The Architecture of Suburban America

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Master of Architecture

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**Thesis:** the Architecture of Suburban America

**Agendas:**

- Architecture as a man-made object
  - Materiality of architecture
    - A city, a human habitation, persists by virtue of the *materiality* of architecture rather than by *images and functions*.

- Collage in architecture
  - The way by which images and objects are related with one another
  - The way that *signifiers* are collaged in architecture to make new images and values

  *Collage is not study just about images. More importantly, what makes collages of "images" possible are body, matter, signifier, and object.*

**Abstract**

This thesis is concerned with images and objects of architecture.

Today, the advent of "modernism" and the progress of science give rise to nihilism and extreme functionalism. As the result of such trends, architects have tried to find the ways with which they can continue to work without the type of "Ann" which traditional architects sought. Some forms of high-tech architecture and deconstructionist architecture were the result of an attempt to overcome "the death of architecture".

However, although they thought images and values were already dead, we still cannot deny that there are, in our living environment, countless images and values which strongly influence our life styles. For example, today’s strongest culture, commercialism, is using images and icons, as if laughing at those who declared "the death of images and values". Even some contemporary philosophers, like Jean Baudrillard, argue everything is the result of images: "Simulacrum".

Thus, it seems irresponsible, as architects creating our living environments, just to deny images and values.

Also, as architects, we cannot abandon the study about objects by accepting Baudrillard’s position.

Thus, I will investigate, in this thesis, how objects are related to images and how values are created from such relations. I expect that this investigation will show that what has changed is just the ways of making images and values and the ways that images and values influence our lives. It will, finally, show images and values will never disappear as long as human culture exists.

Suburban America provides good material to study such a thesis because, although it has a comparatively simple organization, it exhibits complex contemporary phenomena.
Architecture signifies human societies by becoming imprinted letters of human societies. By virtue of the materiality of architecture, the discourse between several significances and between significances and signifiers continuously persists through history.

That is to say, it is by virtue of architecture as physical matter that we can have histories and memories in a city and a city can be sustained.

"Moreover, since every function can be articulated through a form, and forms in turn contain the potential to exist as urban artifacts, one can say that forms tend to allow themselves to be articulated as urban elements; thus if a form is articulated at all, one can assume that a specific urban artifact persists together with it, and it is precisely a form that persists through a set of transformations which constitutes an urban artifact par excellence."

_The Architecture of the City, Aldo Rossi_

"The first maker of iconic and thus recognizable images to work his way out of this position was Aldo Rossi. Form was necessary, according to this Italian evoker of fundamental shapes, because memory, associations, and expectations adhered to them."

_UN STUDIO UN FOLD, Ben Van Berkel & Caroline Bos_
Architecture as a man-made object: Archaeology

Materiality of architecture and architecture as signifiers of human cultures and history make it possible for archaeologists to interpret ancient cultures from ruins.

Of all arts and cultures, architecture is the most concerned with materiality. Only architecture and language can act as signifiers of human culture and history.
Architecture was traditionally the slowest changing culture. In ancient time, that was mainly because of the lag of technologies and readiness to enhance the new.

Although today’s technologies make it possible to destroy and build a monumental building very quickly, its huge economic effects still make architecture change slowly. Thus, architecture persists very long time even in dynamic contemporary cultures. By virtue of the slowly changing aspects of architecture, architecture can retain diverse memories and dynamics of human cultures.

Although many contemporary architects regret the slowness of architecture and are trying to digitalize physical architecture in order to overcome its slowness, ironically, it is its slowly changing materiality that makes architecture retain more memories and images than any other visual art.
Every word column indicates synchronicity in a world. Every word constituting a column has its own meaning. Namely, all phenomena constituting a period have their own meanings synchronically.

However, just one row of numerous rows that are made of synchronic columns is continued by meaningful words. That row indicates the diachronicity of our real world. Other rows are just latent worlds that cannot exist.

