SKATER CONSCIOUS

Request for Approval of Project Research Book
Presented to:

Jeffrey Collins
and to the
Faculty of the Department of Architecture
College of Architecture and Construction Management

By

Jeremy Bowen

In partial fulfillment of the requirements for the Degree of
Bachelor of Architecture
Kennesaw State University
Marietta, Georgia
Spring Semester
May 3, 2019

Thesis Project Title:
Skater Conscious
Thesis Collaborative 2018 - 2019
Student’s Full Name:
Jeremy Bowen
Thesis Advisor:
Jeffrey Collins
Thesis Coordinator:
Elizabeth Martin-Malikian
Department Chair:
Dr. Anthony Rizzuto, PhD

Thesis Summary:
Skateboarding is made possible by the built environment, but without architecture necessarily being designed for its occurrence. Without knowing it, designers have created environments that facilitate a social and artistic culture to thrive. And it has happened – for the most part – in leftover pieces of landscape, infrastructure, and urban settings. Skaters move through and experience space in unique ways. While their boards enable the experience, there is more; most spaces are not designed for them – and some are even designed to keep them out – but, nevertheless, skaters persevere through invention and creativity. Skaters actively search for interesting spaces or even modify a site in order to enhance their experience. Over time, skateboarders develop a new way of thinking: “skater conscious.” They see the seemingly mundane cityscape and imagine and embody another world. Rather than space remaining static, it becomes constantly reinterpreted by skater’s interaction with physical forms and the projected use onto the environment. What can that mean for architecture and the potential of skater and non-skater interaction?

This project proposes that a deeper understanding of skater’s methods of interaction with their physical surroundings will aid in the production of architectural interventions that enhance the built environment for both skaters and non-skaters.
“While the old flatlanders flounder in their parks, the boys are going upside down in the sewers”
(Borden I, Skateboarding, Space and the City)
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1 INTRODUCTION

1.1 Skater Conscious

Abstract:
Skateboarding is a unique activity that changes your movement, speed, visualization, and experience of the space around you. Although, one’s personal experience is constantly evolving due to change in skill, style, material, objects, terrain, environment, and amount of speed.

As a designer, I continue to be fascinated with the relationship between skating and architecture. Skateboarding is made possible by the built environment, but without architecture necessarily being designed for its occurrence. Without knowing it, designers have created environments that facilitate, social and subversive culture to thrive. This has happened – for the most part – in leftover pieces of landscape, infrastructure, and urban settings.

Skaters move through and experience space in unique ways where their boards enable their experience. There is more to space that is not designed for them – and some are even designed to keep them out – rather, skaters experiment through invention and creativity.

Skate spots seek the spaces in unused places or even modify an area in order to enhance their experience. Over time, skate spots develop a way of thinking or ‘skater conscious.’ They build upon the seemingly mundane cityscape and imagine and embody another world. Non-skaters do not often share this resourcefulness or dynamic movement, physical engagement or spatial exploration.

This project proposes that a deeper understanding of skater’s methods of interaction with their physical surroundings will aid in the production of architectural interventions that enhance the built environment for both skaters and non-skaters. In a way, skaters are architects; planning experience, developing form, recording their work.

Research will use similar methods undertaken by skaters themselves; maps and surveys will record existing skate spots and routes; time lapse photography will capture motion and form; videos will document levels of speed, trip, scene change, and context. Computational analyses of existing skate and non-skate spaces will be used to test and imagine new expressive forms and novel spatial experiences. A series of design protocols will then be developed to define the parameters necessary to make space work for the skater’s design and both groups.

As skaters investigate and produce themselves within unused spaces, the research will further focus on revitalizing unused infrastructure. Work will specifically target water control systems, a type of infrastructure that is often associated with ugly, yet lack of design development; such spaces are ripe for proposals for new, multipurpose, and culturally-rich spaces for both skaters and non-skaters to interact.

