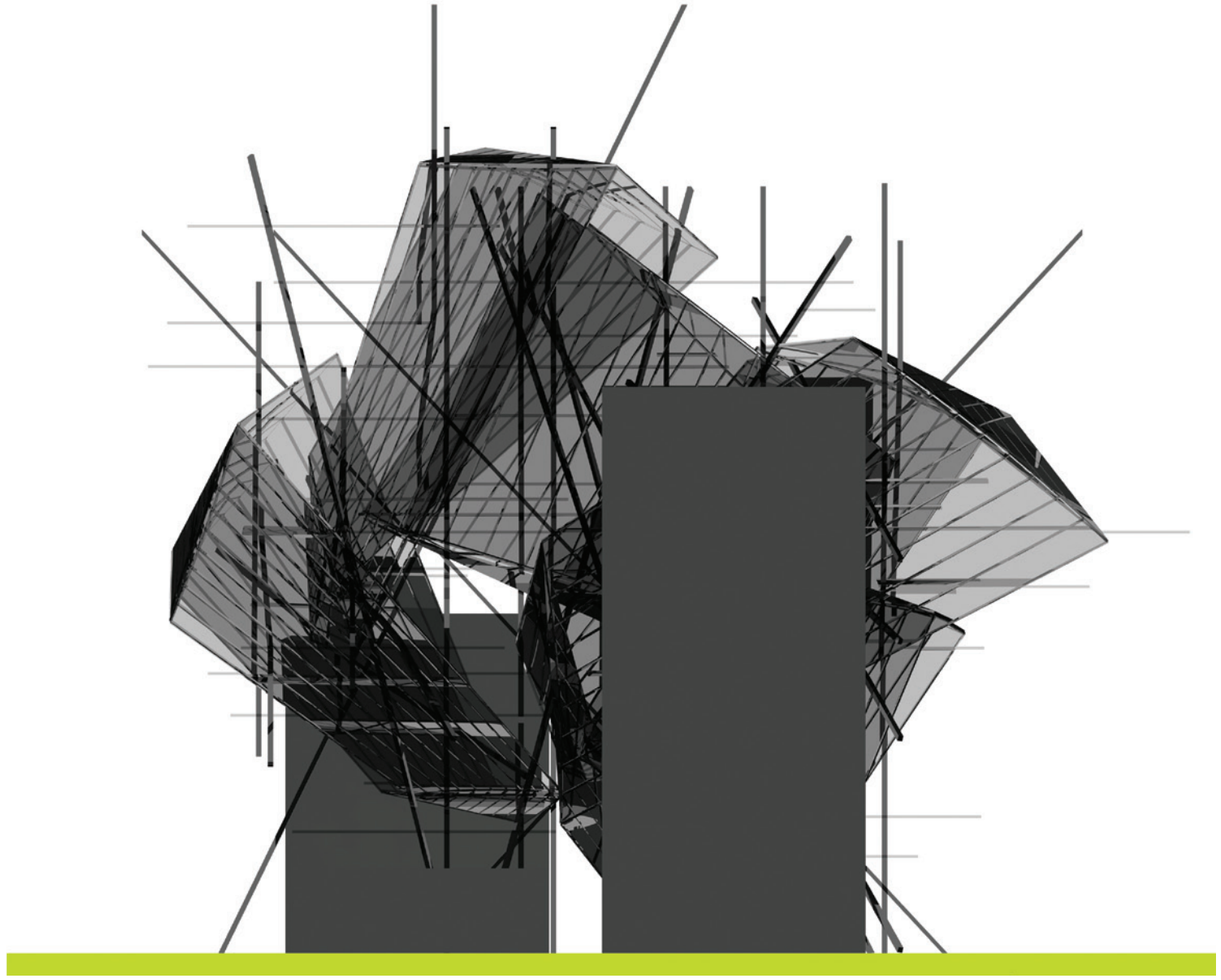
site plan



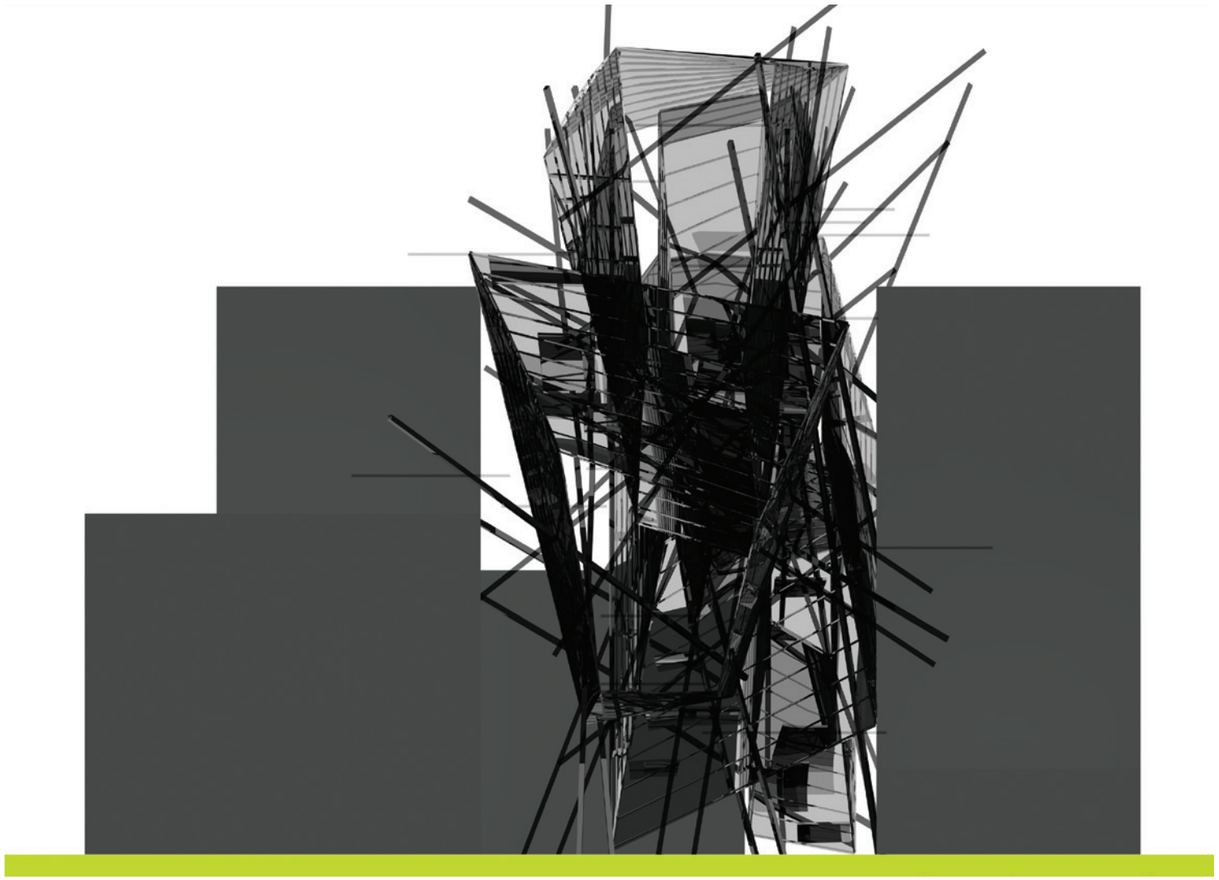
psychic plan



south elevation

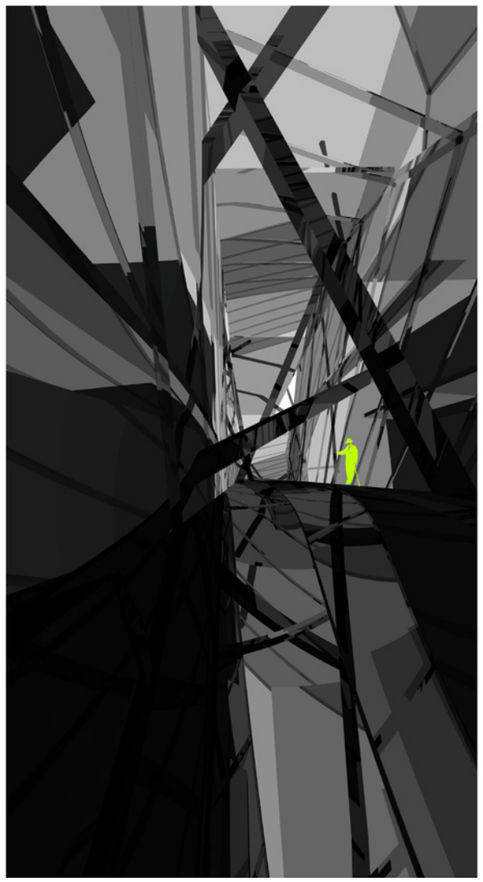


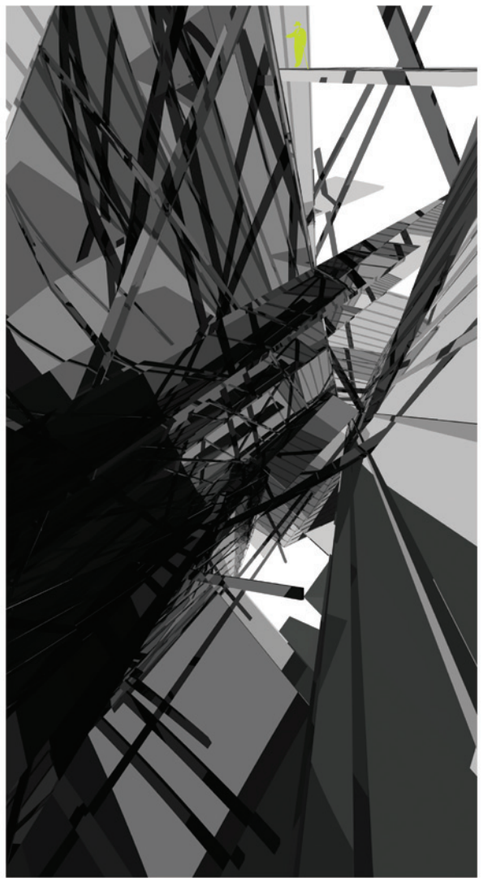
west elevation

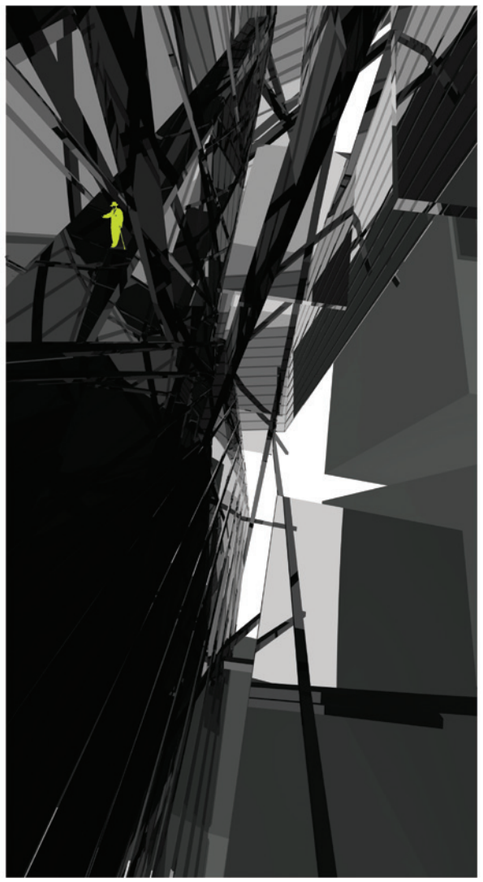


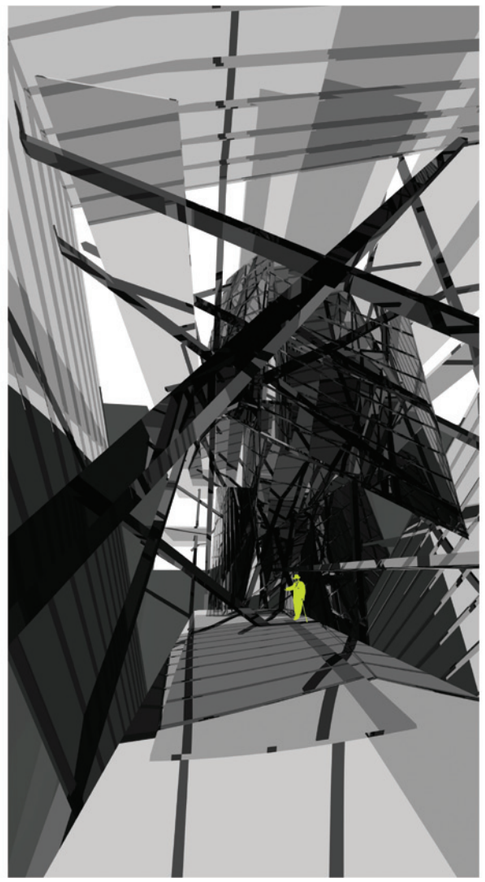
north elevation

east elevation

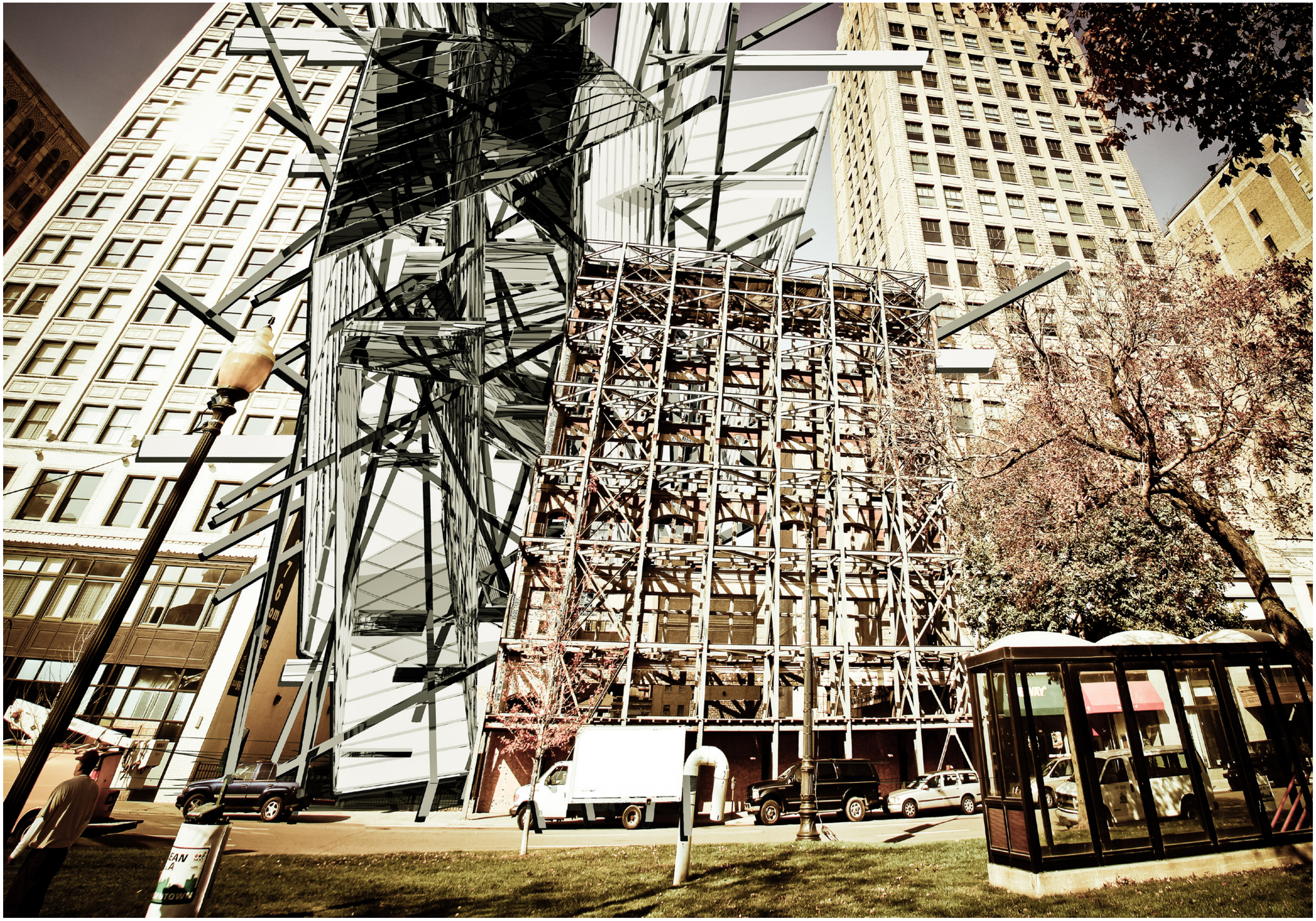








psychological interior with mies 01 | 02 | 03 | 04



architecture lives.

open architecture

This thesis is attempting to define an architecture which enables action, movement, or narrative rather than focusing on a specific program.

Architectural design does not have to succumb to programmatic restraints. And form certainly does not have to follow function. In this context, architectural design can be freed from constraints.

This project is proposing an open architecture or free space where design takes precedence, where program is inserted and adapts, where space, time, form, and individuals come together cohesively, establishing a setting for unknown scenes to be scripted.

The architecture is a counteraction, becasue design can be an attractor, creating a setting where individuals want to be.

When open architecture and design confidently assert themselves within the city, individuals can learn to see differently and adapt to new spatial constructions. This approach sees architecture as an art that reflects contemporary culture, is an image of the time, and looks to the excitement of the future.

Design can be influential. Design can change a city.

With motion pictures, drawings, digital imagery, and 3-D modeling, the architecture of this thesis is crafting a pathway into the imagination to try to unlock what it means to visualize and experience the psychological space of the mind, to visualize an architecture that disrupts existing spatial continuities. One can become lost in thought, while contemplating what it means to experience a type of space that has not been experienced before.

This architecture could be interpreted as being a labyrinth, because there is no spatial schema to base an expectation on how this sequence ought to be perceived. It is a setting for unknown narratives and scenes to be scripted. Each experience will be unique and highly personal, and the only way to begin to grasp what this space means will be to simply pass through it and interpret it, possibly more than once.

This experimental space has been designed to expand the scope and depth of our experiences by encouraging individuals to encounter new dimensions of architectural space.

Open architecture produces design-driven spaces and forms: to be seen, to be used, to be experienced. It's filled with irruptive forces and imaginative geometries which challenge the common repetition of the built environment.

This architecture has as much of a psychic ground plan as a physical one. And the interior spaces are unmappable, much like an architecture of the mind.

This architecture presents an alternate reality which is a synthesis of real space, mind space, and video space. Hence, the architecture presents a previously unknown sophistication. It is designed in such a way that one must look, feel, and experience new spaces in a completely different way.