That is to say, our images, memories, and values are chosen, interpreted, and inherited by subjects in the metrics of countless written letters. Consequently, it makes our meaningful world possible.
Today’s trend:

Today’s many architects who are represented by Rem Koolhaas deny image, value, and memory of architecture as an object. That is, they deny the poetic levels in architecture, but emphasize just the political levels. Rem Koolhaas says poetic aspects in architecture are “what doesn’t work”. This is because the architects concentrate just on outer objective worlds without considering (human) subjects and the relationship between objects and subjects. Without considering the roles of subjects in architecture, they think our world is homogeneous and objective.

However, in my opinion, we cannot evaluate anything without considering human beings as subjects, and all people perceive their environments in both ways: poetic and political. That is, human being itself is poetic and political whether our world is poetic or political.

Question:
Does an object have its image?
However, Rem Koolhaas is one of people who are making the most images in the world......

I am a political person. I love diagram, data, and graphs.
Rem Koolhaas' next generation:

"Alejandro Zaera, a member of FOA, claims that globalization actually leads to the enhancement of diversification and heterogeneity by increasing our awareness of differences, the particularities of a location and its specificities."

*El Croquis 86, MVRDV*

"UN STUDIO MAKES OBJECTS........(although) it has not been fashionable in architecture to make things that stand by themselves and well-formed."

*UN STUDIO UN FOLD, Ben Van Berkel & Caroline Bos*

"She place Warhol's works in a triangulated structure of subject, object, and mediator."

"The mediator ...... is endless."

"You are not in a (traffic) jam, but you are the jam."

*MVRDV and UN studio, who are Dutch successors of Rem Koolhaas' school of thought, both think that form and object of architecture are inevitable and that an architecture as an object has poetic influences on its context.

However, MVRDV are still considering architecture in terms of "objective worlds". With the quotation, they are trying to justify their concept, "the massiveness of architecture"; without considering a subject (although the quotation is very good for explaining relationships between subjects and objects).

Differently from MVRDV, UN studio is going farther. They recognize that form is not a matter just of "objective worlds"; instead form is the result of the relationships between subjects and objects. Moreover, they have an important notion about mediators between subjects and objects.

The next generation of architects like MVRDV, UN studio, and FOA are criticizing Rem Koolhaas' homogeneous and objective world.

These architects are recognizing that, although we have to rely on scientific ways for researching contemporary phenomena, architecture as the result of such research necessarily becomes an object that poetically re-influences its surrounding contexts and interacts with subjects.

Consequently, such discourses between subjects and objects and between existing contexts and new objects, leads to "the enhancement of diversification and heterogeneity by increasing our awareness of differences, the particularities of a location and its specificities"."
**Discourses between written letters and signs:** A "materialized object", a written letter, inevitably becomes images which become meaningful. And then, the images, again, become a cause of other written letters.

**The interplays between objects and images are ceaselessly continued with an interweaving of countless meanings and images. There is no "absolute significance" and no "primal written word".**

"One speaks upon the basis of a writing that is part of the fabric of the world; one speaks about it to infinity, and each of its signs becomes in turn written matter for further discourse; but each of these stages of discourse is addressed to that primal written word whose return it simultaneously promises and postpones...

...For now we no have that primary, that absolutely initial, word upon which the infinite movement of discourse was founded and by which it was limited: henceforth, language was to grow with no point of departure, no end, and no promise. It is traversal of this futile yet fundamental space that the text of literature traces from day to day."

*The Order of Things, Michel Foucault*
Notions about signifier and significance, written letter and meaning, in architecture-1:

In ancient time, geometry was the language of God, but, in modern time, Corbusier said that it is the language of man. Geometry, a signifier, has been interpreted as different significances according to different historical contexts. Between signifiers and significances there are no fixed 1:1 relationships. The relationship is very flexible and unforeseeable. Consequently, interpreting is becoming more and more important. What decides its meaning is not its fixed significance, but the ways of interpretations.

"Geometry is the language of man."
Towards a New Architecture, Le Corbusier
In his book, Vitruvius also recognized the two aspects in architecture: signifier and significance. However, at that time, he thought these two things are related by a fixed connection. That is, he did not recognize (flexible and unforeseeable) mediators between signifiers and significance.

