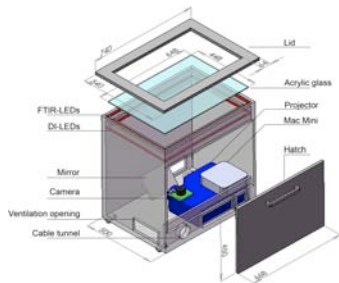
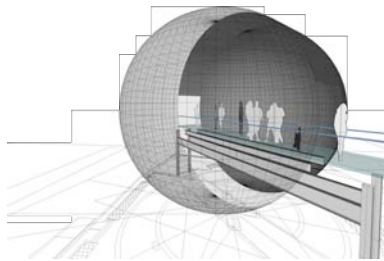


Introduction: Design Intent



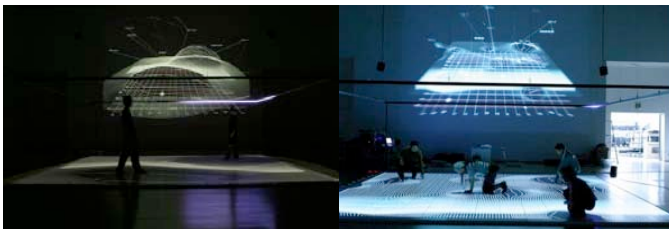
The Virttable, Wiesbaden University



Allosphere: UCSB 3D Model: Gustavo Rincon

The experience of working on the “200C: Touch Table Group Project ” and doing individual research on the Touch Technologies was motivated to demystify the construction, software and theory behind the instrument. The touch table project was an opportunity to consider the broader research topic of "Human Computer Interaction." Architectural/Industrial design methodologies were used in the design and development of the Touch Surface. The overall design intent was to create a flexible system that will be able to transform into different types of surfaces (table, wall & other) for many types of uses. The overall goals that were not realized were to use this system with an enhanced physical framework that could house all elements flexibly. The experience of the touch table and the interactions with data bring into question the current language of Interface design.

Conceptual Design Considerations: Motivations



Seiko Mikami's and Sota Ichikawa “Gravicells”

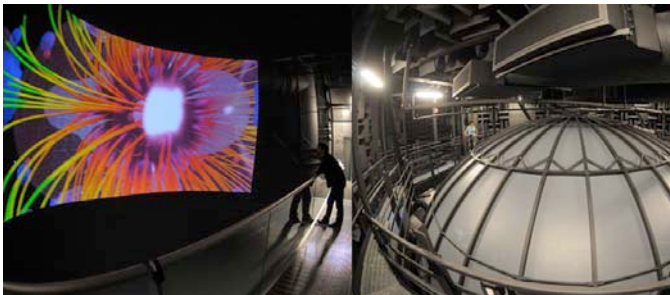


Allosphere. UCSB

The iterative process and the considerations of materiality on the individual parts of the project were tested by research and costs metrics. The ultimate goal in this project was to see the potential of the touch table become a driver for a larger artwork “End of Year Show” or visualization systems “Allosphere.” The potential of the touch technology evolved from the MAT 200C Survey of Media Technology and Engineering – Gustavo A. Rincon - Spring 2010

curiosity of touch technology to the overall research of knowledge of the field of Human Computer Interaction. Why are we still not looking at the dimensionality of data or human movement? In the future implementation of intelligent spaces, how will data need to change to become another type of “Natural System?” How are sound and music incorporated artistically with visual content?

Evolutional precedents of Touch sensing technology: 2D to 3D



Allosphere. UCSB



Translab. UCSB

The details of construction of the touch table and the details of the actual surfaces to transfer touch acrylic, vellum and silicon are fixed by the proximity of the Camera and LED's. In my study of projector configurations and system integration of the Allosphere, the touch system evolved into the potential of a touch space defined by Infrared optical tracking system. Optical Tracking Systems research in the Translab and Professor Marcos Novak as new potentials of enhanced intelligent autonomous space as materials are drivers for future works. The visual and sonic considerations that integrate into the Touch System are inspired by the specialization and instrument research by Professor JoAnn Kuchera-Morin. The instruments designed and engineered are only as limited as the sensor resolution and camera resolution density that are used. The goal of the transformative capacity of the system is to become an instrument for visual and musical art creation. All touch iterative systems now need to be reanalyzed and re-conceptualized to find the human limitations of physical memory through the process of signal filtering.

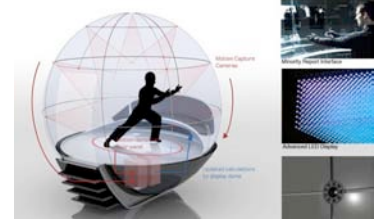
Conclusion:



Minority Report



Oblong: G Speak



VR Cocoon by NAU



James Cameron & Motion Capture



Avatar



VR Research

The project's iterative potential as a fully integrated synaesthetic system relies both on knowledge of hardware, software and behavioral science. What if resources or human capacity did not limit the ambition of the project? What types of future works can be predicted when Humans and Computers are continuing to merge as enhanced sensors? Data will become material and the separation of Physical space and Virtual space will merge the organic and inorganic. This technology is part of larger societal vision questioning and re-inscribing human imagination with the knowledge of science. Cinema, Design, Media Arts and Music are visual tokens that add to the mythology of existing researchers and artists in our field. In the overall understanding of the scale of materiality, now we can include with present day technology a digital dimensional space. We are seeing the beginning of a revolution that can link all humanity and machines together. The promises of an alternate reality synaesthetic and yet unnamed by technology are yet to be determined and negotiated by humanity's needs to survive. The touch table, Translab and Allosphere are part of a larger effort to link the Humanities and Sciences together to create and define a new language for the interactive expression of Art.

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