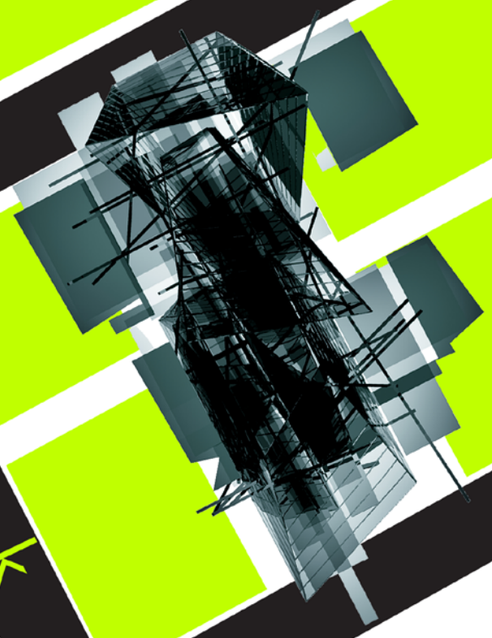
columbia

woodward

adams

elizabeth

park

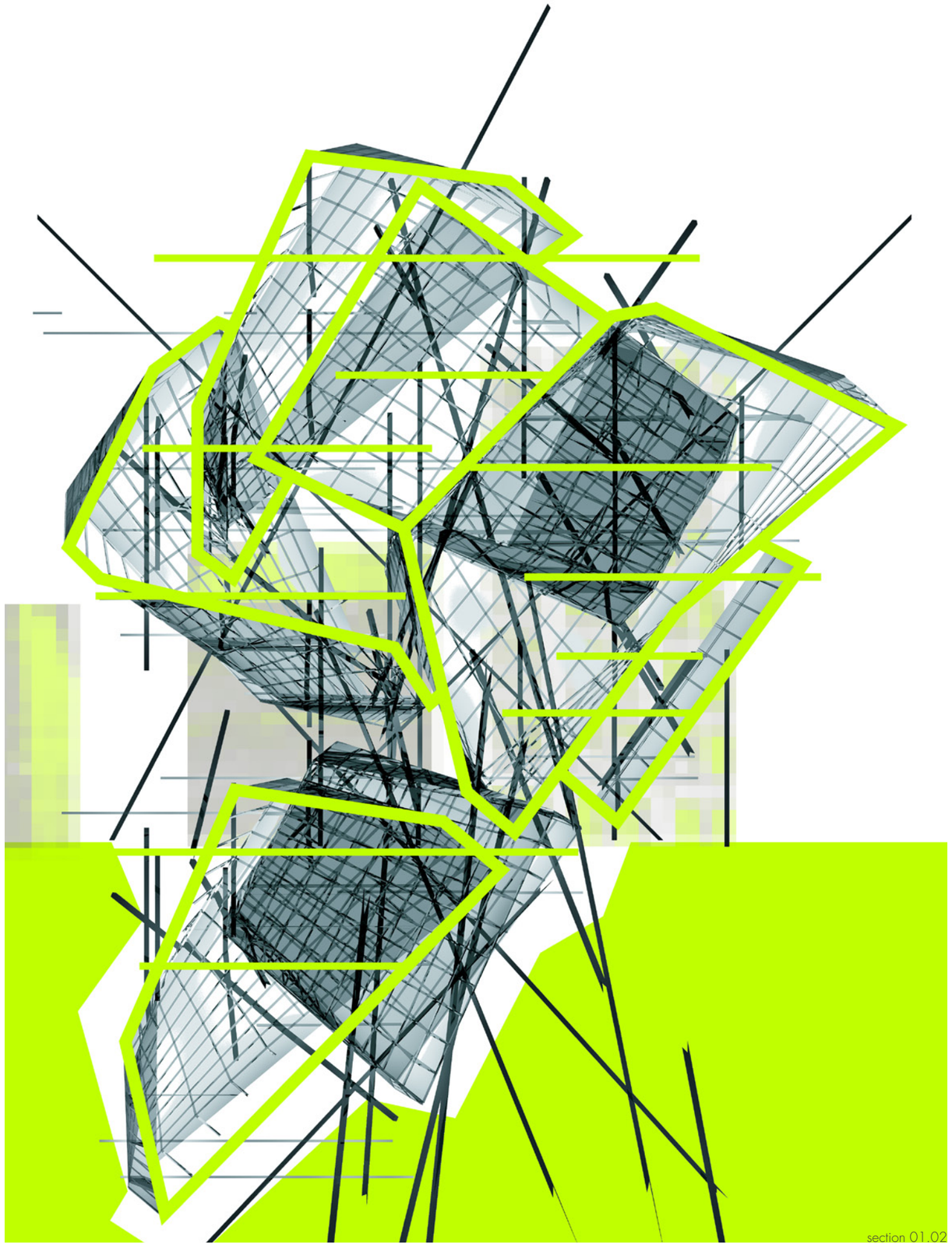


grand
circus
park

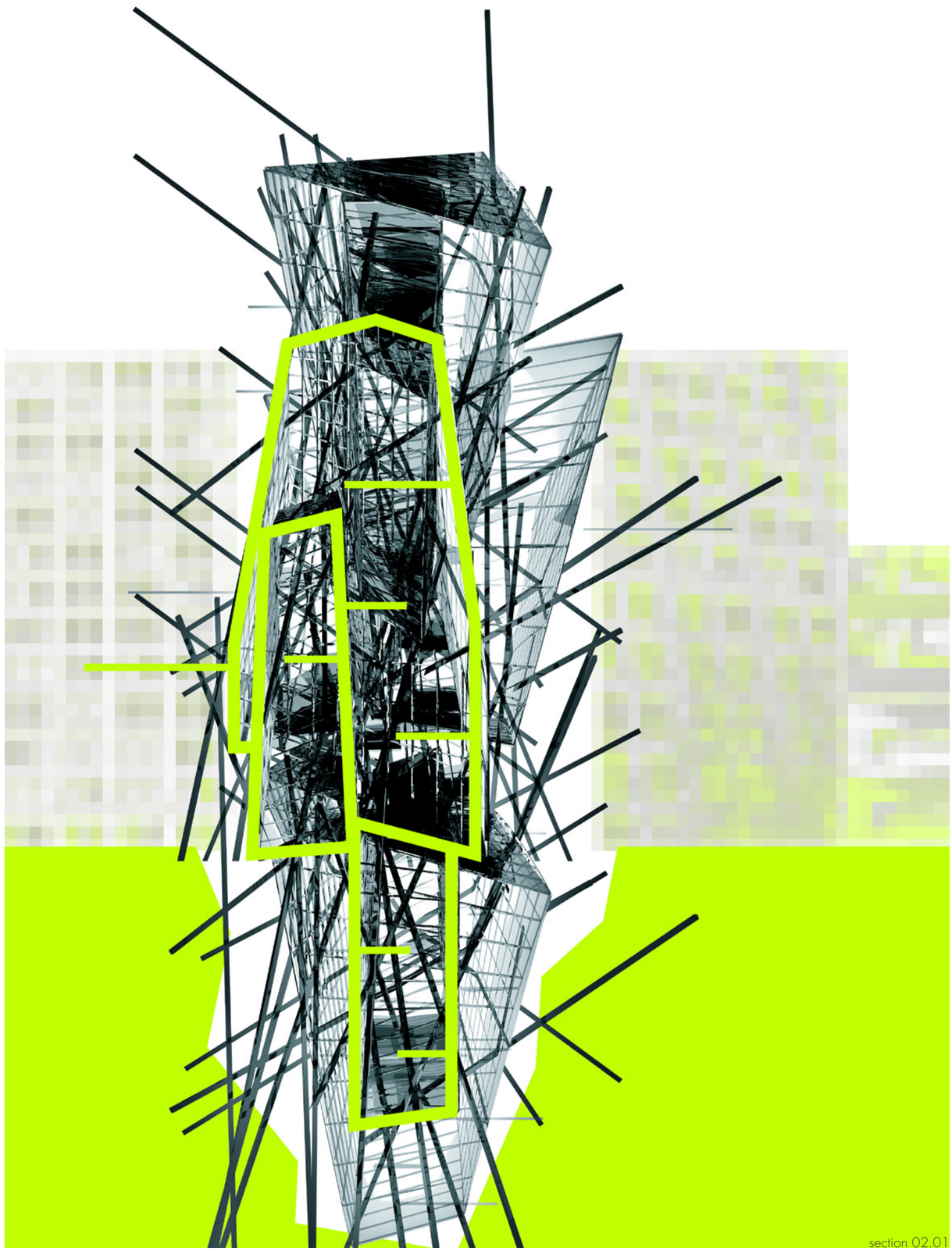
south elevation

west elevation

section 01.01



section 01.02



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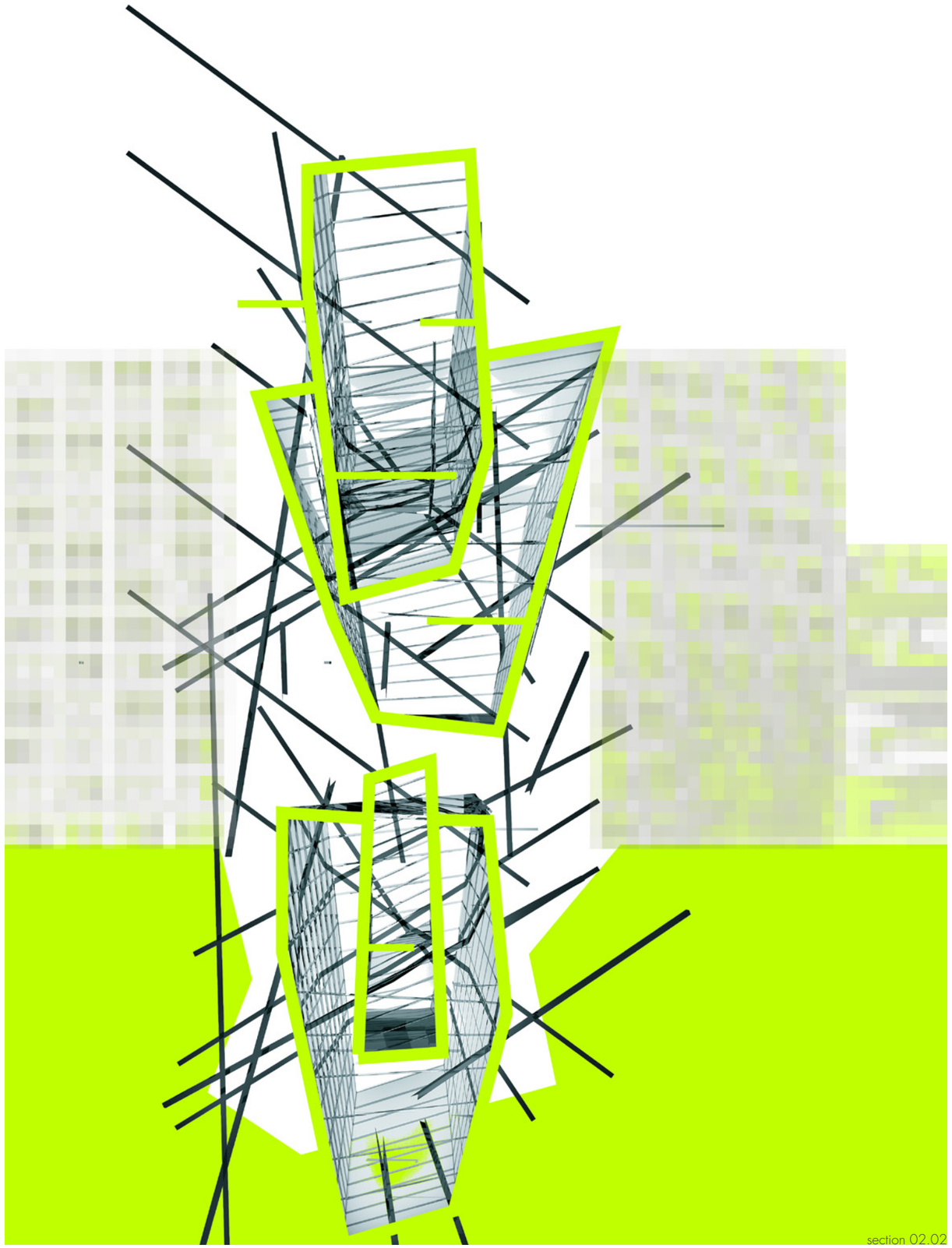