“The Ten Books on Architecture, Vitruvius

“In all matters, but particularly in architecture, there are these two points: the thing signified, and that which gives it its significance.”

In his book, Vitruvius also recognized the two aspects in architecture: signifier and significance. However, at that time, he thought these two things are related by a fixed connection. That is, he did not recognize (flexible and unforeseeable) mediators between signifiers and significance.
Unlike Rem Koolhaas who concentrates on just one aspect in architecture, objective worlds, in the 1970s, Robert Venturi already paid attention to relationships between several signifiers and between subjects and objects in architecture. He called such relationships “complexity and contradiction”. Remarkably, he realized that historical elements can be signifiers for endless discourses between signs and written letters.

Moreover, he was interested in how human being, as a subject, perceives the art and what architecture should be like in order to be a kind of arts. However, unfortunately, most post-modernists used this great idea to produce anachronistic historicisms. Namely, the most post-modernistic thinking in architecture was inherited in the most anachronistic way.

"Joseph Albers calls the discrepancy between physical fact and psychic effect a contradiction which is the origin of art.”
Complexity and Contradiction in Architecture, Robert Venturi
In this book, Colin Rowe and Fred Koetter suggested that poetic factors, like memories and myths, can be used as signifiers. This position is a great progress in the point of worldview over that of previous architects who thought of poetic factors only as anachronistic significances.

However, unfortunately, most of today’s architects use the concept, collage, just as a matter of making “curious images”.

“Habitually utopia, whether platonic or Marxian, has been conceived of as axis mundi or as axis istoriae; but, if in this way it has operated like all totemic, traditionalist and uncritized aggregations of ideas, if its existence has been poetically necessary and politically deplorable, then this is only to assert the idea that a collage technique, by accommodating a whole range of axes mundi might a means of permitting us the enjoyment of utopian poetics without our being obliged to suffer the embarrassment of utopian politics. Which is to say that, because collage is a method deriving its virtue from its irony, because it seems to be a technique for using things and simultaneously disbelieving in them, it is also a strategy which can allow utopia to be dealt with as image, to be dealt with fragments without our having to accept it in toto, which is further to suggest that collage could even be a strategy which, by supporting the utopian illusion of changelessness and finality, might even fuel a reality of change, motion, action and history.”

*Collage City, Colin Rowe and Fred Koetter*
Collages in other arts-1:

Picasso, iconoclast to the core,...would continue to say "No!"
-Picasso Working on Paper, ANNE BALDASSARI

10. Picasso's bull's head, 1943

Is this a bull's head? No and Yes!
Is this a handle and a saddle? No and Yes!

Two signifiers, a handle and a saddle, make a new significance, bull's head.
However, those are still a handle and a saddle.

That is to say, signifier and significance are not a 1:1 relationship any more.

Endless interplays between signifiers and significances!

Picasso, who is a Spanish, liked a bull.

However, for me, this is a space-ship which I saw in a television when I was young.
Collages in other arts-2:

11. Arcimboldo’s Vertumnus

These images are rotated partial images of Arcimboldo’s “Vertumnus”. These images don’t look like human bust any more, differently from its whole image, but look just like a bundle of fruit.
Collages in other arts-3:

In this image, the outline of a torn magazine makes another image.

The artist is saying, "If you read 'I-LOV-IT' backwards, it will be 'TIVOL-I' " . That itself is an interesting collage.

Also, more interestingly, the sentence "I-LOV-IT" can be interpreted for multi-meanings, because it belongs to multi-circumstances. For example, as its original purpose, it might be an advertisement for an Italian city, TIVOLI, but, for the new purpose, it is a work of art.

And then, what does the sentence mean? "I love (TIVOLI)" or "I love (the work of art)?"
Collages in other arts-4:

Each pixel has no specific relationships with Venus’s body. However, read as a whole image, the pixels become a part of Venus’s body.

