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Landscapes of Transformation

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ABSTRACT

This thesis aims to examine the cultural effect of transformation through the lens of procedural
techniques applied to the human body and architecture. The body and architecture both operate as
landscapes of transformation. Technological advancement has increasingly enabled cosmetic sur-
gery and contemporary architectural techniques to encourage a cultural aesthetic of transformation.
In both the human body and architecture, transformation offers a physical and psychological effect.

As a cultural enterprise, how can architecture both benefit and contribute by engaging the cultural
caprice of transformation?

How can architectural procedural techniques define an urban project which engages the consumption
of transformation?

This thesis proposes a response to the cultural effect of transformation and is developed through the
architectural process of testing procedural techniques. The thesis also responds to the notion of gra-
dient as a residual witness of transformation, revealing the techniques by which the transformation
was brought about. The first part of this thesis engages the idea that the human body is a landscape
of transformation as cosmetic procedures continue to redefine the operation of its interiority. The
second part of the thesis presents Central Park as a mechanical artifice and an operative site for the
procedural techniques of transformation.

Thesis Supervisor: Mark Goulthorpe
Associate Professor of Architecture
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Mark Goulthorpe, for the unrestrained intensity of your intellect. Meejin Yoon, for the acutely incisive critique. Saeed Arida, for your patience for precision and your generosity. Neri Oxman, for your wildly enthusiastic creativity. Jeff Anderson, Becca Edson, and Louie Paparella for the continuous support and advice. Suzan Ambs, to whom I dedicate my every accomplishment, for the opportunity.
1. DEGREES OF INTERIORITY

Background

Deconstructing Cosmetic Procedure

Site

Formal Studies

2. FINDING TECHNIQUE

Fields of Absorption: Procedural Studies

Project Images

Conclusions
Background: Transformation as Commodity

Consumerist society and the evolution of the city seem to have emerged hand-in-hand sometime around the 16th century: the city and consumer ethic acting as catalysts for each other. As the 18th century world of goods expanded, social competition increased and generated a hierarchical society structured upon the power to consume. Consumers became targets and commodities were positioned to influence their desires and define their preferences. Consequent products of this period such as new building forms and home furnishings began to transform social interaction, resulting in a new sense of privacy. By the mid-19th century new material goods, technology, and mass production further increased the proliferation of objects. At the Paris Exposition of 1900 merchandising sought to appeal to the fantasies of the consumer. Modernity saw the shift in commodity consumption from use value to exchange value.

Modes of commodity consumption are implicitly infrastructural components of desire and of the city. Glamorization of capitalism in the city celebrates and encourages consumer culture in its space and surfaces. Architecture has become a device for considering the glamorization of consumption, as a means of satisfying desire. Cities encourage the buying of an ideology of consumption not just commodities themselves, arguing for consumption as something refined and fashionable.

New spaces of consumerism, arcades, boulevards, and department stores defined the urban condition of consumer culture. People are now able to physically, literally embody the commodity by the transformation of themselves through cosmetic procedures.

Catering to the culture of the commodity should not necessitate abandoning the greater values of architectural practice, namely invention, innovation, space-making and material use. Optimization and development in the practice of architecture mandates a hyper-abundance of new ideas. This relies on individual, original contribution. When an architectural fad emerges, a certain popular image is established. The consequent burden on architects is to produce more dazzling spectacles to evade inferiority. Invention is forsaken for the contrivance of similitude, to be more comparable to something to compete with it. This inferiority complex is what stimulates the popularity of images. The consequence is a more universal, objective culture. Transformation allows conformity.

By offering the human body as an example, the thesis aims to deconstruct the cultural effect of transformation.
Flayed Man Holding a Dagger and His Skin
Jaun Valverde de Amusco, Anatomia del corpo Humano, 1560
Revealing the Act of the Artifice

This thesis aims to examine the cultural effect of transformation through the lens of procedural techniques applied to the human body and architecture. The body and architecture both operate as landscapes of transformation. Technological advancement has increasingly enabled cosmetic surgery and contemporary architectural techniques to encourage a cultural aesthetic of transformation. In both the human body and architecture, transformation offers a physical and psychological effect.