Skater Conscious: A way of thinking, skaters build upon the seemingly mundane cityscape and imagine and embody another world. Rather than space remaining static, if becomes a constantly changing landscape that is projected upon the environment. What can that mean for architecture and the potential of skaters and non-skaters interaction?
1.2 | MODIFYING FORMS AND SURFACES

Skaters have proven that almost any object is skateable or can become skateable when the right modifications are made. These modifications can be temporary, but they are constructed with semi-permanent materials to hold up against weather and wear. Concrete is the most common material used by skaters to modify the world around them. It is smooth enough to skate on, tough enough to take impact, and fluid enough to create skateable terrains. These additions to urban environments can be very small or very large additions. Fig. 5 is a skatepark in Portland, Oregon named Burnside Skatepark. It was originally built by the skate community and after gaining popularity, the city approved it as a public skatepark.

Every object that can be interacted with by a skateboarder will fall into one of these categories: constructed objects, found objects, or modified objects. These categories are all interrelated as particular objects within skateparks have been built based off of found objects and modified objects. Modified objects tend to be created from found objects as well. Each category of object can be found within each “style” of skating: vert, street, or bowl.

1.2.1 Constructed Objects
Constructed objects are designed for the purpose of skating. These objects were either designed based off the movements of the skater or they were based off of an existing object that had become appropriated by skaters. Skateparks as a whole can be considered a constructed object, but these can also exist as individual objects that make up skateparks or singular objects used by an individual.

1.2.2 Found Objects
Found objects are categorized by their design not originally being for skateboarding. These objects are ones that skaters would usually use to perform on. There is a quite a long list of these objects and each one can be used for multiple purposes, including its original use.

1.2.3 Modified Objects
Modified objects start out as a found object, but they may have characteristics of their object that limit their ability to function well enough to be used. Modification is then necessary to create a better experience. These modification can change the object completely (bending a pole) or they can be a small addition to a larger object (putting concrete to a wall).

1.3 | SPECIALIZED OBJECTS

1.3.1 Found Objects

- Lane Divider
- Loading Dock
- Stair & Handrail
1.3.2 Constructed Objects

Quarter Pipe  
Half Pipe  
Mega Ramp

1.3.3 Modified Objects

Quarter Pipe  
Half Pipe  
Mega Ramp
1.4 | SKATER DOCUMENTATION

1.5 | LITERATURE REVIEW

1.5.1 Henri Lefebvre

The Production of Space

For production to exist, there must be a goal or objective in view. Spatial elements and the body, which include materials and how they move, work together to move towards the objective. There is no way to measure production with a constant factor because this is a process of synchronicity, a constant change between activities that allow part of production.

Since all events are interrelated, space is not a product of production, rather it is the origin and source of activity and the medium of production. Production is seen as the activity which who use their hands and tools, who adjust and combine their gestures and direct their energies as a function of specific tasks.” (Lefebvre 79-80)

Production: The goal of Lefebvre’s theory of space was to encompass physical space, mental or metaphoric space, and social space as to reveal the social relations and modes of production within it. Social space is the lived, perceived, and conceived. This type of space makes up most societies. For production to exist, there must be a goal or objective in view. Spatial elements and the body, which include materials and how they move, work together to move towards the objective. There is no way to measure production with a constant factor because this is a process of synchronicity, a constant change between activities that allow part of production.

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Photography is used mostly in magazines or advertising. It has the advantage over film of being able to freeze movement and consists of multiple movement which are shown frame by frame. Since all events are interrelated, space is not a product of production, rather it is the origin and source of activity and the medium of production. Production is seen as the activity which who use their hands and tools, who adjust and combine their gestures and direct their energies as a function of specific tasks.” (Lefebvre 79-80)

Sequence Photography

Sequence photography is a movement captured without video. Typically, the skater will be performing a specific trick that consists of multiple movement which are shown frame by frame. Since all events are interrelated, space is not a product of production, rather it is the origin and source of activity and the medium of production. Production is seen as the activity which who use their hands and tools, who adjust and combine their gestures and direct their energies as a function of specific tasks.” (Lefebvre 79-80)

Lefebvre introduces a contrary hypothesis where “container could impinge on each other. Since all events are interrelated, space is not a product of production, rather it is the origin and source of activity and the medium of production. Production is seen as the activity which who use their hands and tools, who adjust and combine their gestures and direct their energies as a function of specific tasks.” (Lefebvre 79-80)
The selection of precedents was based on if the structure could be used by both skaters and non-skaters, but also if the form was not purely sculptural. With this criteria, the precedents chosen would be complex in how their form created functionality and how multiple types of groups could use them. Since analysis of the buildings would contribute to the direction the thesis, looking at projects of different scales and typology was important.

