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Spring 5-2007

# Collisions in Architecture and Film

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Erik Herrmann  
*Bachelor of Architecture*

# collisions in architecture and film

*an undergraduate architecture honors thesis*



*erik herrmann, b.arch 2007 | brian ambroziak, assistant professor*

*What then characterizes montage and, consequently, its embryo, the shot? Collision. Conflict between neighboring fragments. Conflict. Collision.*

*Sergei Eisenstein*

*The U.S.-Mexican border is an open wound, where the third world grates against the first and bleeds, and before the wound heals it hemorrhages again, the lifeblood of two worlds merging to form a third country, a border culture.*

*Gloria Anzaldua*



## approach

**This architectural thesis attempts to both define architecture (place | program | metaphor) explicitly through the language of film.**

From its inception, architecture has been a representational art. Architect's have struggled throughout history to bridge the gap between the representational images of their work (plan | section | elevation) and the qualitative perception of space and architecture. The advent (and more recent) proliferation of digital media offers architects a myriad of new tools with which to conceptualize and develop architecture.

This project attempts to shift the paradigm of current accepted methods of architectural "process", using the language of film and the image rather than words to define the essence of the project's site (el paso, texas), program (a brick factory), and metaphor (montage).

## thesis

Montage, or the juxtaposition of one image against another, defines film. In the collision of two disparate shots or images, film is able to transcend the nature of the still image and enter into a more direct dialogue with the human mind and spirit.

In order to engage this dialogue of collision, it becomes necessary to use a site loaded with conflict on a variety of levels. As a transient zone between two disparate cultures, El Paso becomes an ideal site to explore an architecture of collision. The site is located directly on the border between the United States and Mexico.

The use of the brick in the metaphor strengthens a link to place, as well as appealing to each side on a base level. The artificial political boundary which separates the two sides dissolved through the use of an object deeply rooted place and culture, regardless of political boundary.

This project is about montage.

This is a project about the evolving discourse between two sides of a heavily disputed line.  
It is a project about the motivations, actions, and dreams of the project's inhabitants.

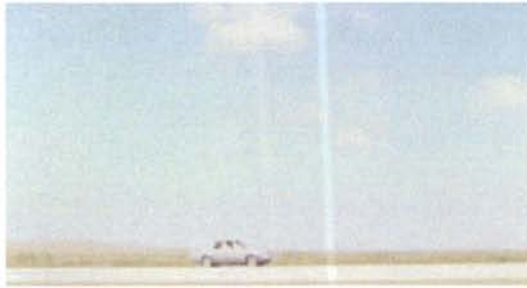
It is a project about collision.



## process...

The process began with a series of precedent studies examining and diagramming scenes from films that elevated the filmic language and engaged the concept of montage. Precedent studies included the mystical, distorted worlds of Terry Gilliam, the structured filmic form of Alfred Hitchcock, and the chiaroscuro worlds of Carol Reed.

After an appropriate site was found, a series of three films: landscape (5), identity (6), and palimpsest (7) were made in order to critically examine the site's challenges and potentials. The resulting films established an essence of place, informing the rest of the architectural process.



## *landscape*

The first in the El Paso series, this film aims to explore the complex phenomenological nature of the desert experience.

The structure of film and its imagery were heavily influenced by John C. Van Dyke's novel *The Desert*, regarded as a quintessential exploration into the essence of the desert. The novel documents the author's long journey through the desert with only a mule as his companion. Through long stanzas of unparalleled breadth and grace, Van Dyke expounds on the essence of the desert.

Through the use of long, tone establishing stanzas, minimal cut articulation, and atmospheric effects, this film exists as a quiet apparition, a mirage, an overture for the entire series.







## *identity*

The second in the El Paso series, this film aims to explore the complex identities of the borderlands.

Border, boundary, and frontier all at once, the name El Paso literally translates to "the passageway" or "the step." The largest metropolitan area to straddle the tense border between the United States and Mexico, El Paso, and its "sister city," Ciudad Juarez, exist as manifestations of their transient nature. Historically, it has been a staging area, a simple stop between one place and another. While at once it is a transit zone, and intermediary in the function of a increasingly globalized world, it still serves as a place of residence for millions of people. This inherent irony serves as only one of the myriad of contradictions that define this place.



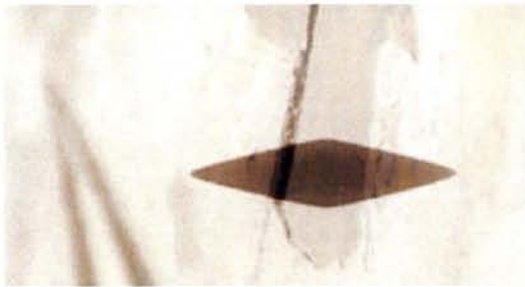




## *palimpsest*

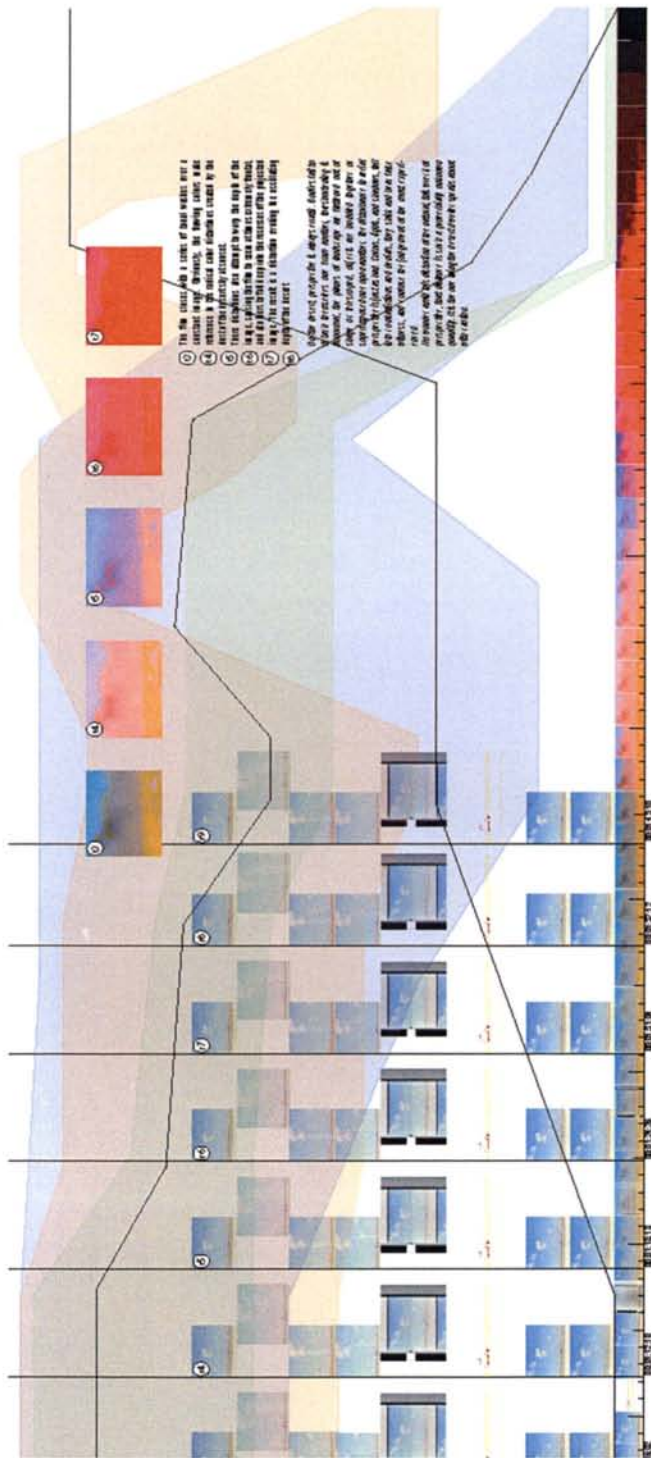
The third in the El Paso series, this film explores the border region as a complex, layered system.