When a "urinal" is isolated from its typical context and carefully placed on exhibition with a purpose, that "urinal" becomes an art work. That is, contexts also can be kinds of signifiers for collage.
Two aspects of Collage: Objective and Subjective

Having seen some examples about collage, we can realize two aspects of collages.

Robert Venturi and Colin Rowe, as architects, tried to analyze contemporary urban phenomena. For them, collage is a method to analyze the world, and is a point of worldview: They, architects, are studying objective aspects in collages.

However, in other art works, artists are trying to explain the way how we, as subjects, perceive objects: That is, they are studying subjective aspects in collages.

Consequently, as a way to interpret objects and subjects, collage relates subjects to objects. Thus, collage becomes a mediator enabling endless discourses between subjects and objects, between written letters and signs.
The written letters in suburban America

Chimney
Water tower
Highway
Hypermarket
Big parking lots

Blackburg studies
Map study-1: The expansion of the town
Map study-2: The trace of a previous street pattern
Chimney
Highway

Suburban America
and
Blackburg
The written letters in suburban America:

Although many people believe that America, without its long history, is different from Europe, it still will be valuable to understand if written letters of human culture exist in suburban America. Aldo Rossi said, in his book The Architecture of the City, several aspects of a city such as economic conditions, urban policies, and geographic factors decide what kinds of written letters would be imprinted in the city. Thus, if such conditions are different, the ways to interpret a city’s written letters should be changed.

In my opinion, the reason that most people believe that there aren’t any written letters of human culture and history in America is because, although every condition is different, they are trying to interpret America with the methods appropriate for Europe.

However, I believe if we try to understand America itself, we will be able to find its written letters which are different from those of Europe. As the result of that effort, if we find some written letters in suburban America, it will mean on the deeper level there are common principles more important than architectural styles. And I strongly believe that is the way we can make appropriate traditions even in our dynamic contemporary cultures.

15. A Written letter in an European city
The written letters in suburban America: What can we read in suburban America?

1) Chimney:

Because of America’s vast land, the thermoelectric power plant becomes the most efficient type of power plants. Scattered suburban settlement makes the concentrated power supply system of an atomic power plant inefficient. In addition, water and wind power plants cannot be applied at every place because of their geographical restrictions. Thus, in most suburban America, chimneys for thermoelectric power are pervasive, and those chimneys become a metaphor of human aggregation in the vast American landscape.
The written letters in suburban America: What can we read in suburban America?

2) Water tower:

Because of America’s vast land, it is difficult for several suburban towns to share a water tower. Thus, most suburban American towns have their own water tower.

The water tower becomes a kind of monument to represent America’s vast land and its scattered suburban. A water tower’s peculiar shape differentiates it from other buildings.
The written letters in suburban America: What can we read in suburban America?

3) Highway:

Highways are the veins of vast America landscape connecting each suburban settlement. The highways become thresholds between a town and a town, and between a town and rural lands. They also represent American’s automobile culture and high speed.

A highway is a modern threshold.
The written letters in suburban America: What can we read in suburban America?

4) Hypermarket:

Hypermarket is the typology of a commercial building that is optimal to automobile culture. That is one of symbols that America has exported worldwide.

As most shops are grouped in a shopping mall area as a hypermarket, shopping area and residential area are being separated. Such phenomena cause walking spaces to disappear in suburban America.

To buy a tiny “chocolate-chip cookie”, you might drive! “Jogging” is the only way you will walk!

Suburban America needs shopping streets rather than a shopping mall!
5) Big parking lots:

While, in most European and Asian countries, parking lots are constructed in a building or underground, parking lots in suburban America occupy a vast undivided plot. This vast landscape in an urban context reminds us of the effect of expropriation in Europe.

As Venturi said, in America, parking lots substitutes for European piazzas by becoming a vast piazza celebrating America’s automobile culture.
Blacksburg studies:

As a specific example, I will study suburban America in Blacksburg, Virginia.

Although this chapter will be quite basic, I am convinced that it is sufficient to assume that written letters exist in suburban America.
Blacksburg studies: Map studies in Blacksburg

As an archaeologist interprets from ruins forgotten information, the map, as a written letter, also helps us to interpret the town’s changes.