The four selected provide a good range of scale and formal qualities. They all share an architectural characteristic where surfaces flow between horizontal, diagonal, and vertical. Each precedent manipulates surfaces to create a different function for both skaters and non-skaters.

Looking at the buildings, I learned by example how a simple form can contain multiple functions and activities to occur in, on, inside, etc. I saw that they could be pushed further to provide even more interesting formal and spatial experiences.

Bernard Tschumi
Movement as Generator

Lebbeus Woods
Assorted Work

Martin Summers Studio Projects
Discipline Continuity

1.6 | INSPIRATIONAL PROJECTS

Bernard Tschumi
Movement as Generator

Lebbeus Woods
Assorted Work

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2 | PRECEDENT BUILDINGS

The selection of precedents was based on if the structure could be used by both skaters and non-skaters, but also if the form was not purely sculptural. With this criteria, the precedents chosen would be complex in how their form created functionality and how multiple types of groups could use them. Since analysis of the buildings would contribute to the direction the thesis, looking at projects of different scales and typology was important.

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2.1 TWA TERMINAL
Eero Saarinen
Queens, NY
1963

The forms in this airport flow from wall, to stair, ceiling, to floor.
The function of the forms is primarily circulation and structure
and for this reason the surfaces become unskateable.

2.2 BasketBar
NL Architects
Netherlands
2003

This site was interesting for how the forms were designed not
only for skating but also for wheelchair ramps, seating, and
access to the sunken cafe. It was one of the few precedents
that purposefully tried to combine multiple user groups in one
space.
2.3 Amos Rex
JKMM Architects
Queens, NY
1963

The site consisted of a series of extrusions on the roof that acted as light wells for the museum below. Although these forms looked skateable, the texture of the bricks made them unable to skate. They were designed to be sat on or walked on, not skated.

2.4 LA River
N/A
Los Angeles
Varies

This piece of water control infrastructure is also well known for being used by skateboarders and other user groups. The drainage mainly flows through industrial districts which make it perfect for skateboards and other use for alternative purposes.
The analysis tool used was a script from Grasshopper which used a component called “BlendC,” which “creates a blend curve between two curves.” The curve bulge was determined from numeric data input that would have different effects depending on the orientation of the curve and if the value was positive or negative.

The curves were used to explore the processes, limits, and protocols for generating surfaces. Curves were generated by picking lines from the sectional studies of the precedent buildings. The limit was determined from numeric data input that would have different effects depending on the orientation of the curve and if the value was positive or negative. It was important that the analysis tool used data input so numeric limits could be set for all curves to follow.

**GOAL:**

The goal was to imagine new formal and spatial conditions by manipulating an existing building to have another use or another function than it has not been designed for.

**FINDINGS:**

The analysis was generated within existing sections created from different types of spatial experiences. Some were impossible or undesirable to inhabit, while others were full of potential for both skaters and non-skaters. Identifying conditions that were too extreme or restricting were helpful for understanding the limits of both groups.
The height is an obstacle while the depth is unusable. The vertical slope is too steep and the depth of the curve is too deep. The space created becomes semi-enclose and difficult to get out of.
3.3.2 BasketBar

The curve is not dramatic enough to create any effect. Curve pulls back too far and creates too small of a space. Space created is too small to be occupied or used. The angles created are too acute to be occupied.
3.3 SPLINE ANALYSIS SERIES

3.3.3 Amos Rex Museum

The vertical of the curve becomes a wall. The depth creates makes the space inescapable. The small dip breaks the continuity of the curve. The angle the curve pulls back is too acute.
3.3.4 LA River