Taking inspiration from Jaun Valverde’s Flayed Man, the thesis asks:

How can architecture reveal its skin and dagger? How can the artifice be experienced while revealing itself?

The cultural enterprise of architecture is undergoing a transformation as it is increasingly called upon to be a social intensifier. Architecture and the human body are called upon to perform differently as developing digital and surgical techniques permit. This is the cultural aesthetic of seduction enabled by transformation. There is a perversity in the degree to which new technique enables capricious-ness.

The thesis attempts to analyze strategies of transformation and develop procedural effects to generate an architecture which reveal its artifice. While a surgeon is given a condition to reconstruct, the architect is responsible for construction through his own process.
<table>
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<th>Procedural Type</th>
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*Note: The table segments are not fully visible in the provided image.*
### The Taxonomy of Transformations

This Matrix is constructed as a means of finding relationships between procedure types. Categorized by operative site (body part), the procedures are evaluated in terms of their effect on the body, their duration, and the spatial conditions in which they are performed. Most importantly, the matrix attempts to define the degree to which each procedure affects the interior of the body. Interiority must inherently be defined by some datum. In this case the datum is the skin. Rather than a boundary, THE SKIN IS A RECONFIGURABLE FIELD OF TRANSFORMATION and a datum that is able to continually able to be redefined by the procedural effect. Each procedure is classified as follows:

- **plastic**: re-forming
- **implantation**: insertion/ embedding
- **excision**: removal
- **superficial**: non-invasive/ topical

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<th>type</th>
<th>frequency</th>
<th>instruments</th>
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<td>high</td>
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Information taken from
The American Society of Plastic Surgeons
The Matrix Mapped as Experience

Also catalogued by the matrix are procedure duration, anesthesia type, pain intensity, asepticism level, and room type. These are mapped out over time (above) to understand the intensity of the conditions of each procedure. Relationships between conditions begin to emerge. For example, procedures requiring more asepticism tend to be longer in duration and more painful. These relationships begin to suggest the codependencies between the experiential conditions of a procedure and the degree with which it violates the interiority of the body. Programmatic components can be defined by the intensity of interiority of the procedure.

The intention of the program is to offer physical transformation as a series of procedures. The diagram on the right suggests hypothetical clients and a sample procedure series mapped over time.
redefinition of interior / exterior

datum / boundary

variable condition

variable datum
The nature of the cosmetic procedures suggests that the skin is a landscape of transformation. Rather than operating simply as a container for the interior of the body, the skin is a transformable datum that can continually redefine interiority. The diagram (above) groups the four types of procedures according to their interiority. In effect, these groups define three types of programmatic elements, the procedural spaces.
Cosmetic procedures can be conventionally distinguished as either invasive, non-invasive, or topical. The diagram on the left examines 3 types of conventional program organization to determine the spacial interiority of the procedure rooms with relationship to its support space. The plan diagrams (from left) refer to a surgery department, a physician office, and a salon. The more invasive procedures require more space and more support function.
organization of the 3 types of procedural spaces and their relative scale.
consciousness / size

- variable consciousness
- unconscious
- size [relative SF]

sub-groups

- treatment a
  - procedure
  - prep / recovery
- support b
  - staff
  - instruments
- reception c
  - waiting
  - consultation
site: location denoted on map (right)
Central Park: The Mechanical Artifice

Central Park was designed to be a landscape of desire, selling an image of naturalness, cleanliness, and escape. As the landscape of downtown Manhattan became increasingly industrialized, the social elite migrated north. They desired the society of city life without the filth and traffic of the city. Frederick Law Olmstead was appointed superintendent of Central Park in 1850. He also entered the design competition despite his lack of experience. His intention was to create a park that would refresh and renew the whole person: mind, body and soul. Over the following 17 years, the natural landscape was destroyed and recreated. Drainage systems were laid underground. The simulation of naturalness was created above. Ultimately, Central Park operates as an artifice in the fabric of the city, providing only the image of naturalness (Reed, 63).