Reaching back to colonial times, Samuel Schmidt notes that the region was perceived as an empty space, and that view still underlies the region's multi-layered identity. This perception, which Samuel Schmidt alludes to, often shaped the image of the entire border region in its early years, and still pervades common perception even today.



The film juxtaposes several conflicting images of the border condition within an atmosphere of chaos and distortion. This inherent irony serves as only one of the myriad of contradictions that define this place.





## diagramming

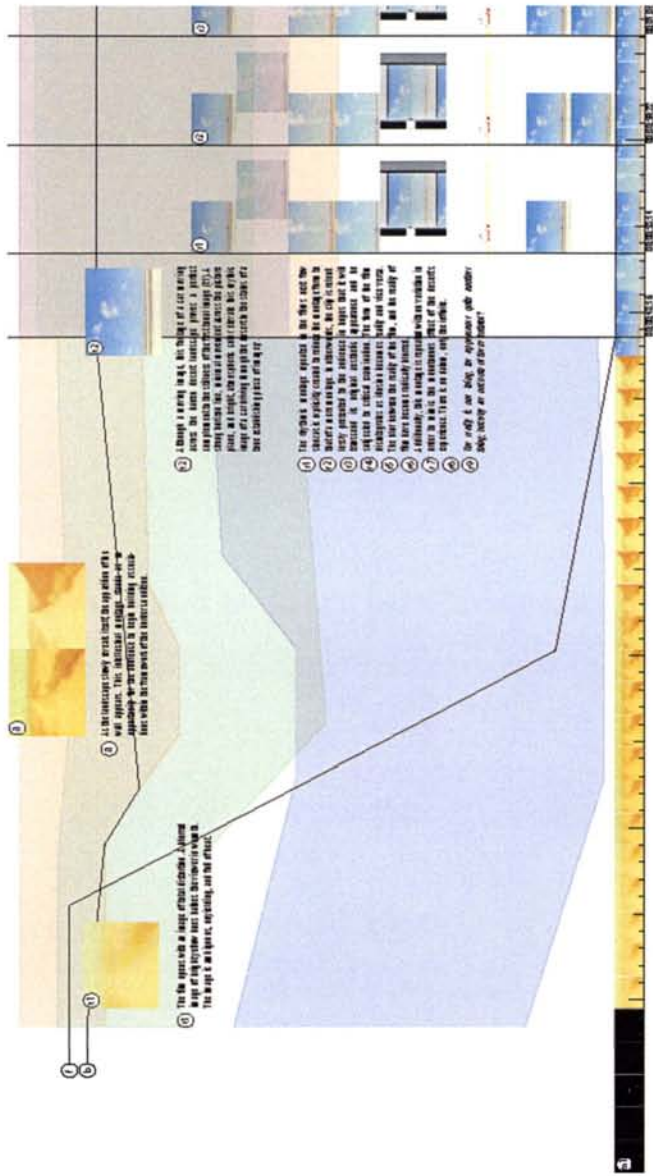
The diagram represents a graphic study of the films, using Sergei Eisenstein's five forms of montage as a frame for their decomposition. This diagram attempts to study each form of montage within the film and subsequently convey the essence of the film within the constraints of two-dimensional media.

In 1929, Soviet film director and theorist Sergei Eisenstein published an essay titled "Methods of Montage," in which he postulated the existence of five forms of montage. This diagram attempts to study each form of montage within the film and subsequently convey the essence of the film within the constraints of two-dimensional media.

The first form, **metric**, is based entirely on the physical nature of time. In the case of a metric montage, an editor will cut the film at an exact mathematic ratio, taking no regard for the form or content of the image. The metric montage is rhythm released from the context of the image. A filmmaker may choose to cut merely in mathematical ratios. For example.

$1/2, 1/4, 1/8, 1/16, 1/32, \dots$

The metric montage is considered the lowest order of all montages and elicits the most basal of responses from the audience. The metric montage is studied in the diagram through the use of a datum of the full length of the film running along the bottom of the page. Each cut in the film, regardless of importance, has been documented with a vertical line running through the entire diagram, allowing the rhythm of cuts to emerge visually.



The second form, **rhythmic**, is of a higher order than metric, but closely related. Rhythmic cuts are made with regard to time as well as to the content or form of the actual frames. These montages are explored as vertical zones which extrude from the main datum in order to more exactly study their hierarchy and order. As a mediation between the temporality of time and visual hierarchy of the image, the relationships within the rhythmic montage become crucial to understand.

The third form, **tonal**, is a montage of atmosphere. The tonal montage involves the use of imagery or content of specific emotional sound in order to establish a tone for the montage. In the diagram, this imagery has been lifted above the rhythmic montages and lies on a horizontal bar, thereby signifying its dominance in the hierarchy of the montage.

The fourth form, **overtonal**, is not directly engaged in the diagram, though it is certainly present, as it is the coalescence of tonal and rhythmic montages.

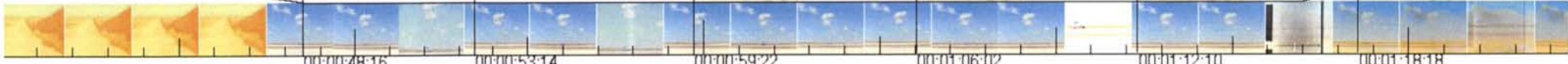
The last form, **intellectual**, is considered the highest order of montage and is based on the juxtaposition of two disparate images in hope of inviting a psychological response from the audience. In the diagram these associative images appear juxtaposed against each other in the top row of the diagram





t2 Although a moving image, this footage of a car moving across the barren desert landscape proves a perfect complement to the stillness of the first tonal image (t1). A strong horizon line, minimal movement across the picture plane, and bright, atmospheric color elevate this mythic image of a car driving through the desert to the status of a tone establishing piece of imagery.

- r1 The rhythmic montage repeated in the film's next few stanzas is explicitly created to reduce the montage form to that of a mere montage. In other words, the clip is relentlessly presented to the audience in hopes that it will transcend its original aesthetic appearance and be subjected to critical examination.
- r2 The form of the film disintegrates as illusion becomes reality and vice versa.
- r3 The blur between the reality of the film, and the reality of film have become radically blurred.
- r4 Additionally, this montage is repeated with no variation in order to mimic the monotonous effect of the desert's experience. There is no datum, only the infinite.
- r5 *The reality is one thing, the appearance quite another thing; but why are not both of them truthful?*



00:00:48:16

00:00:53:14

00:00:59:22

00:01:06:02

00:01:12:10

00:01:18:18



- Ⓡ1 The film opens with a series of rhythmic montages which cut in and out of the visual silence with great severity.
- Ⓡ2 Visual disharmony and chaotic editing lead to exactly edited montages which offer just enough of an object for it to become visible, only to distort the image moments later. This selective editing leads to a destabilized experience and tension throughout the opening of the film.
- Ⓡ3
- Ⓣ1 From the outset, this piece relies on the tonal quality of its montages in order to convey a sense of chaos, distortion, age, wear, layer, and shearing.
- Ⓣ2 The images have been completely washed of color, and a few are explicitly rendered unrecognizable. The result is a visual experience which borders on the visceral.
- Ⓣ3
- Ⓣ4



