ETHEREAL VOLATILITY WITHIN THE SPATIAL EXPERIENCE

Exploration Into the Fundamental Repercussions of Gravity Inherent in the Human Experience Within the Realm of Architecture

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SUBJECT
My interest in architecture is fundamentally rooted in the emotional, psychological, and behavioral responses to any kind of spatial experience. Gravity is inevitably an integral part of that experience, as it has always presented both limitations and opportunities from which we design to orchestrate the experiences within our architecture. I attempt to dismantle the subconscious understanding by which gravity enforces on the individual by trying to understand the direct relationships between the human and gravity, thus (hopefully) adding to our existing knowledge of how to design in the built environment.

PROGRAM/TYPOLGY: TWA Airport in New York, NY as well as surrounding landscape: SPACE STATION/ APPLIED RESEARCH FACILITY/ SPACE PLAYGROUND (open to the public)

TECTONIC/ STRUCTURAL/ CONSTRUCTION: Orchestrating an architectural series of systems which:
- exaggerate the accustomed gravitational force (perpendicular to the earth’s tangent at ~9.8 m/s)
- explore different gravitational forces to contrast the occupants traditional gravitational experience
- simulate a space/ spaces that negate a gravitational force altogether

Exploiting the Given Site
- geometric/ structural analysis to the design of the TWA Airport, creating grounds for placing certain types of alternate gravitation forces in navigational sequence
- the site being a series of airport terminals, vast swatches of land as well as relatively isolated bodies of water and islands surrounding it. The underwater experience is one of the closest ordinary experiences one has to escaping gravity and thus these bodies of water could possibly be utilized to explore that inclination.

SYSTEMS/ TECHNOLOGY:  
- analog models of different scales to compare/ contrast architecture under the force of gravity/ different gravitational forces
- Rhino/ Grasshopper/ Processing/ Galapagos to explore models of alternative gravity (and the negation of gravity completely)

SITE/ CONTEXT: Taking an architectural landmark of Saarinen’s Airport Terminal intimates a specific stimulus and response method of designing, where one is to acknowledge the important and intent of the architect and somehow to react to it in such a way that does not completely destroy the existing architecture, but simultaneously figure a way to give new life to the architecture itself. The site is incredibly interesting as it almost presents itself as an assembly of voids within the very dense civilization in New York City.

It is honestly difficult to state a critical stance within this thesis, due to the fact that I simply do not know enough yet. This thesis ultimately attempts to combine my interests in [cognitive/ behavioral] psychology, sociology, and architecture, and thus it is important to implement research within the regard of my thesis on all three different fields, working in parallel at at times intersecting, manner.

What is clear, however, is that gravity has more than merely physical effect, expanding to our psychological makeup and extending to how we behave on a sociological level. Humans have always had a fundamental desire to defy gravity, whether it was manifested in the creation of the airplane or in the pursuit of catapulting ourselves into space. This desire to escape one of the clearest physical limitations speaks greatly about the makeup of the human race.

I do hope, however, that my method reiterates the importance of human-centric [architectural] design. This does not necessarily mean only that we are to design for the ordinary occupant, but that ultimately architecture surpasses the mere intentions of an architect or group of designers, but ultimately presents an interpret for occupants to react to. Furthermore, the implementation of my Thesis research onto the TWA Airport site is representative of my desires to create an environmental that not only manifest my newly acquired information regarding gravity, but also to make those discoveries clear to the occupant via my redesign of the TWA Airport. I intend that through the course of the year I make clear that architects should constantly pursue a deeper understanding of the human being towards the built environment as the chasm of information regarding this is infinite.
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field overlaps
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field specifics
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timeline
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PRECEDENT

THE LOGIC OF SENSE || GILLES DELEUZE

THE FOLD: THE LEIBNIX AND THE BAROQUE || GILLES DELEUZE

FRANCIS BACON: THE LOGIC OF SENSATION || GILLES DELEUZE

METAMORPHOSIS || FRANZ KAFKA

THE SCIENCE OF SLEEP || MICHEL GONDRY

THE ARCHITECTURE OF ARTIFICIAL GRAVITY: THEORY, FORM, AND FUNCTION IN THE HIGH FRONTIER || THEODORE W. HALL

BLDG BLOG || GEOFF MANAUGH

STAR WHEEL HORIZON || DISCUSSION OF ‘HORIZON HOUSES’ LEbbeus WOODS

UPSIDE DOME: ARCHITECTURAL UNDERSTUDY || DISCUSSION OF ‘UPSIDE DOME’ GIS VAN VAERENBERGH

ACOUSTIC PLANETOLOGY || DISCUSSION OF THE ARTICLE OF SAME TITLE IN NEW SCIENTIST

GRAVITY 2.0 || GREGORY DAIGLE

GRAVITY, GROUPS, AND GOD || JOHN CACOPPO

GRAVITATIONAL AESTHETICS || JULIJONAS URBONAS

DANCING ON THE CEILING || KATHLEEN FORDE

STRUCTURAL INTEGRATION: GRAVITY, AND THE UNEXPLORED FACTOR IN A MORE HUMAN USE OF HUMAN BEINGS || IDA P. ROLF

PSYCHOLOGY AND ‘HUMAN NATURE’ || PETER ASHWORTH

THE HUMAN BRAIN IN SPACE: EUPHORIA AND THE ‘OVERVIEW EFFECT’ EXPERIENCED BY ASTRONAUTS || IAN O’NEILL

ANNOTATED

BIBLIOGRAPHY

none found as of yet