The curve creates an overhand that breaks the continuous interaction.
4 | DEVELOPING SURFACES

4.1 Physical Models
4 | DEVELOPING SURFACES

4.2 Poster

4.3 Body Relationships
5.1 Site Dispersion

Existing Topography

Topography Boundary

Divide Boundary

Reduce Grid

Project Center Points

Distribute Follies

Rotate Follies

Scale Follies
5.2 Folly Development

- Boundary
- Grid
- Extrude Line Grid
- Reduce Lines
- Scale Lines
- Interpret Curves
- Create Lines
- Loft Lines
- Add Planes
- Merge Grid, Surfaces, and Planes
The bellwood quarry is located in west Atlanta near the Bankhead Marta station. There are plans to convert the empty field into Westside park which, when completed, will be the largest park in Atlanta at 280 acres. The proposed project is basically a series of paths that lead people through landscaped fields of grass.

This site was chosen as a case study because the proposed intervention could be seen as a challenge for what would be built there in the future. Arguably, the dispersed forms on the site would create more interesting engagement for the public, the expansion of the site would allow different levels of density of the public and parks to make immersive environment than what is planned to be built in phase 1 of Westside Park.
5.3.1 Sections
This site is interesting because it has previously been repurposed by skateboarders to create their own concrete skatepark. However, the skatepark existed illegally and eventually was shut down.

Unlike the Bellwood Quarry, this site has some boundaries that had to be addressed. The boundaries were seen as input information which the forms had to respond to. There was the height of the freeway above and the columns that supported the highway. Responding to these conditions caused the forms to be oriented in a purposeful way rather than just generated onto the site.

The site intervention was seen as a way to respond to the needs of the future community that would live in this area. Currently, there are no public parks that the residents in the surrounding apartments could take advantage of. The project also would provide bridges to get people safely across the streets.

5.4 Interstate 85
The site is located at Piedmont Park along a drainage ditch that connects to Clear Creek. The concrete inside the drainage ditch is currently used by skateboarders for its sloped surfaces and ledges. The Beltline runs directly parallel to the site which would bring in people from other areas of the park. The topography of rises and falls with the slopes required to direct the water. This provides an interesting displacement of the forms where changes of elevation become part of the experience.

Even though the Beltline continues this far into the park, there is no current development of this area. The site intervention would diversify the kind of programs occur within Piedmont Park as currently it is mostly used for walking, running, and biking.

5.5 Piedmont Park
5.5.1 Sections
6.1 Model Series

Each model started as two intersected forms and several copies of each individual form that made up the intersection. These were combined with the idea of creating enclosure that could be carved from a massing and added thickness. As more forms were added to the assemblage, certain surfaces cleaned up or the landscape to add a subtractive element to the models. Sheet metal was used as a way to blend the landscape back into the forms so they would be one with the topography. Remnants of the structural grid were punctured through to add another level of complexity.

The goals of the models were to quickly imagine ways that the forms could create spatial conditions and glitch themselves into creating new formal conditions that were not seen in the digital models.
6.2 Model 1

To better understand the potential within the physical models, they were brought back into the digital to be analyzed with the parametric curve tool. The tool was used to imagine further modifications of the forms in relation to the human scale. To understand the spatiality of the forms, sections were generated to represent what interior space could look like. Different activities and functions were represented with scale figures.

Carving forms deeper creates potential for skateable surfaces.

Layering different forms together creates different levels of interaction.

The forms can be utilized both underneath & on top of.
Ramps can be created that provide access to the inside of the forms while the roof can be occupied by another group. Carving within the inside can create slopes for biking/skating, flat spaces for sitting or standing, or large coverings. Gentle slopes can be used for running, walking, or seating. Adjusting the angle of the surface will determine which group can interact with it.
Platforms extending out of a central void can create elevated walking paths while beneath them create converging.

Carving large interior spaces can create spaces for gathering.

Carved spaces can open up to the outside in a singular closed space.
Constant slope allows activities to switch as you move through a form. Carving deeper produces a steeper slope which will affect activities occurring on the surface.
The slope of the forms can create seating and continue into the landscape to create a gathering space.