## program

Program was explored through a series of character vignettes. These poems and the accompanying images define the project's inhabitants in a way such that each piece of program begins to garner its own personality, texture, tone, and presence.

the grinding supervisor looks as if he is in a trance  
his eyes are sharp and calculating  
the rhythmic vibrations of the machine  
render the soil a blur to the average observer

but not for the grinder

he sees every lump,  
every grain,  
every sliver

something is off  
his sandwich is too thick today  
he examines the contents and finds  
the guilty party  
a crudely sliced chunk of ham lies jagged  
on the bread  
he has lost his appetite





the managers are deeply jealous of the workers  
the sun slices into their office,  
shards of light explode in the tiny space  
they slave away  
stealing glances at the light

they watch the workers outside in the sun,  
working with great purpose  
these men leave each day  
with the clay of the brick  
and of the earth  
staining their clothes and hands

the hands of the manager are pink and bloated  
he stuffs his hands in his pockets  
when he walks around the yard,  
he feels foreign in his own factory  
his home is the office  
where he watches  
and files  
and watches

the manager can see everything  
the manager knows nothing



the kiln operator never sleeps  
he catches small catnaps while lying on the surface of the kiln

he revels in slowly walking across the surface of the kiln,  
trying to match the speed of the bricks  
the speed is too slow, and he almost falls in the effort  
the wait is agonizing

the kiln operator doesn't tell anyone,  
but he believes that he has the most important job in the  
factory

his eyes are puffy and red  
he doesn't eat, he doesn't sleep  
he watches the kiln and waits  
and waits  
and waits

you can tell by the stubble on his face, how much longer  
the bricks must bake  
his face is clean  
the night is young



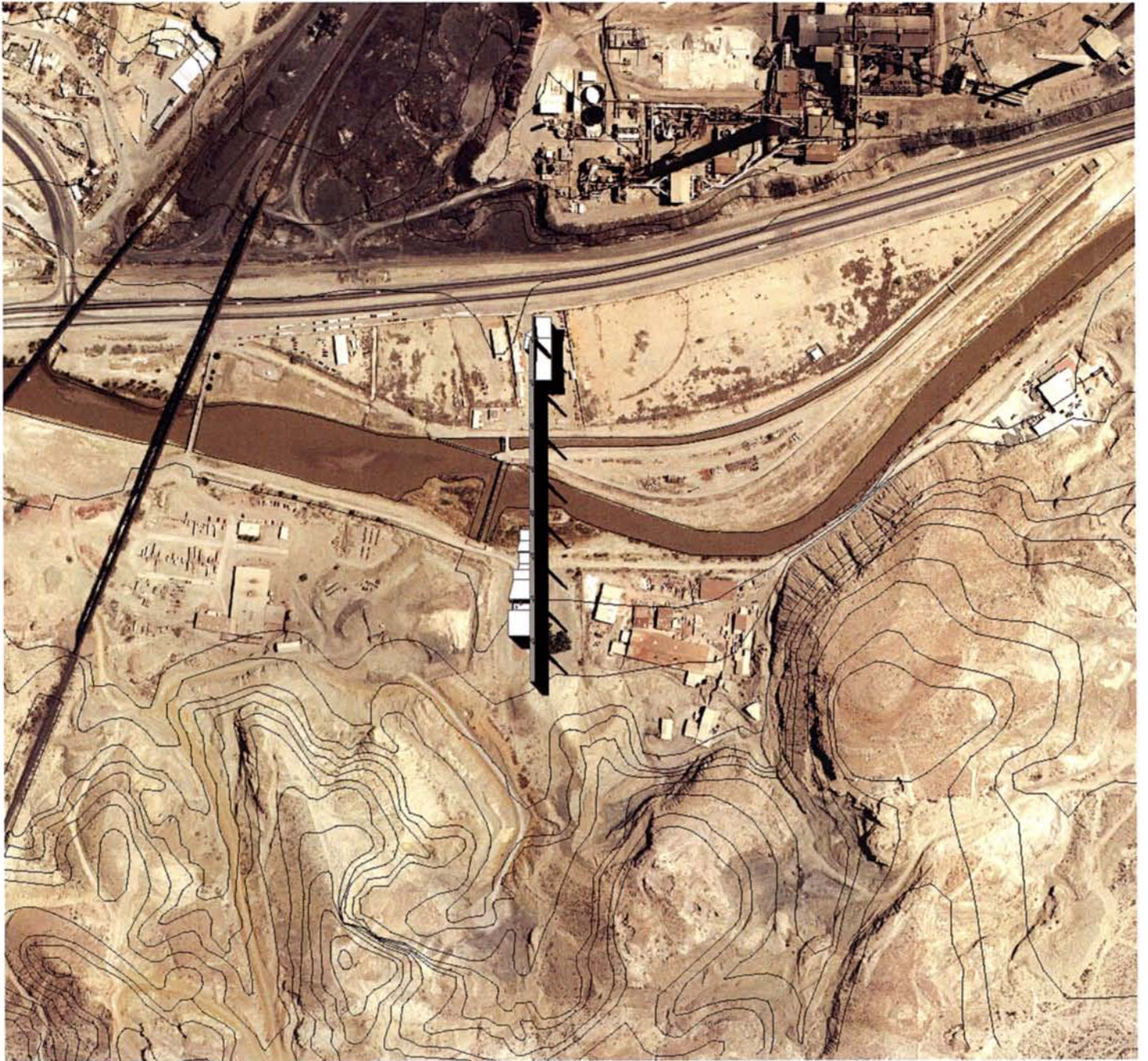
## the drawings

The following drawings make up the presentation set used in the final presentation of the thesis. These drawings have been dramatically reduced and, as a result, have lost much of their original detail. Drawings include:

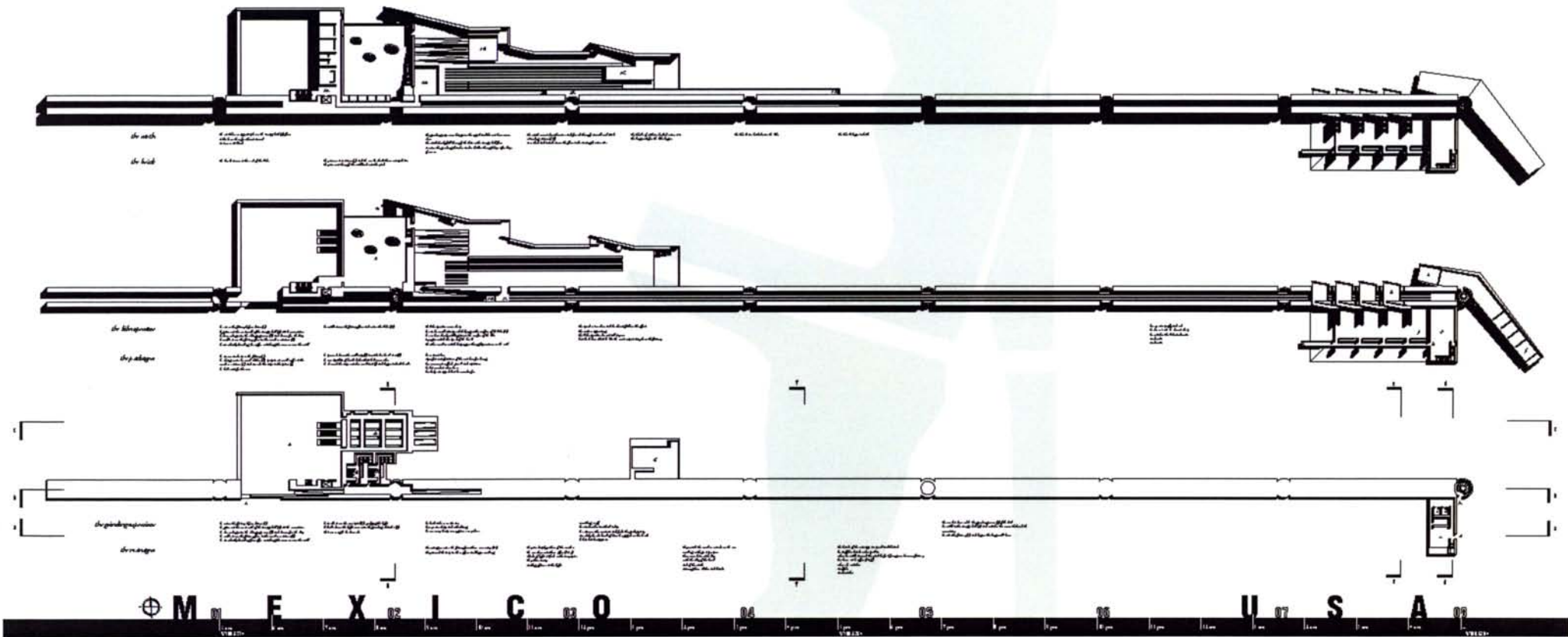
15. site context board
16. site plan board
17. plan board
18. section board I
19. section board II