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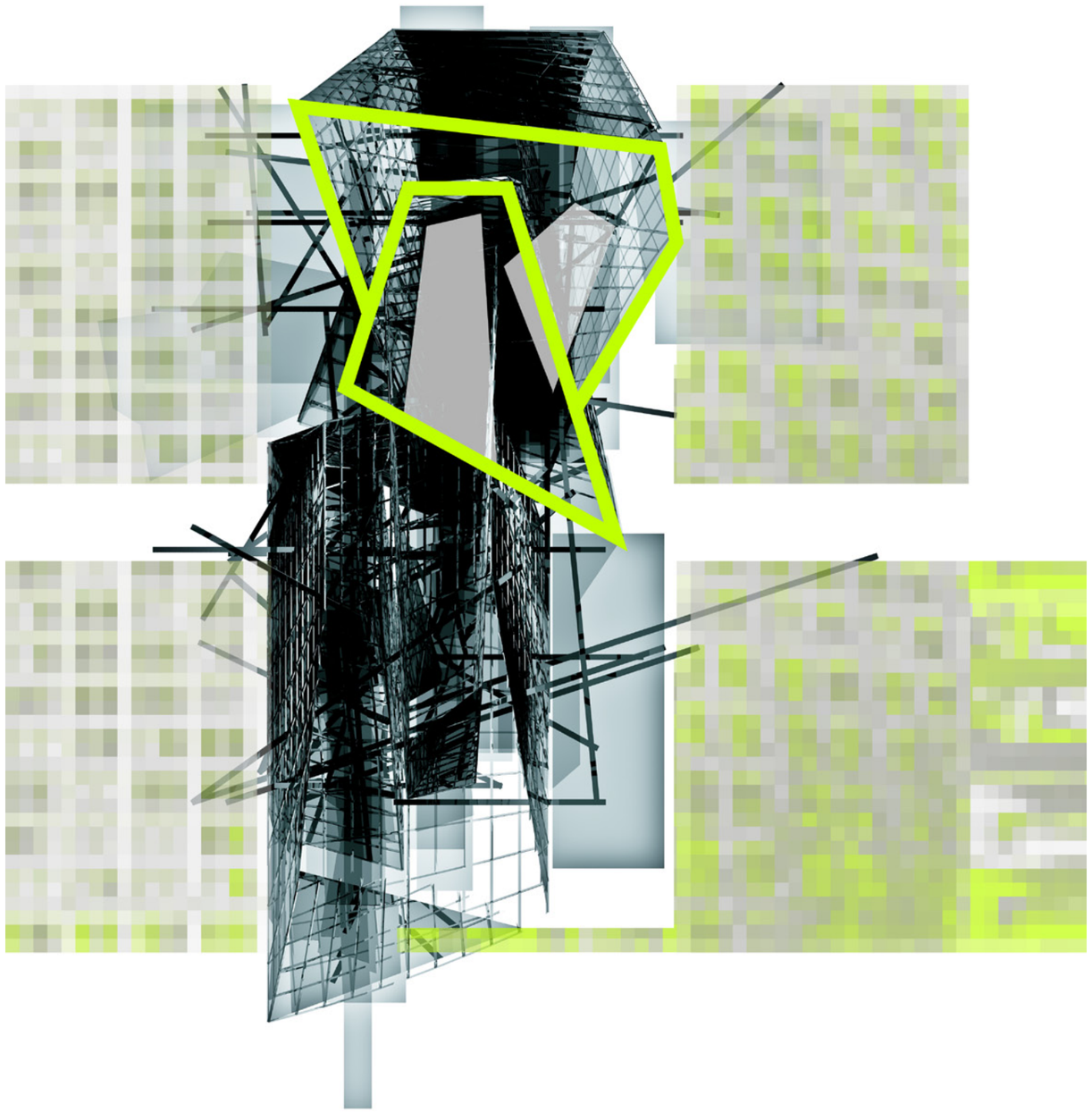
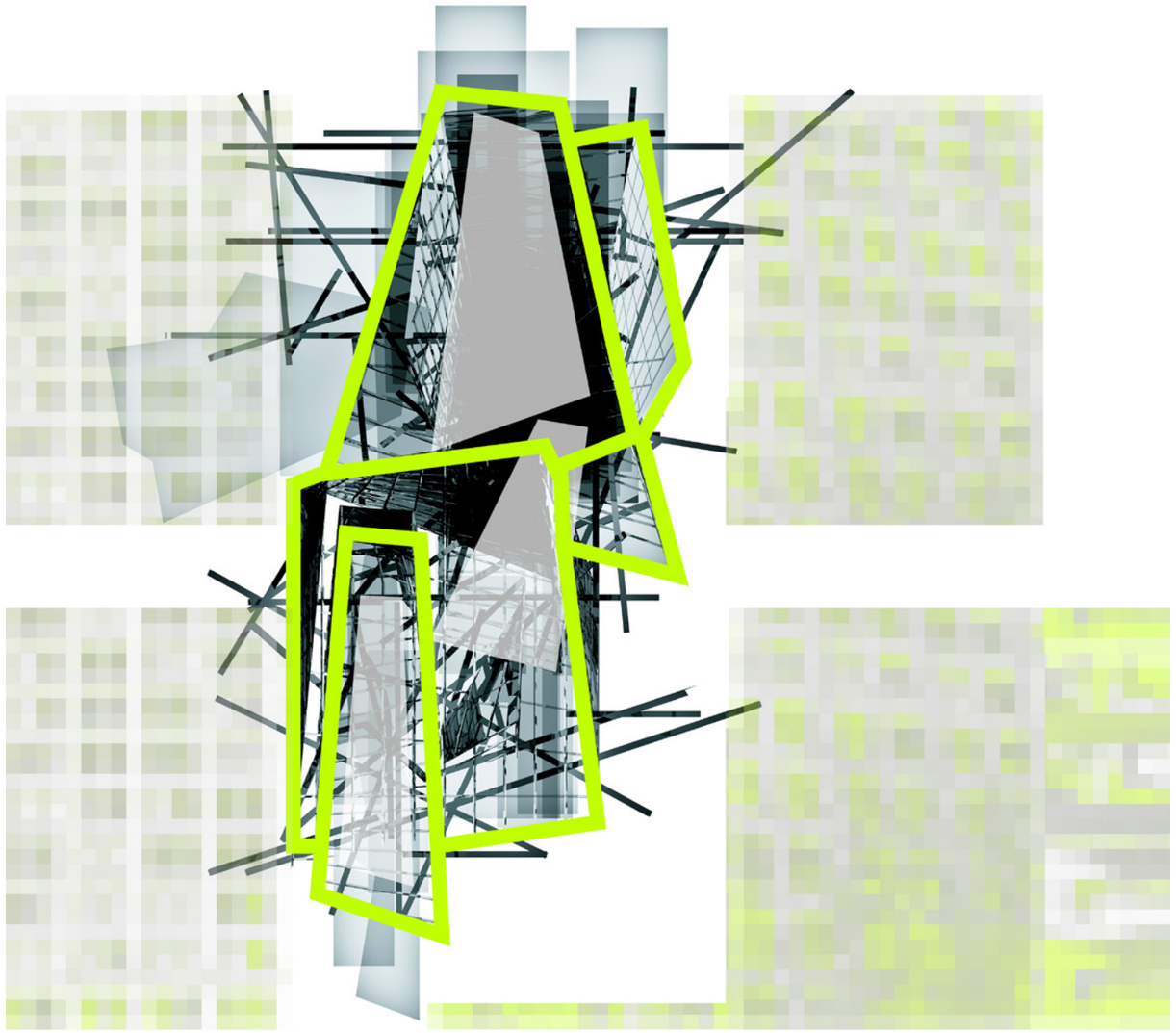