Map study-1: The expansion of the town

In the original map and the map in 1946, the town started as regular grid patterns. As time goes on, the town has been expanded as irregular pattern because the spontaneous private developments followed the irregular patterns of wild land promenades. Finally, we can still recognize the original area of the town and the expansion of the town.

The highway 460 becomes the threshold showing the expansion of the town.
Blacksburg studies: Map studies in Blacksburg

Map study-2: The trace of a previous street pattern

In the 1946 map, the main street was bent toward Virginia Tech campus, because, at that time, the town was so small and the university was the most important facility.

However, in the 1958 map, the main street was changed to today’s condition. As a result, the main street penetrates through the town and then is well connected with the interstate route, the highway 460.

Today, we can still see the trace of that change of street pattern, which has produced an uncommon street pattern.
Blacksburg studies: Chimney

"It, fire, is the first and most important, the moral element of architecture. Around it were grouped the three other elements: the roof, the enclosure, and the mound, the protecting negations or defenders of the hearth’s flame against the three hostile elements of nature.”

The Four Elements of Architecture, Gottfried Semper

Like other suburban America, a chimney is also in Blacksburg. As Aldo Rossi said, a chimney is a metaphor of human aggregations using fire. Gottfried Semper also identified the fireplace as the center of a home. And then, a home can be analogized with a town as a human habitation.

In Blacksburg, the chimney becomes the center of the town. Of course, the drill-field of the university is also a real center, but, as a vertical element, the chimney is more visible and noticeable from other places in Blacksburg.

Although this is, to some degrees, a poetic aspect, we can use the element just as a signifier in the manner suggested by Colin Rowe in his book.
Blacksburg studies: Highway

According to an analogy between a home and a town, the highway 460 becomes a metaphor of the wall of the town. In addition, as the analysis of the map demonstrates, the highway 460 is the threshold showing the expansion of the town and connecting several towns.

As the chimney becomes the visual center of the town, the "wall" and the chimney visually emphasize their poetic aspects with one another.
A collage in a city - a Wall and Buildings
34 So, what is your project?
35 Written letters, signifiers, which are interpreted from the town as a project vehicle

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Summary of collage elements

Appendix: Building drawings

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Thanks to
Before presenting my project, some examples of collages in architecture will help us to better understand how collage can be adopted in architecture.

In this image, buildings are differently interpreted according to different scales to which they are related. That is, as a signifier of human culture, architecture is a locus in which human activities of different scales and aspects are collaged.
A collage in architecture:

Ricardo Bofill used historical elements for different functions. In this building, as he changes the material and scale of “columns”, what we recognize as “columns” are totally changed in their functions. Namely, he realized flexibility between a signifier and significance.
So, what is your project?

- **Political programs**: a rest area for the highway
  - motels
  - storage for surrounding farms

- **Poetic programs**: the wall of the town
  - the threshold showing expansion of the town
  - to visually introduce Blacksburg from highway 460
  - to represent "flows" of the highway

Like a collage, this project is a single buildings
that has several roles and values.
As the types of collage discussed by Colin Rowe,
this project is also political and poetic at the same
time. The building is differently interpreted
according to different scales, which the building
influences, and its different circumstance.

Episode-1: Can you say, "Who you are"?
Most people think they know who they are. However, in fact,
there are few people who can say, "This is who I am". Maybe
nobody can confirm, "This is who I am".

Interestingly enough, we define ourselves according to relation-
ships with others and with circumstances rather than according to
oneselves. For example, you may be "someone's" father or mother,
and you may be "someone's" brother or sister, and you may be
"someone's student" and "other's son".

And then, who really are you?

Although we familiarly think that we are very an identical being,
we are really a collaged being.

The only thing that persists as me is my body. The body is the
node of every name and definition about me.

I am someone's son, someone's good friend, other's bad friend,
someone's student, someone's roommate, someone's nephew,
someone's uncle, someone's brother, someone's colleague,
someone's buyer, someone's passenger, ..........................................