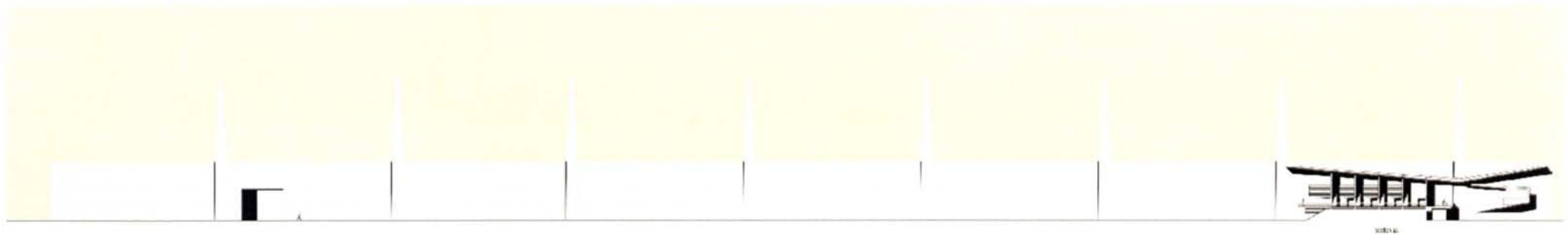


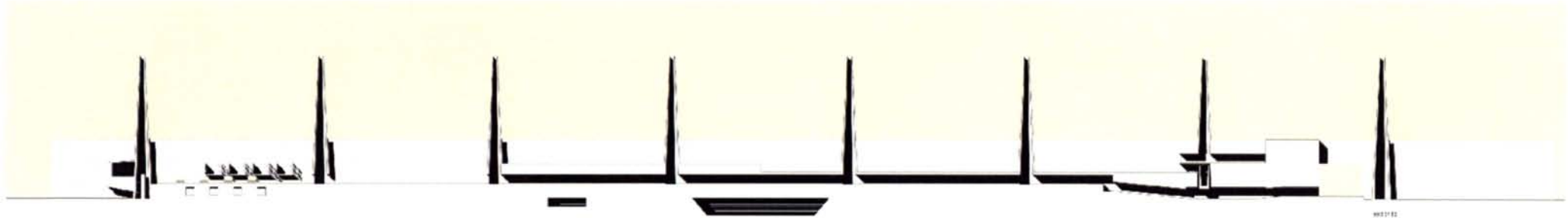




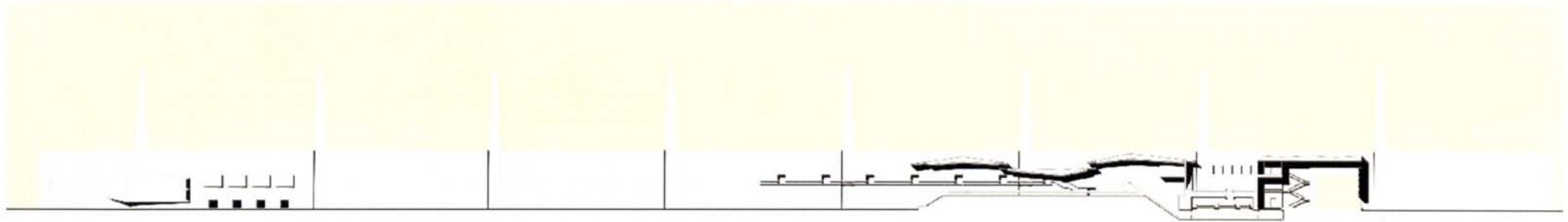








01/10/11



01/10/11

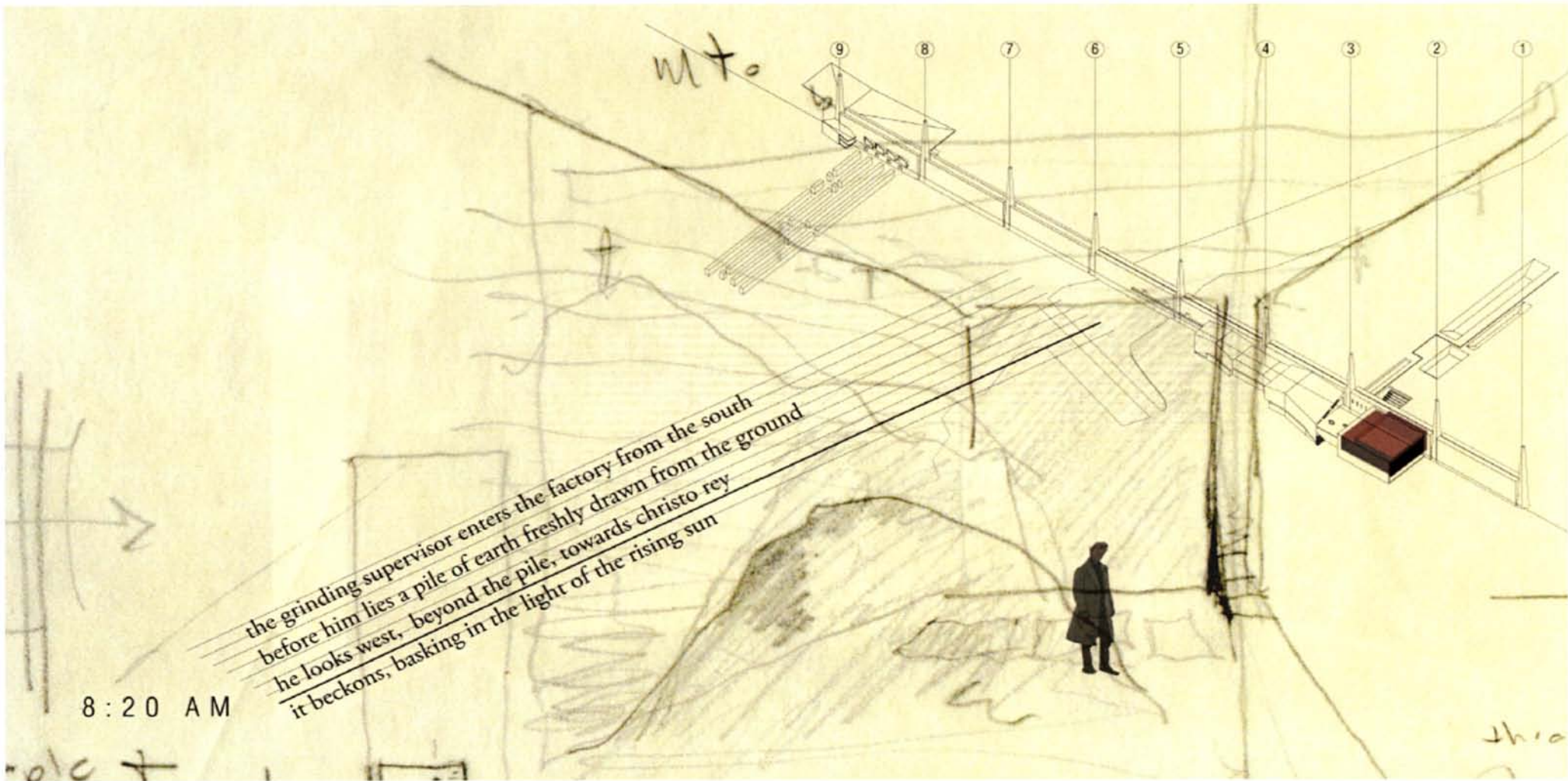


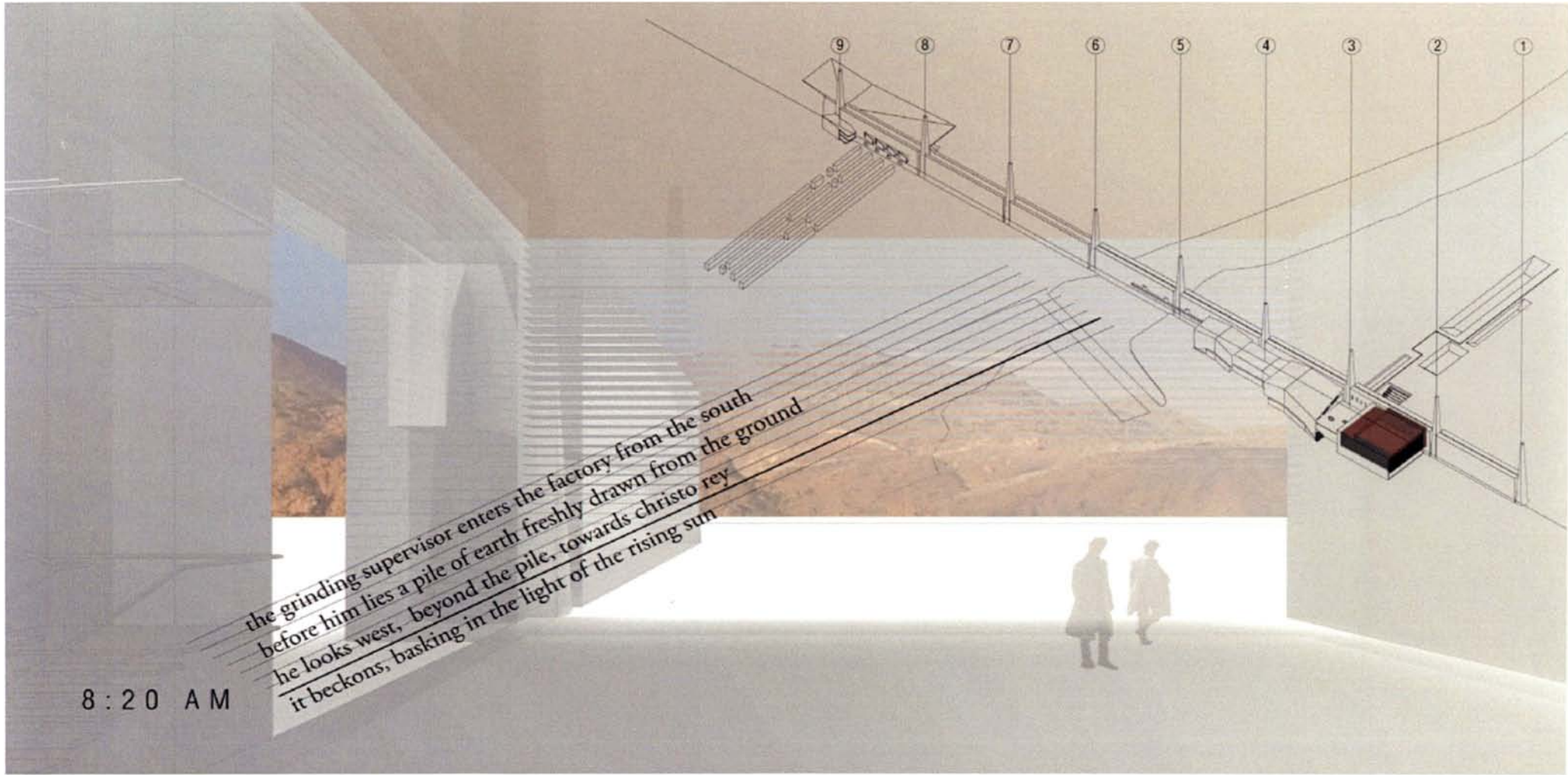
## the film

A dvd has been included in this packet which contains both the precedent films discussed on pages 5 through 7 and the final film created during the design process. The following plates contain key frames from the final film.

21. storage hall sketch
22. storage hall perspective
23. manager's entry
24. kiln material montage
25. kiln firing montage
26. interior production floor perspective
27. mountain | industry montage