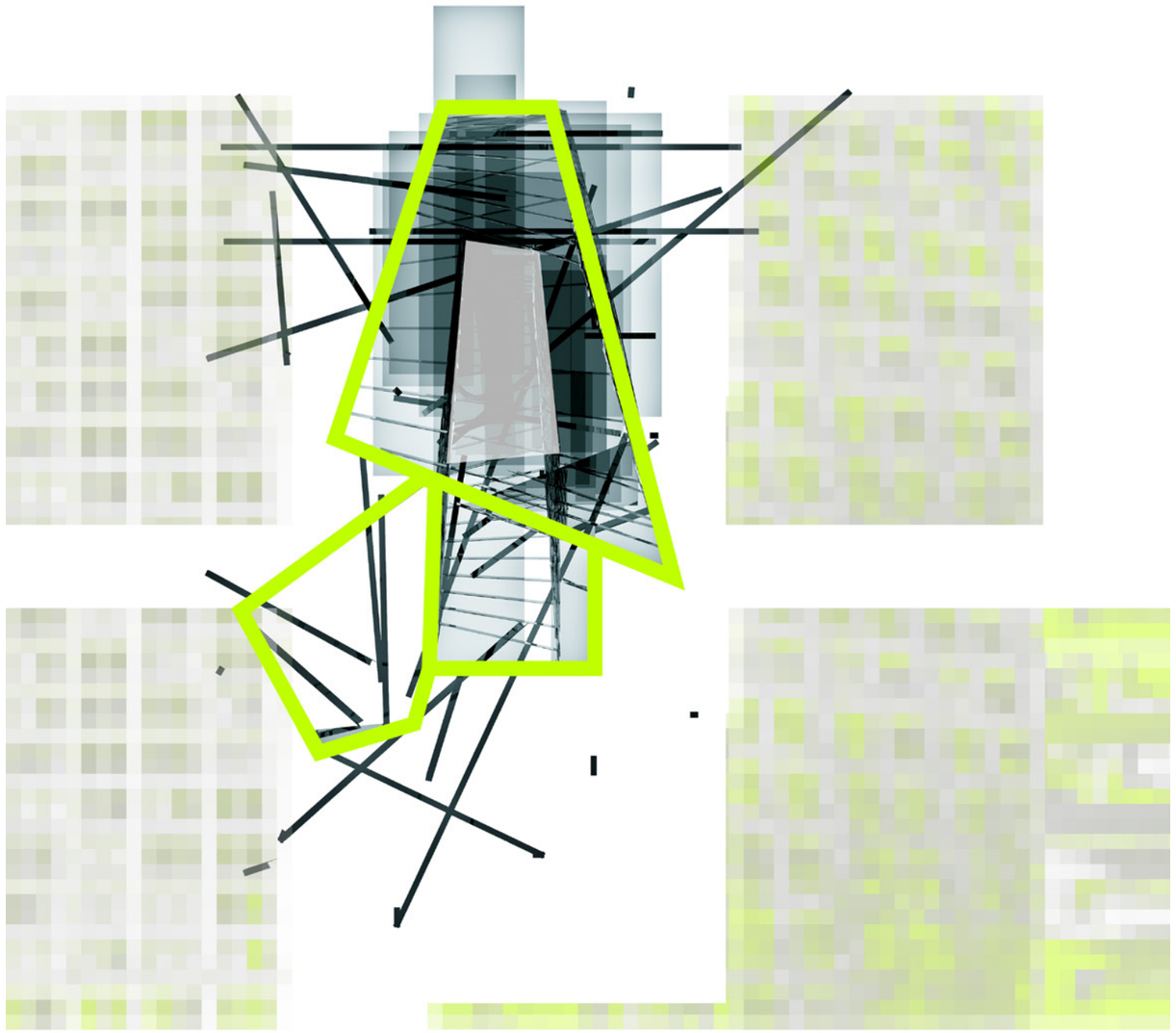
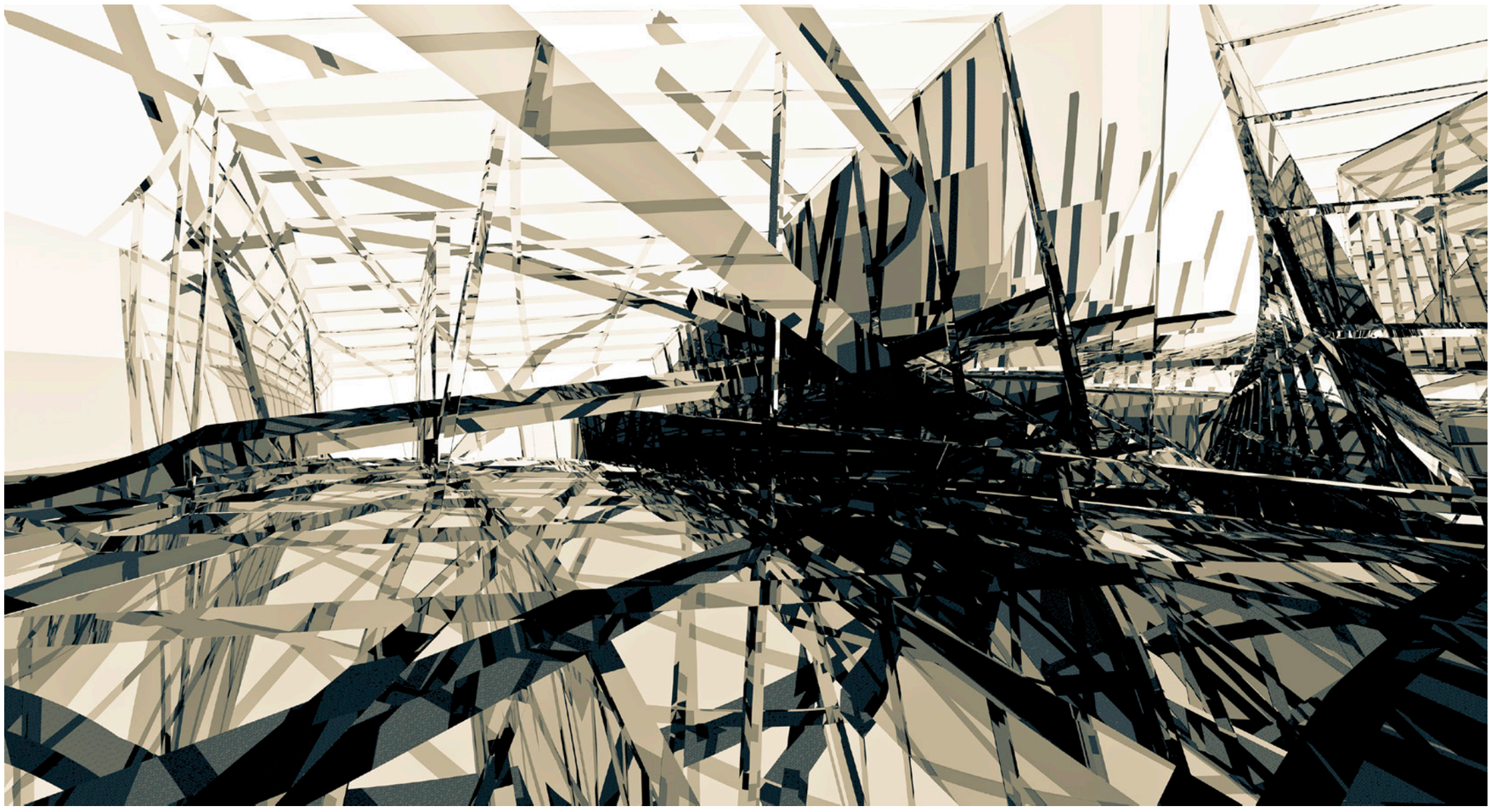
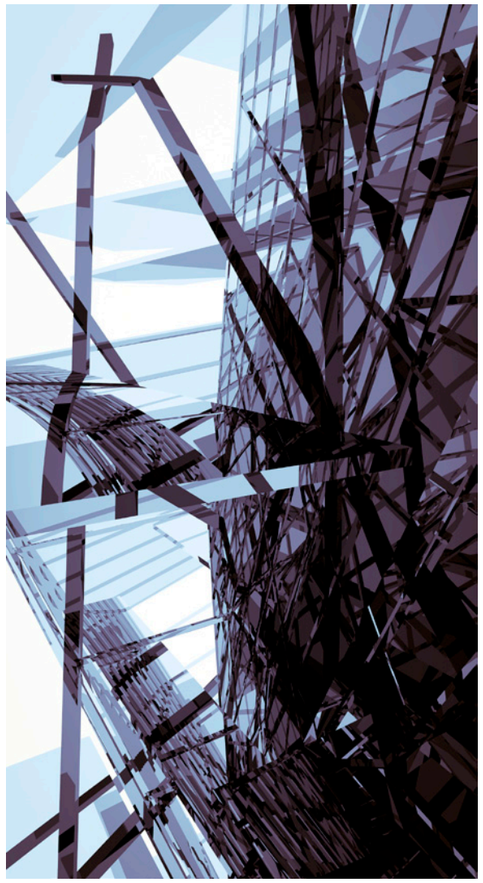