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I am someone's something.
Written letters, signifiers, which are interpreted from the town as a project vehicle:

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The highway 460</td>
<td>A threshold showing the expansion of the town.</td>
</tr>
<tr>
<td></td>
<td>Of course, politically, the highway is also very important because the highway is an important</td>
</tr>
<tr>
<td></td>
<td>approach toward Blacksburg and the university.</td>
</tr>
<tr>
<td>The drill-field</td>
<td>Virginia Tech is politically and poetically the center of Blacksburg. Actually we can say that</td>
</tr>
<tr>
<td></td>
<td>Blacksburg is an university town. Thus, the drill-field that is the center of the university is</td>
</tr>
<tr>
<td></td>
<td>also the center of Blacksburg.</td>
</tr>
<tr>
<td>The chimney</td>
<td>As I mentioned before, a chimney is a metaphor of human aggregations and the center of home.</td>
</tr>
<tr>
<td></td>
<td>Of course, this is a poetic notion, but we can use such a poetic notion as a signifier.</td>
</tr>
</tbody>
</table>

Episode-2: Let's think thoroughly according to collage!

What are signifiers, written letters?

Here I am mentioning only physical elements in Blacksburg in order to explain signifiers constituting my project. However, we have to be careful to say that signifiers are physical forms.

In ancient time, people thought there was “absolute significance”, and “signifiers” represented that significance. However, in our contemporary thinking, significance and signifier are becoming very relative concepts. Namely, one is a signifier for some significance and, at the same time, that is significance about other signifiers. There are always two faces: everything is simultaneously signifier and significance, even the “absolute significance” that ancient people believed in. Contemporary philosophers think that, because nothing can explain itself, there cannot be any “absolute significance”. Moreover, signifiers influence significance as well as vice versa.

Thus, intangible concepts are also kinds of signifiers, written letters in some cases. Namely, collage is not just about visual images, but, generally speaking, it is a way of thinking.
A building that is built in a town is necessarily related to several circumstances that are poetic as well as political. Thus, it cannot be defined by just one name; by this definition it is a collaged being.
The building location was decided according to the studies about the written letters of Blacksburg, namely, its map studies.

As approaching from highway 460, we can well see the panorama of the university, the center of Blacksburg.
The drill field is the most ceremonial place of Blacksburg and Virginia Tech. The axis of the drill field is poetically, not politically, functional. In the relationship with the axis, my project becomes "the wall of the town".

"The wall of the town" is an analogy between a home and a town. That is, my project poetically reminds us of a _human town_ in relationship with the axis of the drill field.

The residents in Blacksburg will, sometimes and somewhere, read my project as a wall. Such an experience will perhaps give the residents the notion that they are living in "their" _town_ having a poetic boundary.
In the relationship with the highway, my project is not "the wall of the town" any more. Along the highway, "linear streets" are woven with one another. Such woven "linear streets" and the patterns of louvers emphasize "flows" of the highway.
From the outside of the threshold:

From the outskirts of Blacksburg, the project looks like the weaving of linear elements.
As "streets in the air", the linear elements say, "Here is the highway, the threshold of Blacksburg".

This is not a chimney, but a elevator.
Interweaving of "linear streets":

Two layers of linear streets are interwoven to make a continuous flow. The louvers, as "skins" of the building, have different characters, according to the different contexts toward which each louver faces.

Facing Virginia Tech:
Glass louvers form an urban scale wall of glass, while, in the building scale, they serve as an enclosure of space.

Its dynamic openings are the result of the partial shape of dynamic linear masses. Namely, partial images, sometimes, have different effects from their whole figure.