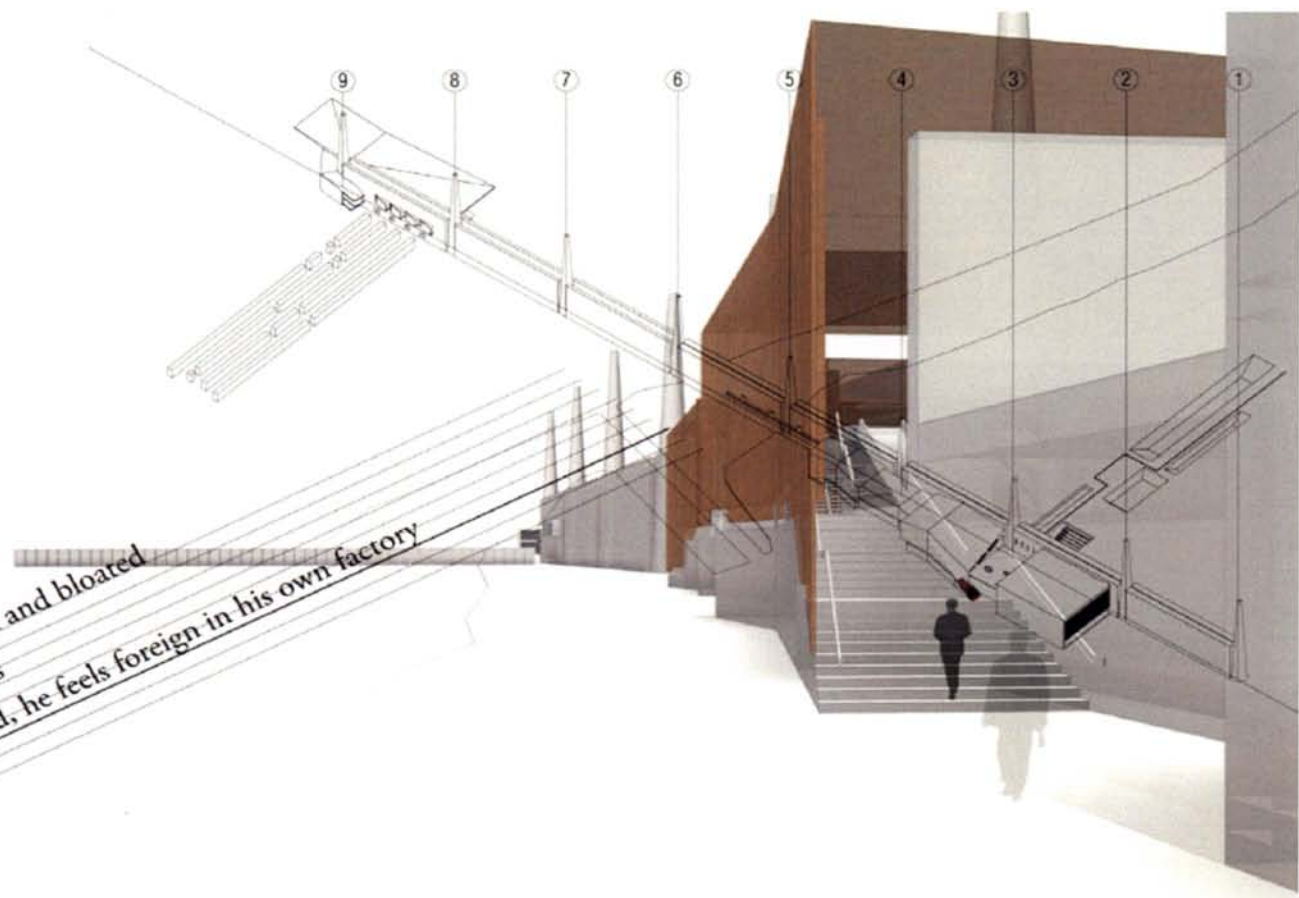
8:20 AM

the grinding supervisor enters the factory from the south  
before him lies a pile of earth freshly drawn from the ground  
he looks west, beyond the pile, towards christo rey  
it beckons, basking in the light of the rising sun