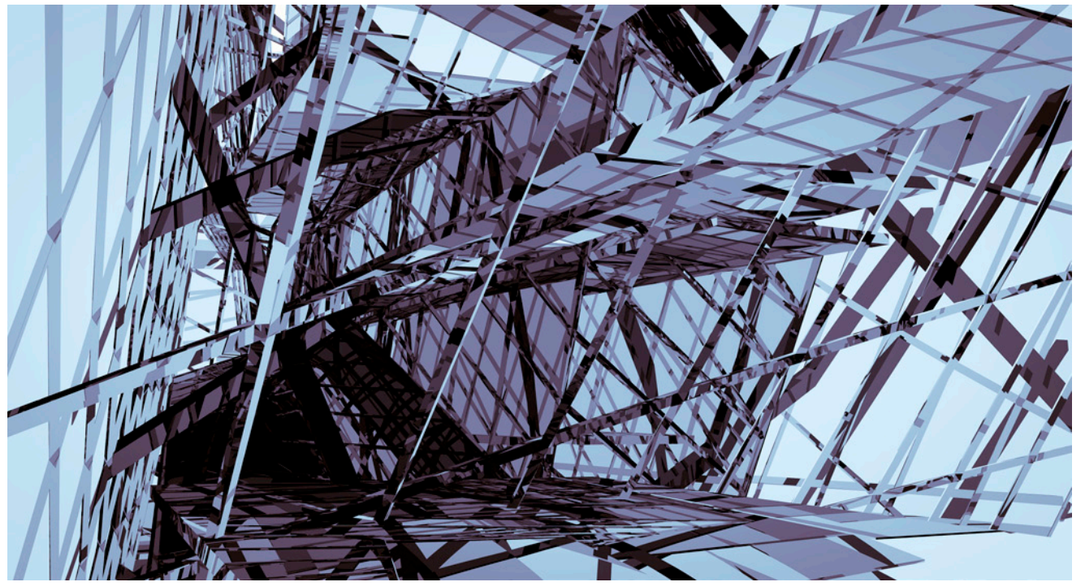






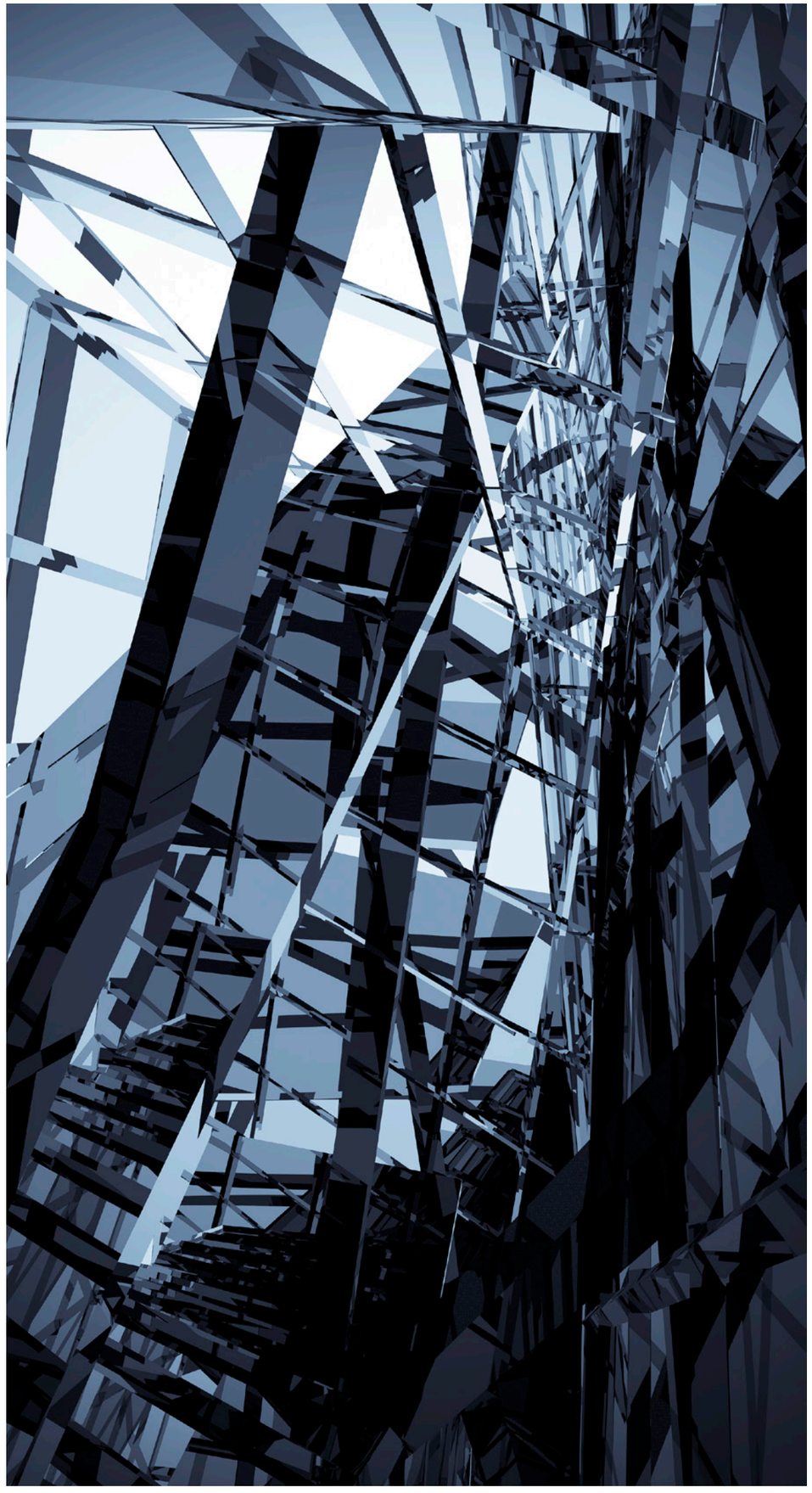


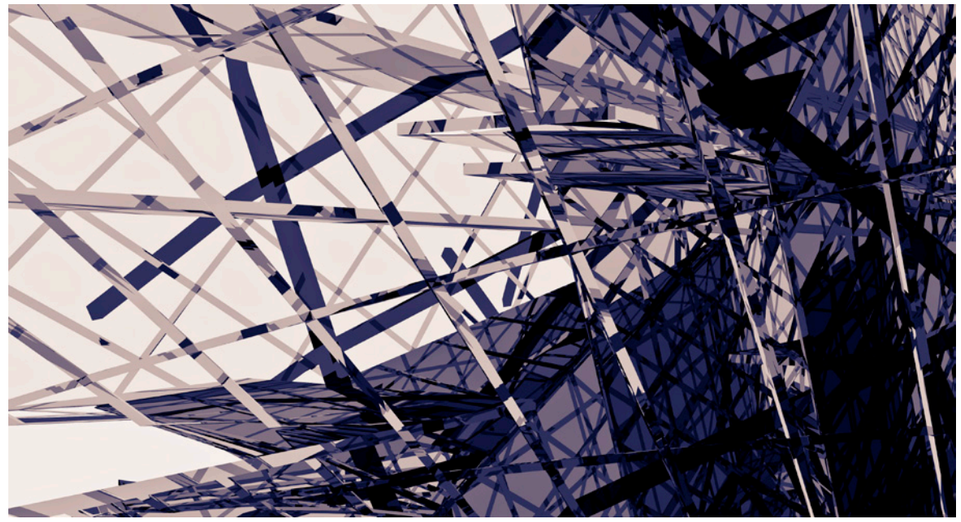
interior 03| 04

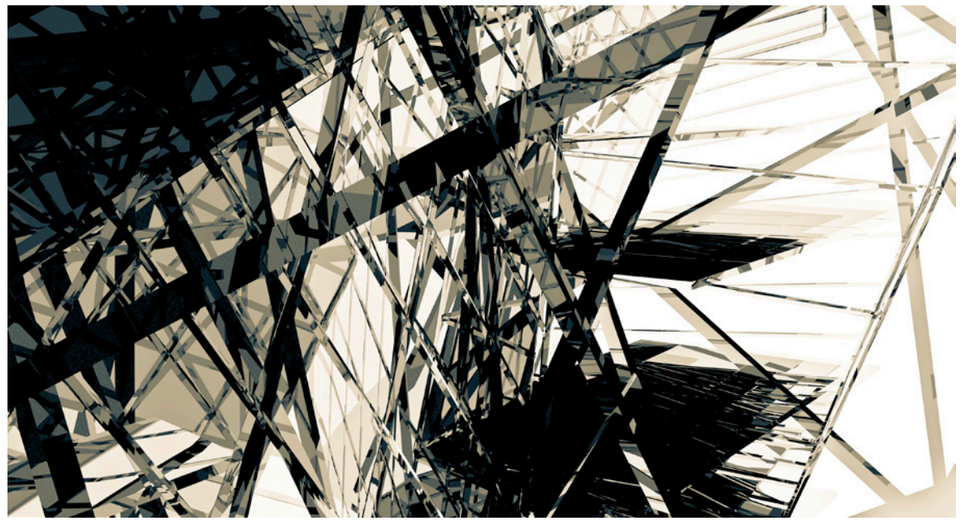


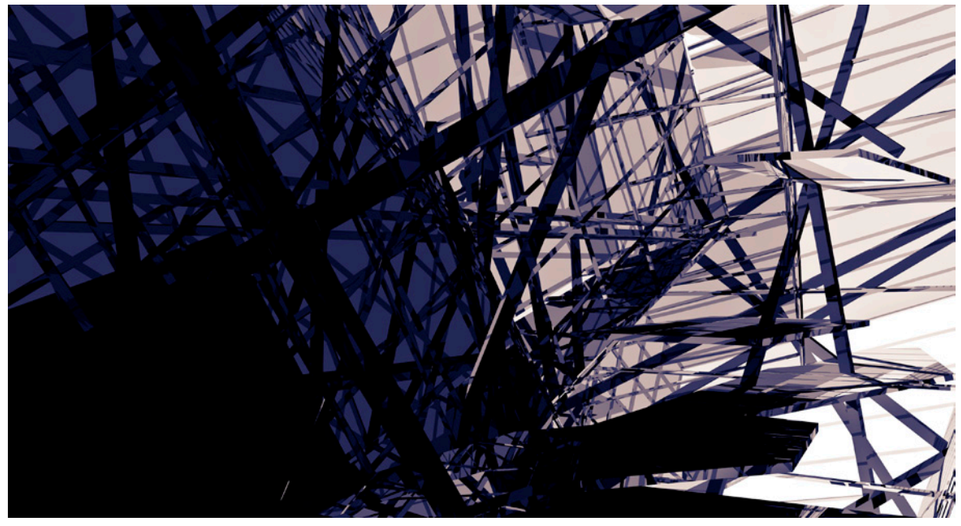
interior 05