Facing the highway 460:
Aluminum louvers, facing southwest, are shading elements. The linear shapes of the louver emphasize "flows" of the highway.
Promenade in the air:

As the result of interweaving of two linear masses, there is a continuous and intertwined “sky promenade”, 530m (1740ft) long. Those who are tired of driving can stroll for relaxation in the sky promenade viewing the Blacksburg panorama.
Panorama of Blacksburg: The threshold of perceiving

A highway rest area is like an airport. Namely, those facilities are kinds of thresholds connecting different regions. As transportation technologies develop, the traveling speed is increasingly distant to what is typically covered by a human scale. During one night of sleeping, you can go to another continent without any notion of distance. Just as in an elevator in which you are isolated from the physical awareness of movement, only digital screens can show your location and the speed you are moving. Highway facilities and airports are the places, or thresholds, at which we return to “human speed”. At that place, we perceive where we are with our sense, without needing (digital) technologies.

In my project, visitors can see the panorama of Blacksburg and Virginia Tech. That experience gives people a hint of where they are. Then, Blacksburg becomes one of the experiences they perceive in person, differently from other towns which they just have passed.
The passage that is placed toward Blacksburg makes the panorama of Blacksburg prominent.

The passage also offers people a shopping area those who want to enjoy shopping.
Two in one: "Sky" and "Ground"
The base section is related to the conditions of ground and near contexts.
It is a reinforced concrete structure, which is solid. However, the upper part belongs to sky and is related to far contexts. That part is a steel structure, which is light.

While the base physically connects the building with surrounding contexts, the upper part connects the building with contexts in visual ways. Consequently, this building has different relationships with contexts according to different distances.
Elements in the building:

Every element in the building can be “interpreted” in several ways. It is a type of collage that is made from political programs, poetic programs, and images.

It is important to consider political and poetic programs as signifiers for collage in architecture because architecture is an art of having programs that are obligated to be performed.
Collage of grass:

The grass located along the north side will grow very slow, but the grass along the south side will be overgrown. By using movable grass panels, we can control the growth. By changing the locations of the grass panels, we can get some unforeseen patterns.

That is, sun-directions and the growing speed of grasses become “materials” for collaged patterns.
Multi-function elements:
- Ivy towers or stools
- Lighting towers which wear ivy skins
- Lighting boxes
- Box shape shops
- Air conditioner diffuser

In our house, furniture always has multi-functions, that is, in a signifier there are several significances. For example, a chair is an apparatus to sit on, and, at the same time, it is an element to decorate the space that the chair occupies. Namely, it has two aspects of functions: political and poetic.

Like the example of a chair, boxes that are scattered around the interior space become patterns to define the character of the space: poetic aspects. In addition, every box also has other multi-functions besides making the pattern: political aspects.
Multi-function elements-1 : Ivy towers

Outside:
The ivy towers make an artificial grove in the air. Thus, visitors can enjoy plants in the building, bringing nature to the inside the boundary of the building. At night, the ivy towers become lighting towers. The green leaves would filter the light, from inside of its steel frame, making "greenish" mood.

Inside:
In order to minimize the amount of soil for ivies, small soil boxes just for ivy are extruded. These extruded boxes become lighting boxes in the interior space. Also water is drained from the extruded boxes.
Multi-function elements-2 : Elevator

-Political function :
The main elevator of this project is constituted by a (brick) cylinder and a (concrete) rectangular box. The brick cylinder is the room for an elevator, and the concrete box is a structure to support the elevator. The space between the cylinder and box is used for building equipment like plumbing and air ducts.

-Poetic function :
The main elevator is the only vertical element in this project, while other things are horizontal. The brick cylinder for the elevator becomes a collage element reminding us of the chimney of Blacksburg. That implies this building has strong relationships with the chimney that is the visual center of Blacksburg.

The materiality of the brick cylinder is almost the same as that of the Blacksburg chimney. Both are vertical cylinders which are made by bricks. Thus, although both have politically different functions, they still have poetically similar functions.

And then, what makes us to imagine a chimney from a "vertical brick cylinder"?
Multi-function elements-3: Billboards

In a commercial building, signs are a necessary element. Because of the high-speed of a highway, billboards become one of the prominent elements in a highway facility. In this project also, signs are located at the most noticeable place.