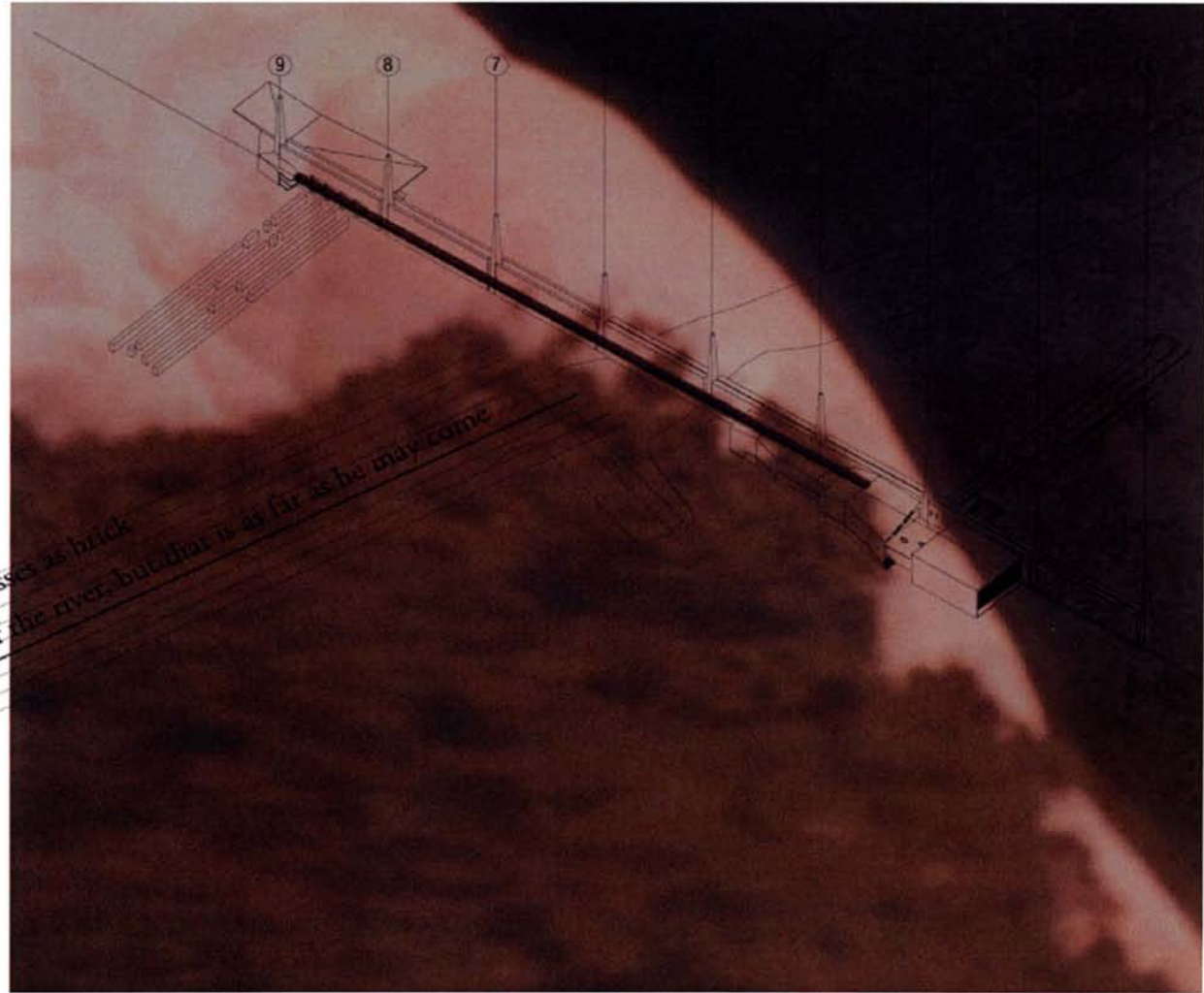
9:30 AM

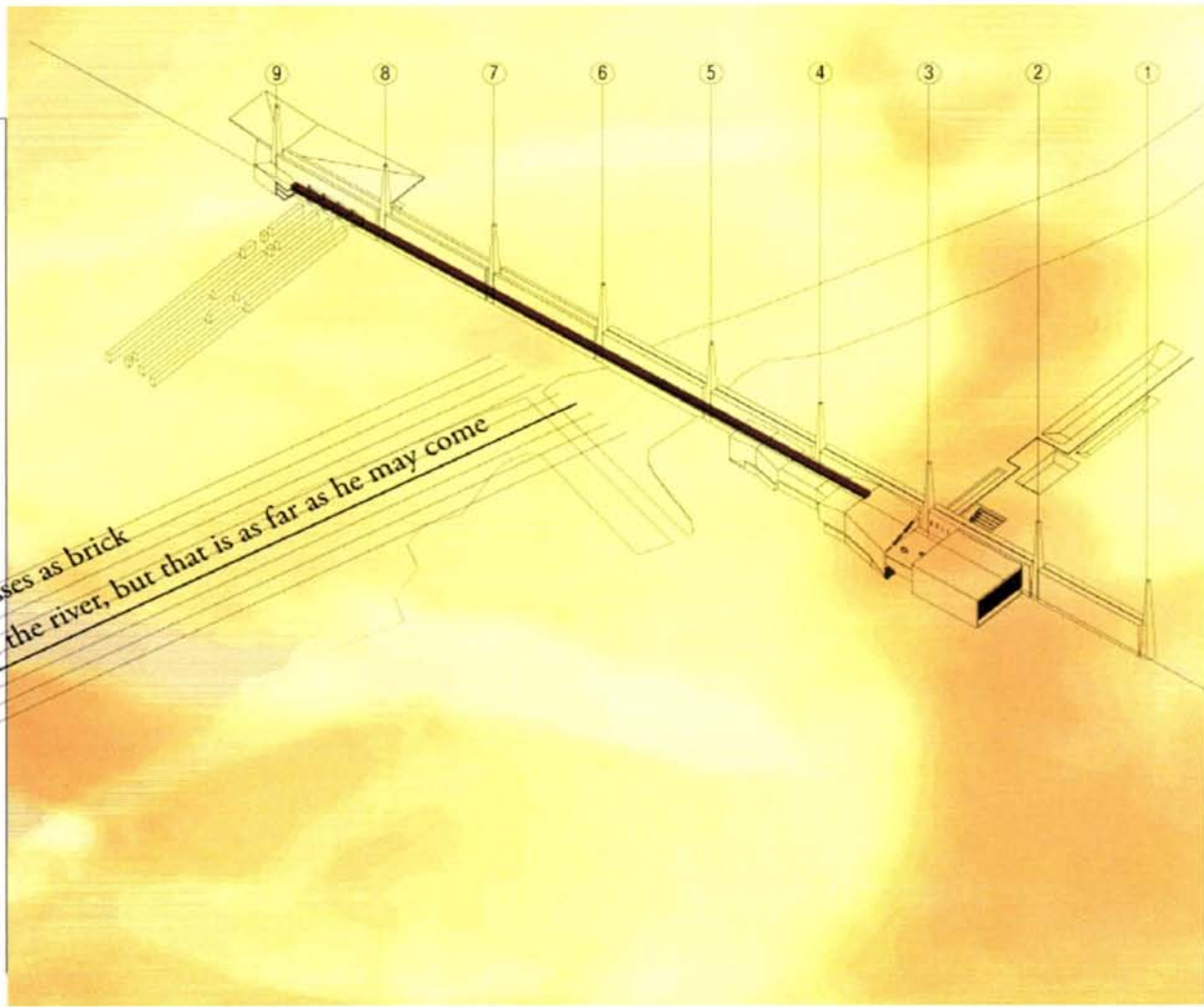
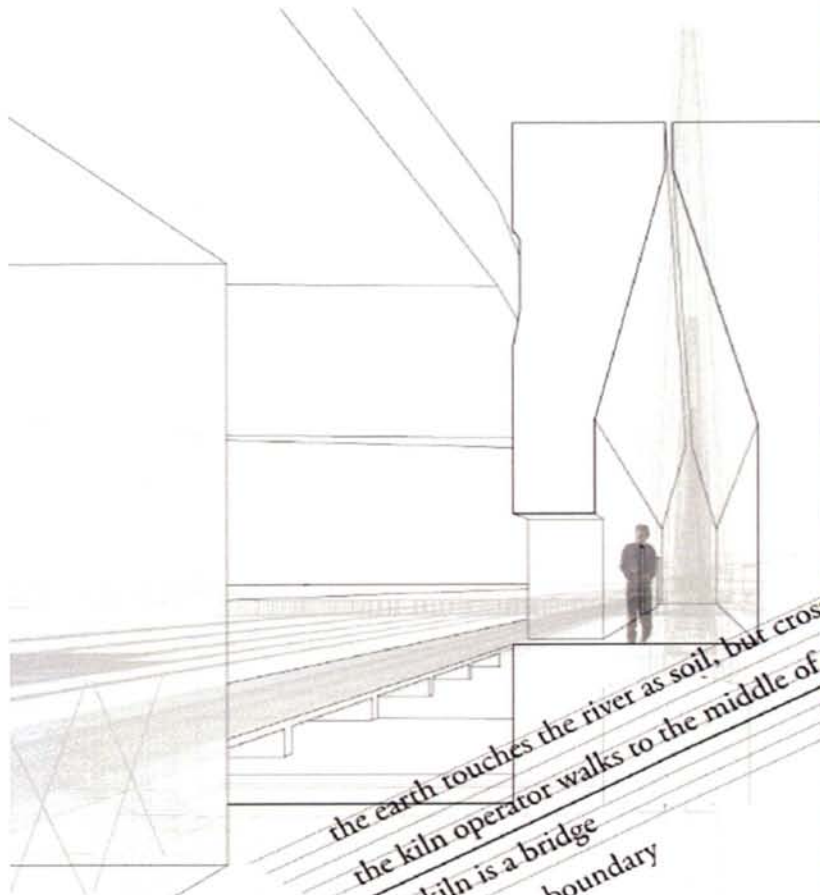
the hands of the manager are pink and bloated  
he stuffs his hands in his pockets  
when he walks around the yard, he feels foreign in his own factory  
his home is the office  
where he watches



11:25 AM

the earth touches the river as soil, but crosses as brick  
the kiln operator walks to the middle of the river, but that is as far as he may come  
the kiln is a bridge  
the kiln is a boundary