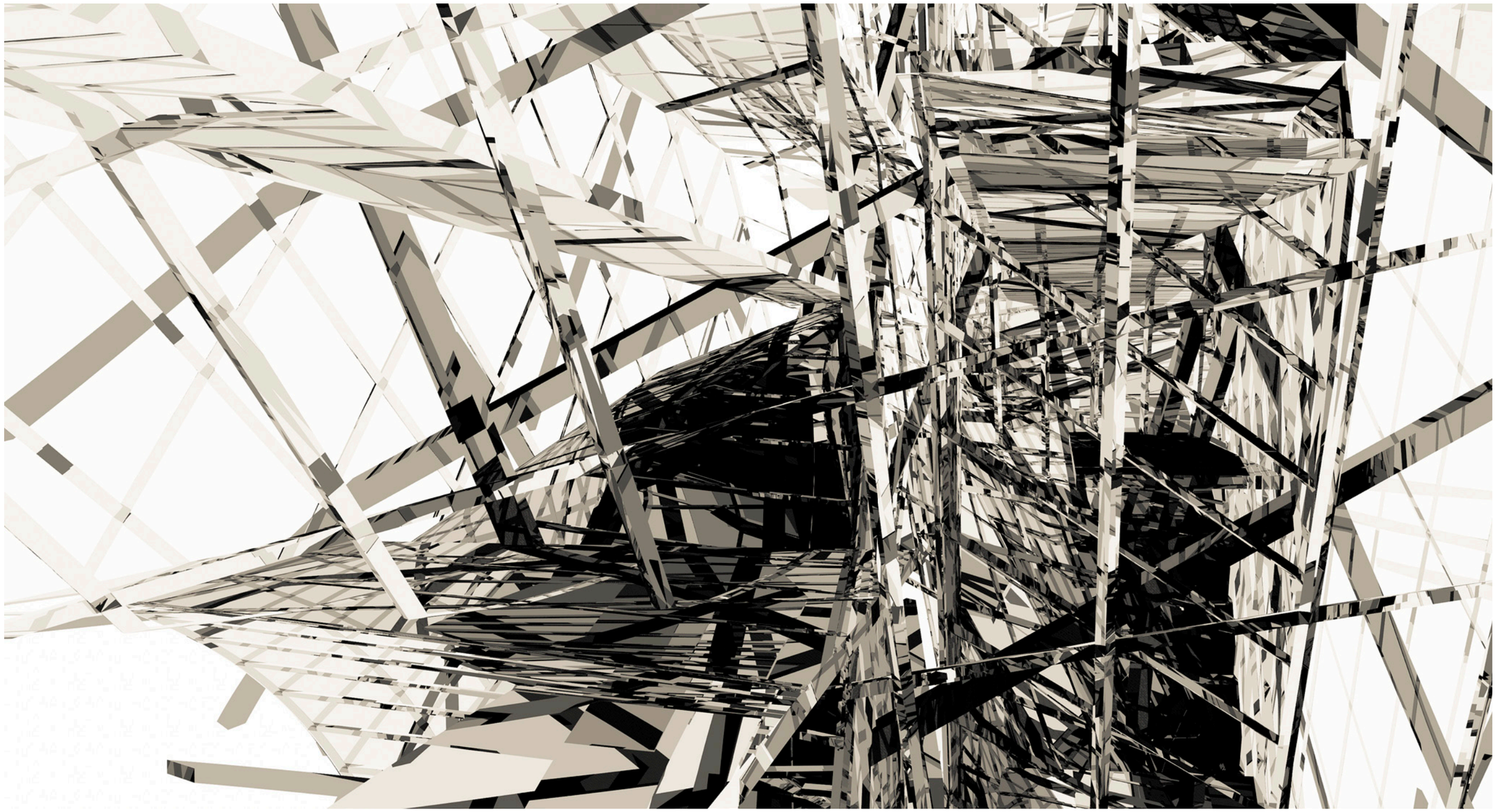
interior 06 | 07 | 08



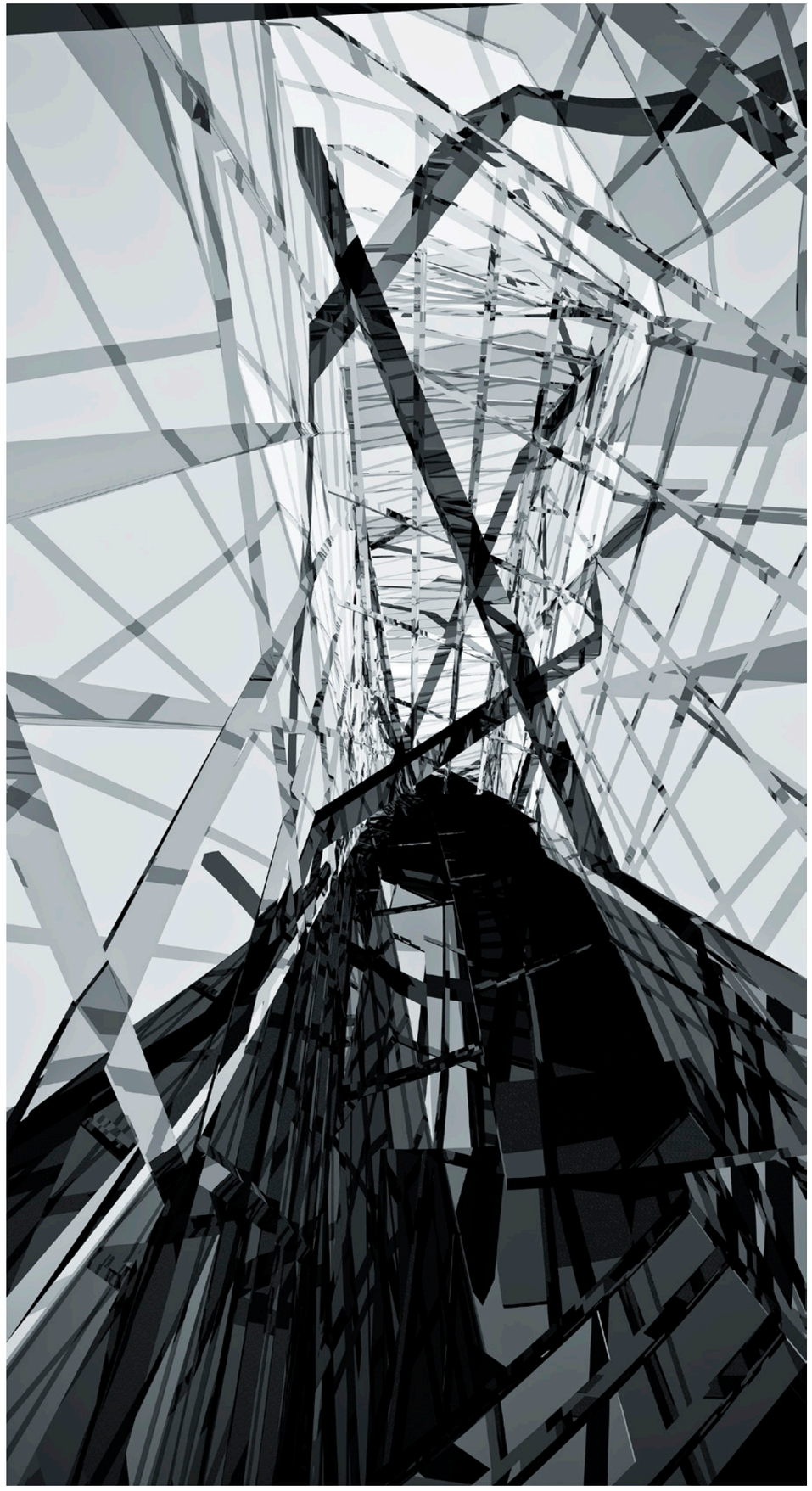




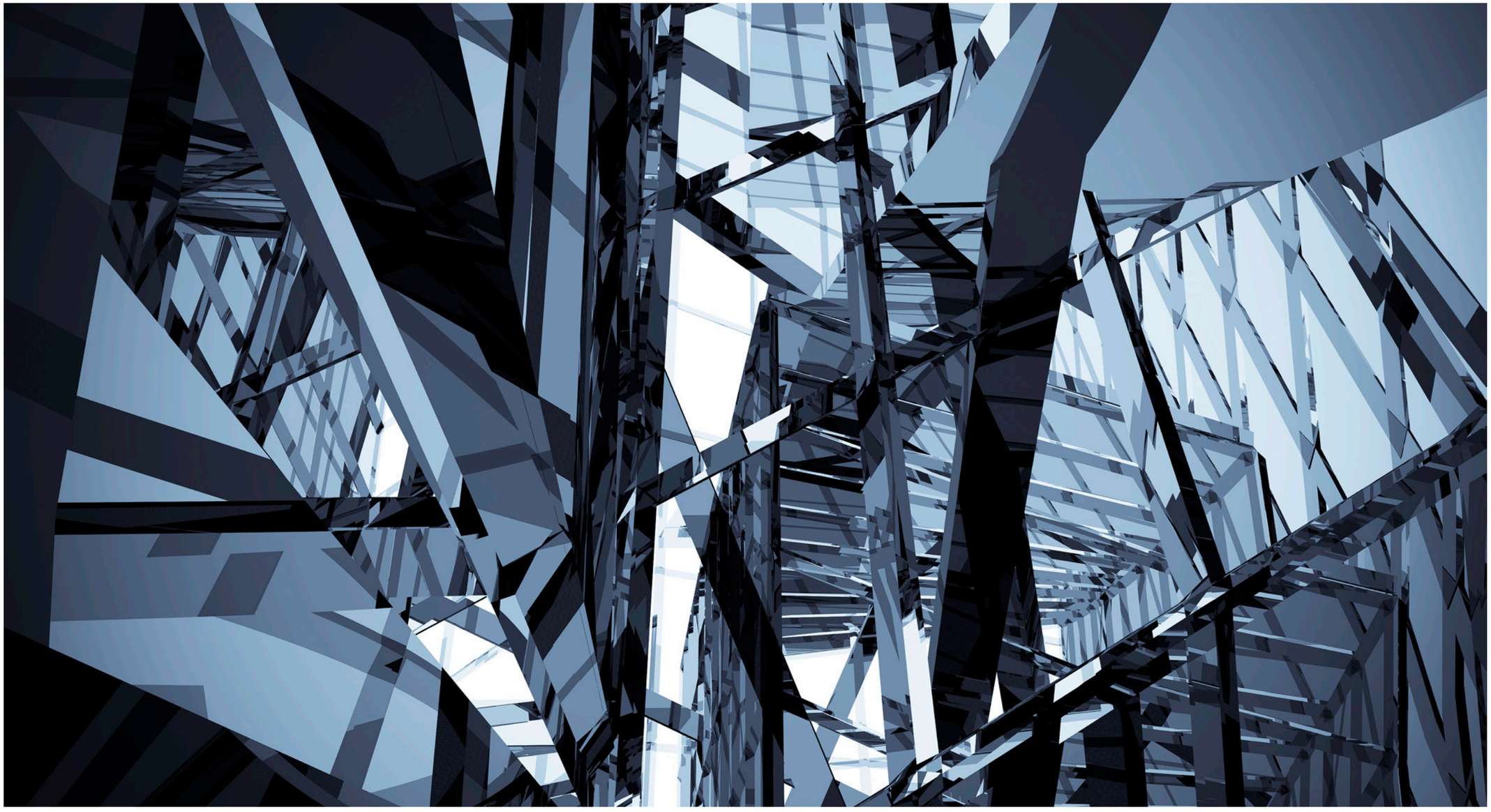




interior 13



interior 14 | 15



interior 16


DO NOT
ENTER


PARKING
WEST ONE

architecture is now.