In addition to functions as billboards from the highway, the panels have different functions on a smaller scale. Their arrangement emphasizes and defines a spatial direction.
Summary of collage elements:

- The project is located according to the result of the studies about written letters of Blacksburg.
- The project is the threshold showing the expansion of the town.
- The project is "the wall of the town". The wall consequently refers to the chimney as the center of the town. Poetic notions become *signifiers* to be collaged into the building.
- The project visually introduces Blacksburg, the local context, to travellers: a threshold of perceiving. Local contexts are collaged into the project.
- The opening of the glass wall is the result of the partial shapes of dynamic linear masses.
- The two facades of the building are different according to the surrounding contexts.
- The building is vertically divided into two parts: solid ground and light upper part. The ground part mainly functions on the scale of near contexts, and the upper part mainly functions on the scale of distant contexts.
- The facade facing the highway is an abstract of the flows of the highway.
- Furniture in the building has poetic functions as well as political functions.
- The chimney is collaged into the building complex as a political element: the main elevator. It is also a poetic reference to the Blacksburg chimney and to the metaphorical center of a home.
- Grass becomes collaged pattern influenced by sun-directions and the speed of growth.
- Inside space and outside space of the building are intermingled.

Collage is like the play of children enjoying "broken pieces" (*written letters*) while finding "new functions" for the "broken pieces". Everything around the children would be a very good material to make something "fun". They will find material from "trash" whose original significance has died already. However, the "trash" will be revived by new interpretations.
Appendix: Building drawings

As approaching from 460-highway, we can well see the panorama of VT (the center of Blacksburg).
Storage for surrounding farms

Offices

Section - "A"

Section facing the university

Section facing the highway

Passage for the panorama of Blacksburg

Aluminium louver

Shopping module

Air-duct

Glass-louver

55
The interweaving of building masses and space
The interconnecting of outside and inside
Plan- "1"

Plan- "2"

Plan- "3"

Storage for surrounding farms

Toward the university

Toward the highway
Storage for surrounding farms

Mechanical room

Offices

Plan- "1"

Plan- "2"
Storage for surrounding farms

Ground (storage) level
Bibliography

The Ten Books on Architecture. Vitruvius
The Four Elements of Architecture. Gottfried Semper
Toward a New Architecture. Le Corbusier
Collage City. Colin Rowe and Fred Koetter
The Architecture of the City. Aldo Rossi
Complexity and Contradiction in Architecture. Robert Venturi
Learning from Las Vegas
Robert Venturi, Denise Scott Brown, Steven Izenour
S.M.L.XL. Rem Koolhaas
Elronquis 86-MVRDV
UN STUDIO-UN FOLD. Ben Van Berkel and Caroline Bos
The Order of Things: An Archaeology of Human Sciences
Michel Foucault
The Order of Discourse (Korean translation)
Michel Foucault
Simualtion (Korean translation)
Jean Baudrillard
Difference and Repetition (Korean translation)
Gilles Deleuze
The Fold: Leibniz and the Baroque (Korean translation)
Gilles Deleuze
Credits (images)

Unless otherwise noted images are reproductions of drawings, photographs, or renderings by the author.

1. Aldo Rossi, the Architecture of the City, 89 page
2. www.nps.gov
3. Photographed by Kevin Connors
4. www.rtouch.com
5. Rem Koolhaas, S.M.L.XL, 893 page
6. Rem Koolhaas, Content, cover image
7. Rem Koolhaas, Content, 89 page
8. Robert Venturi, Complexity and Contradiction in Architecture, cover image
9. Colin Rowe and Fred Koetter, Collage City, cover image
10. Colin Rowe and Fred Koetter, Collage City, 138 page
12. Robber M Murdock, Jhon evans collage, 83page
13. Scott Bodenheimer, Scott Bodenheimer’s portfolio
14. Edited by the museum jean tinguely basel, Duchamp, 91page
15. Aldo Rossi, the Architecture of the City, 89 page
17. Colin Rowe and Fred Koetter, Collage City, 152 page
18. www.bofill.com
I dedicate this thesis to my family, my mother and sisters giving the endless love and support through my life, and my father who is in heaven.

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