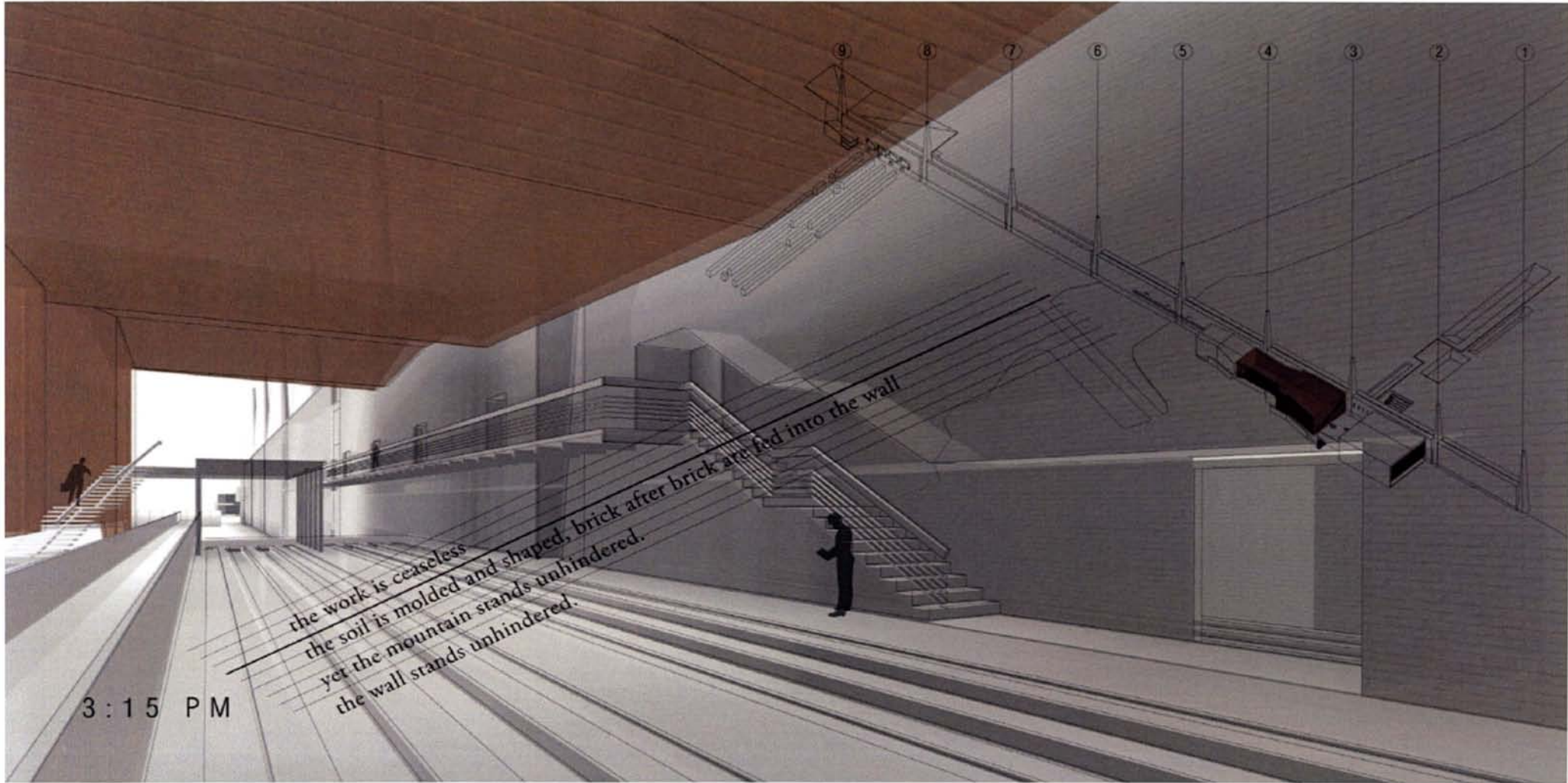




11:25 AM

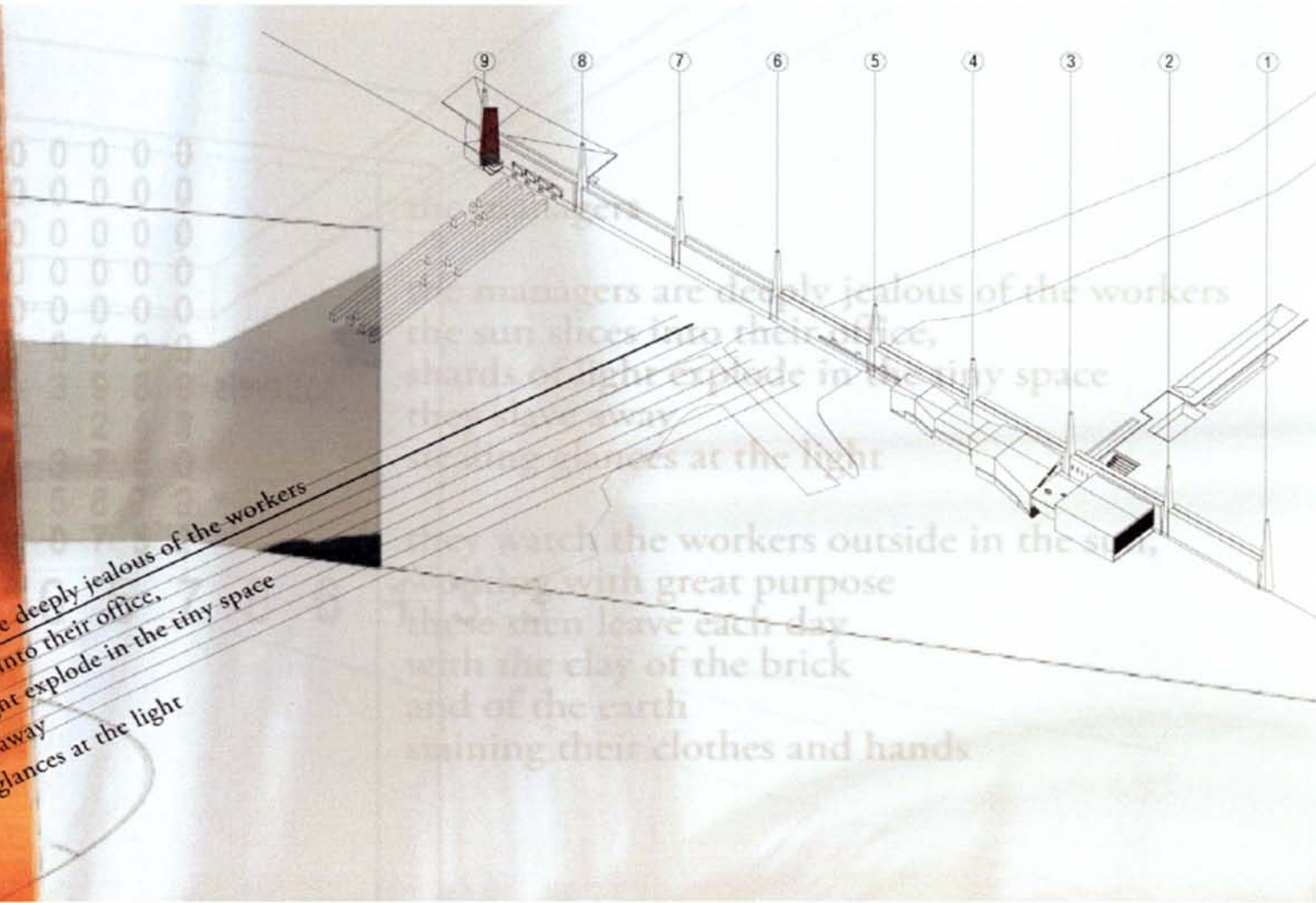
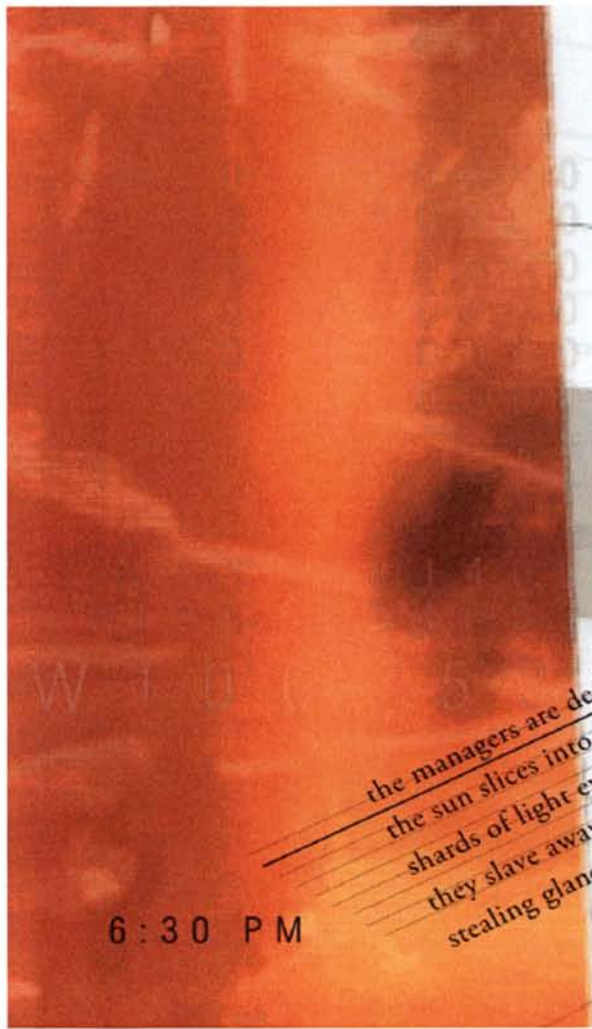
the earth touches the river as soil, but crosses as brick  
the kiln operator walks to the middle of the river, but that is as far as he may come  
the kiln is a bridge  
the kiln is a boundary





3:15 PM

the work is ceaseless  
the soil is molded and shaped, brick after brick are laid into the wall  
yet the mountain stands unhindered.  
the wall stands unhindered.



6:30 PM

the managers are deeply jealous of the workers  
the sun slices into their office,  
shards of light explode in the tiny space  
they slave away  
stealing glances at the light

the managers are deeply jealous of the workers  
the sun slices into their office,  
shards of light explode in the tiny space  
they slave away  
stealing glances at the light  
watch the workers outside in the sun,  
working with great purpose  
they then leave each day  
with the clay of the brick  
and of the earth  
staining their clothes and hands



## **sincerest thanks**

to professor brian ambroziak. my mentor, without whom none of this would have been possible.