Central Park has come about through the implementation of false naturalness. In this zone of artifice, mechanisms of exposure and concealment are constantly at play. Much of the park's landscape is under the cover of trees, producing a disorientation that the grid does not. Central Park's boundary is a harsh score between itself and the less contrived body of the city. This thesis proposes a revisiting of the implantation of artifice and the procedures that enable it.

By layering effects on the site, the thesis aims to achieve a series of experiences in the landscape, allowing circulation and the spaces of transformation to coexist.
The study series (left) demonstrate the idea of layered interiorities. Circulation and programmatic volumes are woven through the site suggesting both interaction and autonomy. Study model (above) suggests transparency as a device to generate layered interiority. Perforated opaque material operates as a field of absorption, defining degrees of penetration of light, movement, and views.
Lacerations in the Landscape: 2

In an attempt to more rigorously test techniques of transformation, this digital study demonstrates a set of procedural techniques applied uniformly to multiple components. The layered plane is divided into uniform components (top right). A combination of techniques is systematically applied and spatial conditions emerge.
Finding Technique

The process of the thesis engages parallels between architecture and surgical transformation to propose a procedural design technique. Cosmetic surgical procedures rely upon the subtle transformation of sameness. The process here presented examines the idea of gradient as this accumulation of relentlessness. The gradient between an original condition and its manipulation reveals this process of layered effect. Computation offers the necessary medium to exploit this gradient as the infinite number of subsets between two given conditions.

Whereas the surgeon employs his technique to transform the existing landscape of the body, the architect is responsible for establishing his own set of techniques to be deployed on a site. The following proposal is a series of tests to find a this set of techniques. The aim is a series of architectural experiences that bear witness to their own process.
Procedural Effects Study 01: Patterning

A variety of incision patterns (above) employ the effect of gradient on a surface. As fields of absorption for light, view, etc; the surface can then be manipulated to test the gradient of effects (right).
opening generated from the field

field of units

localized intensity of transformation
The following process is developed through a system of parametric fields of units. A neutral field (above) is transformable through the local application of effects to individual units. Transformation can be applied precisely to generate a desired intensity of porosity or absorption.
group a: unit shape transformation

SIZE DECREASE

SHAPE CHANGE

ROTATED

FIELD: NEUTRAL UNITS
TRANSFORMATIONS: UNIT SHAPE

EXPANDED RECTANGULAR

EXPANDED DIAMOND

ATTENUATED
DIRECTIONAL CONDENSATION

ALTERNATING CONDENSATION / DISPERSION

ALTERNATING UNIT SIZE

FIELD: NEUTRAL UNITS
TRANSFORMATIONS: UNIT ARRANGEMENT
GRADIENT STUDY 01

Frames demonstrate the emerging gradient that is generated as the combination of effects is applied.
variations of locally applied combinatorial effects

variations of gradient of effects
Fields of Absorption

These fields of absorption are applied to the project to generate openings for movement, view, and light. Programmatic volumes are organized along circulation paths and offer varying degrees of view for the public.
Fields of Absorption

These fields of absorption are applied to the project to generate openings for movement, view, and light. Programmatic volumes are organized along circulation paths and offer varying degrees of view for the public. The above diagram demonstrates movement of circulation through the site and the convergence and dispersion of circulation paths.
PLAN @ EL +15' / 1"=100"
Conclusions

The project follows from earlier studies as circulation paths drawn out along the site. This last iteration is generated from a system of procedures performed locally and in combination with each other to achieve an architectural experience which reveals its process. Incisions along the site designate a striated sequence. Each striation undergoes varying degrees of folding and rotation. The result is optimized to accommodate program: volume and circulation.

The project represents the attempt to develop a system of transforming procedural techniques and employ them to generate an architectural experience to reveal that effect.
Bibliography

CentralPark.com, www.centralpark.com
The American Society of Plastic Surgeons, www.plasticsurgery.org