transmutations still frame 01

transmutations still frame 02

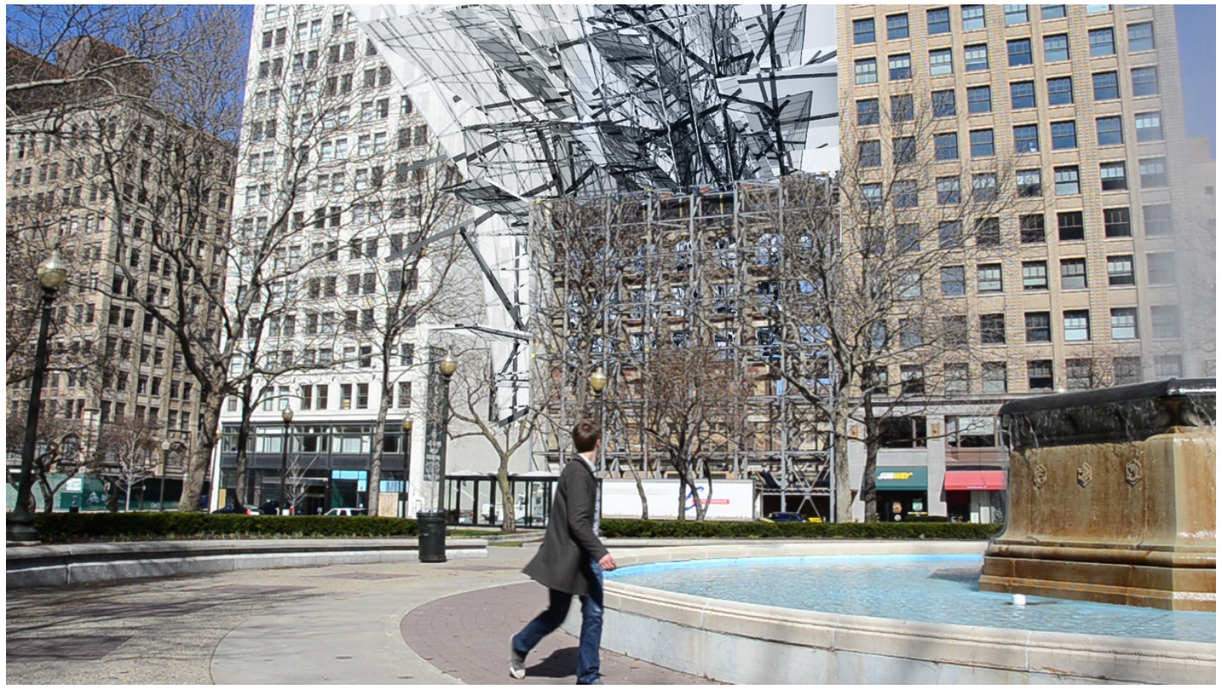
transmutations still frame 03 | 04 | 05

transmutations still frame 06 | 07

transmutations still frame 08

transmutations still frame 09 | 10 | 11

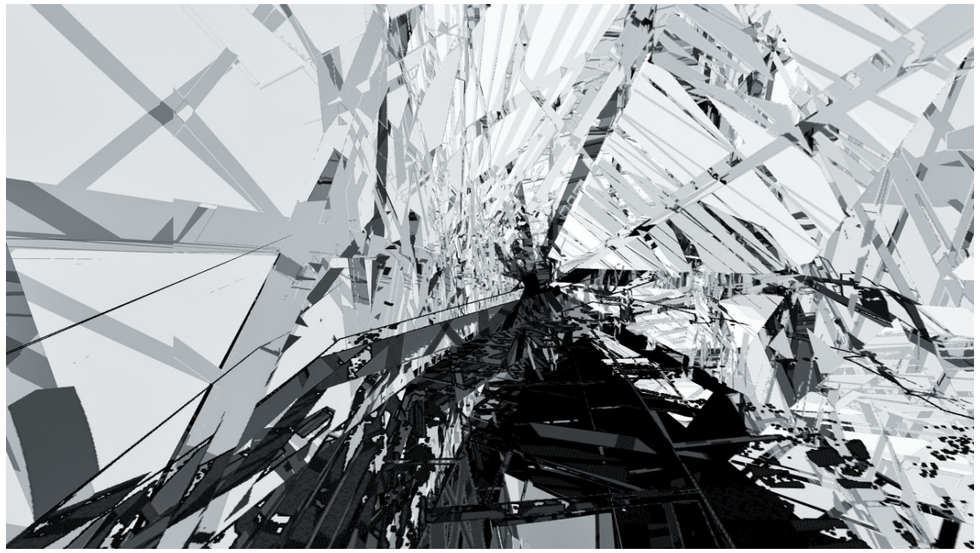
transmutations still frame 12 | 13 | 14



transmutations still frame 15

transmutations still frame 16

transmutations still frame 17 | 18



transmutations still frame 19 | 20 | 21

transmutations still frame 22 | 23 | 24

transmutations still frame 25

this is where
it begins.

transmutations still frame 26

designing is thinking is learning is growing.

"Architecture lives for seconds at the moment of design. It can never be past, because at this moment it becomes future. Architecture is now."

— Wolf D. Prix

Architecture is not just about creating structures and space. It's about something more. And that something more is exactly what an academic architectural thesis is all about. It's a process of thinking, a process of learning, a process of growing.

Designing is not knowing. It is questioning.

The completion of a thesis is an auspicious occasion, because this academic experience shapes one's character.

It is by design.

And whether one realizes it or not, an individual's education plays an integral role in a highly personal design process.

One in which he or she is the project.

And the designing has already begun.

One may not be able envision the end, but potential is always attractive, and beauty can be found in the mystery of not knowing where a design process might lead.

Because designing is not knowing. It's questioning.

At this moment in an educational endeavor, it is important to question within the context of design: questioning how one thinks, questioning one's professional path, and questioning the person one may seek to become.

First, question how one thinks.

It is important to take a moment to reflect upon one's education, to ask if one has truly had the opportunity to think creatively.

Students are expected to be correct, to know the right answer.

And when a person does, he or she is rewarded with a number.

But this acquired knowledge will get an individual only so far.

It's the methods he or she uses to question that will make one successful.

Free thinking architect Daniel Libeskind warned that it was impossible to know outcomes before someone has even defined a proper set of questions.

One's future lies in pursuing the right questions.

Only then will it be possible for meaningful answers to emerge.

He or she might be wrong a few times — or even much of the time.

But in this personal design process, it's understandable, because that's what generates creative thinking.

Original, creative advancements — in whatever field — are made because someone has asked the hard question.

Someone has taken a risk.

It's up to each individual to inspire others, to not be afraid to ask questions that are risky, possibly even dangerous.

Secondly, question one's professional path.

Renegade architect Will Alsop has advised students to recognize that one's first job will be his or her second education.

In choosing one's first job, an individual should be as selective as possible, because this critical decision will most certainly begin to define his or her future professional path.

Professor Alsop encourages students to aggressively pursue working with someone who fascinates them.

Innovative thinkers populate every field.

The truly great have made their career their craft.

Each student belongs to the next generation of creative thinkers.

So it's important to ask the right questions right now.

Who is inspiring?

And for one's second education, who will be a mentor?

Thirdly, question the person one seeks to become.

This is a difficult one.

Knowing the answer would undermine the authenticity of the design process, which is unique to every individual.

It's up to each person to think creatively. No one's going to do it for them.

Students are challenged to think for themselves while studying at a university.

And now, each individual is about to have the opportunity to do so in the professional world.

Perhaps the most important question to ask at this point is:

What type of person does each individual want to become as he or she makes his or her way?

No doubt, it'll be important to lead by example.

It will also be important to lead with humility, recognizing that there is something in the world greater than ourselves.

It will be important to question.

Keeping in mind the qualities of leadership and service, students are prepared to have a positive impact on our surrounding environment and to strive to be the type of people who have the ability to raise others up.

How rare is that?

But how wonderful.

To make people stronger.

To give people faith.

To inspire.

How many people in one's life actually have these qualities?

Are they among one's professors?

Are they among one's family or friends?

Designing is thinking is learning is growing is questioning.

And this call to question has risen out of an architectural education. This is the something more in architecture.

This is meaningful design.

Education is by design.

Designing is not knowing. It is questioning.

And the questioning begins now.

"Architecture is now."

"Architecture is dangerous. It is the defining responsibility of an architect to keep the power of architecture out of the hands of those who would use it to lull us into complacency. . ."

"Architecture must blaze."

— Wolf D. Prix

endnotes

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