Inscrutable Places For Cyborgs

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INSCRUTABLE PLACES FOR CYBORGS

a thesis proposal
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SITUATE WITHIN THE DISCOURSE

More and more humans interface with digital devices to mediate their experiences with external information. This project seeks to explore the architectural implications of this trend as it reaches its logical conclusion in the cyborg mind. Although the project is positioned in the near future, architects practicing today will have to deal with the interaction between their architectural manifestations and the cyborg interface. This does not mean that this is a predictive project. We will be focusing on generating techniques which begin to explore the tools necessary in organizing and envisioning this world, while focusing less on the detailed inner workings of this environment.

What type of environment can mediate between these two worlds? Ultimately, the terms outlined above will be the background for an exercise in world building. By crafting a narrative, we can begin to highlight moments of friction between human visitor and cyborg citizen. Through a mix of conventional representation techniques and augmented overlays we hope to simulate the experiences of each of these users, ultimately demonstrating the necessity of new kinds of architectural organizations for cyborgs. We will produce both renders and film elements that describe this cyborg megastructure, continually checking the world in the images against the parameters of what would constitute Utopia for the cyborg user.

THE STACK

We are designing in an environment with parameters associated with The Stack. The Stack is a term coined by Benjamin Bratton which describes an “accidental megastructure” created through the layering of digital information networks and infrastructures. The Stack starts to dissolve our understandings of Westphalian geographies, imposing its own forms of territorial organizations and classifications. This can already be seen today along the Canadian-United States border where there is a physical-nonphysical demarcation that separates economic and political zones. However, when looking at this relationship through the forms of digital networks along the border, in this instance radio and cell towers, this demarcation line begins to become less resolved. These networks transcend beyond the rules established by nation states in which a person on one side of the line can potentially have access to the radio and cell towers on the other side, and vice versa. As The Stack proposes, these digital networks start to reshape our conventional understandings of national sovereignties.

REORGANIZING TEXT AND THE MAP

Our initial exercises required us to create a new logic for organization which would allow us to augment or reconceive conventional sets of organization systems. In doing so we would be able to imbue alternative sets of information into these system, thereby developing new relationships between the source materials and external sets of data. The first test investigated how text and state information can be reorganized. Text no
Together coherent Things infrastructure forming massive universal eye identified produce image? energy done seen hand us own own how our do We can of planetary-scale computation geopolitical realities' takes mineral sourcing subterranean cloud software addressing interfaces drawn augmentation users self—quantification arrival legions sensors algorithms robots. distort deform geographies territories Stack Benjamin Bratton proposes genres computation smart-grids cloud platforms mobile apps smart Internet automation species evolving accidental Stack computational apparatus governing inside Stack inside
longer must be read in a sequential manner but through relationships between it and other similar texts. This is also shown through the reorganization of the United States map in which the states are no longer organized through adjacencies but by an applied system of relational characteristics—size, population, tourism, etc—creating a new understanding and organizational rendering of the map. For the cyborg, there is no need for any graphical organization which does not contribute alternate sets of information. The first test was a text based exercise where we took a passage from the The Stack by Benjamin Bratton and cross referenced each word from that passage with its frequency of use between it and another text, Kenzo Tange’s Metabolism in Architecture. The passage from Frequency of use between the two texts as well as the prominence of use for that word in the English Language.

DATABASES, SHARDS, AND THE AMAZON WAREHOUSE

There are a plethora of database architectures ranging from We are most interested in the object oriented database and its application within the Amazon Warehouse organizational structure. Objects are packed into bins which are then packed into racks. The objects in these bins are not associated by physical appearance but through an external set of data, their frequency of purchase relative to one another; for example a teddy bear, Iphone, and guitar may be in the same bin because they are frequently bought together.

Shards are a branch of database structures more relative to online multiplayer games which allow users to inhabit multiple instances of the same environment. Users access a server which connects them to the environment that has been replicated specifically for that server and user. This allows for a more individual experience while still being part of a collective.

SLOCUM HALL SORT [RACKS, BINS, OBJECTS]

These ideas of packing and sorting were then applied to architectural space. Starting with Slocum Hall at Syracuse University, the rooms act as our objects which are then repackaged into bins that sit in the rack resembling the overall configuration of Slocum Hall. Issues of circulation and recall arise which lead to the next set of exercises.

SLOCUM HALL SORT [MECHANICAL AND PERCEPTUAL ORGANIZATION]

These exercise investigate the implementation of perceptual organization and mechanical distribution of space. Slocum Hall is resorted into groupings which cater to specific user types, that being either a student or faculty programmatic organization. A mechanical recall system is then implemented which brings these spaces directly to the user, a system similar to the automatic retrieval system found in Santa Clara University’s library.

The next exercise focused on the perceptual organization of space. Referring back to the idea of shards, users inhabit a particular shard which creates alternate versions of the space. Users have hierarchies amongst themselves which perceptually reconfigures the space to suit that user; the dean of a school would have a different understanding of the space than a student would.
This again allows for a more individualized experience while inhabiting the same space with other users.

THE CITY

The scale of the city becomes the testing ground for the project due to its relevancy regarding qualities pertinent to The Stack. It is notable that the city is one of the layers specified in The Stack - The Stack requires density of users and information to operate. It comes as no surprise then that it is the city from which The Stack begins to assert its sovereignty - a network of urban networks.

Building on previous tests, we begin to treat the city similar to the Amazon warehouse, where a series of “racks” contain bins into which objects are sorted. If programmed rooms are the objects, bins and racks become the language of the city. City blocks are replaced by packed racks of program, allowing for circulation to be removed as the primary organizational element.

DISCRETE OBJECTS [THE RE-INTRODUCTION OF METABOLISM?]

Utilizing sorting techniques developed through previous exercises, objects [rooms] are treated as being independent of the bin which allows for a way of programming a city scaled area independent of the building. Rooms are able to maintain discrete characteristics while external variables are applied -square footage, sequence number, etc.- to their organizational position within the larger framework. Their position in the city is determined by identities prescribed to them. Rooms are arranged within the confines of a xyz grid in which they start to agglomerate according to shared/overlapping “goals” and qualities. Ones that share characteristics start to be placed on top of or adjacent to each other, which starts to produce communities that share similar goals/characteristics. The resulting physical shape is one that is overly complex, and where the intentions of the original room are apparently lost. However, with the cyborg’s ability to cull noise from the presented information, the environment they experience is only selected signal from the noise of this hybrid system. Neighborhoods and “buildings” are created as objects intersect. Some of these objects share servers and associations; others combine separate communities that inhabit the same physical space while separating out the perception of the other’s existence. This provides the groundwork necessary for ad-hoc modes of organization that the cyborg user will require.
More information can be found on our blog

https://cyborgmetabolism.wordpress.com
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HTTPS://CYBORGMETABOLISM.WORDPRESS.COM