Observation platforms can be created by extending surfaces above carved landscape.

Open, inter-connected spaces inside the forms encourage exploration.
6.7 Sectional Study
7 | SITE INTERVENTION

7.1 Aerial Views
7.2 Perspectives
7.3 Cross-Sections
“Modifying typical architectural forms and design processes towards the development of new spatial experiences”
The project began with a fascination for how skateboarders interacted with urban architecture. It investigated the potential for how architects could adopt the way skateboarders think, skater conscious, into the design process for urban space. The site intervention was designed to produce areas of appropriation, participation, and collision. The project allowed the architecture to break free from typical design processes and let the user define their experience in a space crafted to have endless potential. To further the complexity of the design, future work could address greenery, material, texture, lighting, and analysis for how speed relates to experience.
Sequence photography is how movement is captured without video. Typically the skater will be able to freeze movement and allows more creative freedom with lens and light manipulation.

Over time, skateboarders develop a new way of thinking; a “skater conscious.” Non-skaters actively search for interesting spaces or even modify a site in order to enhance their physical surroundings will aid in the production of architectural interventions that enhance the build upon the seemingly mundane cityscape and imagine and embody another world. Non-skaters do not often share this resourcefulness; nor the dynamic movement, physical experience.

What can that mean for architecture and the potential of skater and non-skater interaction? Through an everyday practice - neither consciously theorized nor programmed, skateboarding is made possible by the built environment, but without architecture necessarily being designed for its occurrence. Without knowing it, designers reinterpreted by skater’s interaction with physical forms and their projected use onto the environment. Skateboarding is made possible by the built environment, but without architecture. What can that mean for architecture and the potential of skater and non-skater interaction?

HENRI LEFEBVRE

Production of Space

Borden states “Skateboarding should be considered as a lived concept, one which both draws occasionally on analytical thought. Through an everyday practice - neither consciously theorized nor programmed, skateboarding is made possible by the built environment, but without architecture necessarily being designed for its occurrence. Without knowing it, designers reinterpreted by skater’s interaction with physical forms and their projected use onto the environment. Skateboarding is made possible by the built environment, but without architecture. What can that mean for architecture and the potential of skater and non-skater interaction?

Philosopher who wrote many books about his theories on the production of social space and the city - Architecture and the Body. Borden, a historian, begins the book by on the writings of Henri Lefebvre to support its points. lefebvre was a French Marxist on the development of new architectural forms and that also helped to shape this thesis. Borden then develops his own argument about skateboarding and the city, discussing and the potential of skater and non-skater interaction.

In its own measure, re-editing it as a series of surfaces, textures and micro-objects” (Borden 214) circumnstances and to extract what you want and to discard the rest, and so reproduces architecture hold anything, this would create a ‘logic of separation’ that space is not a pre-existing void (container) that can and orienting space.

This is the space crated by scientists, urbansists, or social engineers who decide what is lived, perceived, planned or logically conceived.

The goal of Lefebvre’s theory of space was to encompass physical space, mental or metaphoric space, and social space as to reveal the social relations and modes of production within it. 5 The curves were used to explore the processes, limits, and protocols for generating curve changes as it approaches its maximum and minimum.

ANALYSIS:

Ability to reject Analog Visual Time

The vertical slope is too steep while the depth is unusable. The height is an obstacle. The small dip breaks the space inescapable. The angles created are too big to be occupied or used. Space created is too small to be occupied or used.

*Notes:*

**Res.:**

*HENRI LEFEBVRE*

**“Modifying typical...

**ANALYSIS:**

This line would be used to limit where the generated curves will talk briefly about each author and pull out the key points that Borden builds upon each group.

**ANALYSIS:**

*HENRI LEFEBVRE*

**“Modifying typical...
REFERENCES


“TransWorld SKATEboarding Videos Archives.” TransWorld SKATEboarding, Transworld SKATEboarding, 2019, skateboarding.transworld.net/video-archives/.


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