

[The Space Between]

A Riverwalk Bridge

Spring 2010

Texas A&M University.

College of Architecture

ARCH 305

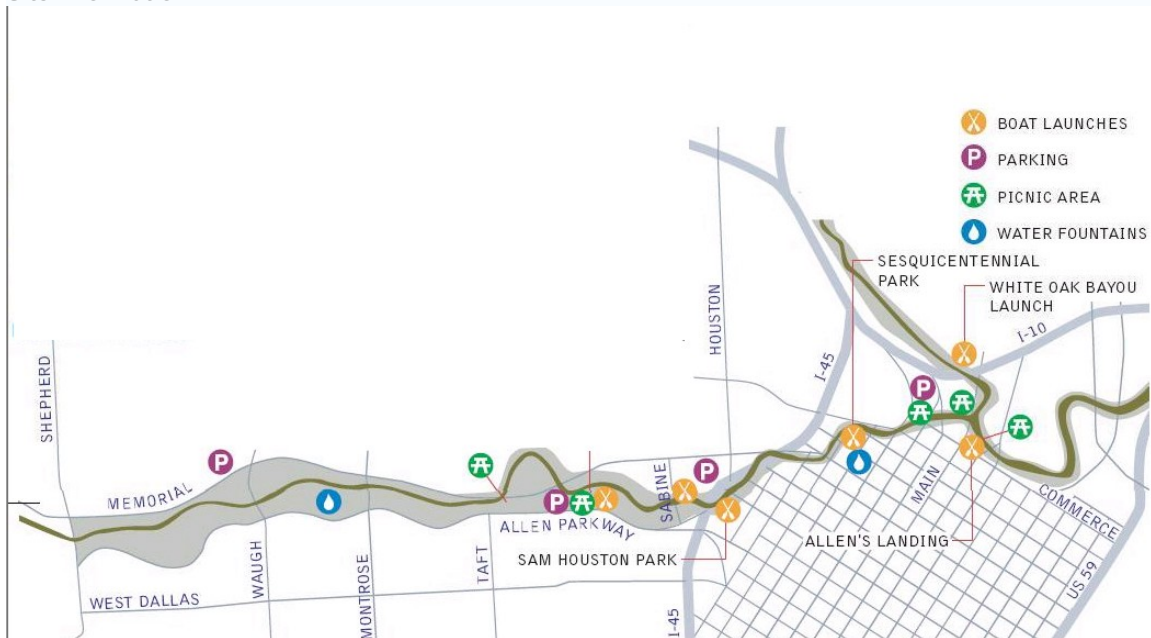


Premise

In order to promote the development of real state in this area, the city of Houston decided to replace the vehicular and pedestrian bridges for something that speaks about the future of Houston in the 21st century. There is an enormous tradition in terms of these kinds of structures; therefore these projects should engage continuity in the tradition of bridges.

This new bridge should discuss new aesthetic, structural and material possibilities. These bridges should become landmarks for the city.

Site Information.



This project will include lectures and reviews with Professor Shelley Holliday. This project has a technical study component focusing on structures.

Bibliography:

1. [Bridges: Three Thousand Years of Defying Nature](#) by [David J. Brown](#)
2. [Bridges of the World: Their Design and Construction](#) by [Charles S. Whitney](#)
3. [Bridges That Changed the World](#) by [Bernhard Graf](#)
4. [Bridges: A History of the World's Most Famous and Important Spans](#) by [Judith Dupre](#) and [Frank O. Gehry](#)
5. [Elementary structural analysis in bridge design](#) by James J Perz
6. [Seismic Performance of Cable-Stayed Bridge Towers: Nonlinear Dynamic Analysis, Structural Control and Seismic Design](#) by Shehata E. Abdel Raheem, Toshiro HAYASHIKAWA, and Uwe DORKA
7. [Bridge Deck Analysis](#) by Damien L.Keogh
8. The Space Between. Short Story Fiction about Bridges. John Law

Second Project

vitra.

Showroom in Dallas

established 1950

In the closing decades of the 20th century Vitra became widely known as a fashionable manufacturer of furniture, commissioning experimental designs from a range of designers including Ron Arad, Frank Gehry, Shiro Kuramata, Alessandro Mendini, Ettore Sottsass, Borek Sipek, and Philippe Starck, in addition to its own exciting Design Museum building by Frank Gehry. The company's origins lay in Willi Fehlbaum's shop-fitting business, established in Switzerland in 1934. The Vitra furniture manufacturing company in Weil am Rhein in Germany was established for the production of office furniture by Willi's son Rolf in 1950. Made under licence from the Herman Miller Company early products that set out Vitra's corporate design ambitions encompassed furniture designed by Charles and Ray Eames (including the *Lounge Chair*, 1956), George Nelson (including the *Marshmallow Sofa*, 1957), and, a little later, Verner Panton (the *Panton Chair*, 1967). In the 1970s Vitra's growing reputation for high-quality design and a visually dynamic corporate identity was further enhanced by Rolf Fehlbaum, who had been made chief executive in 1977. He commissioned company buildings by highly innovative designers, including factory buildings by British architect Nicholas Grimshaw (1981) and Italian Antonio Citterio (1992), a conference building by Japanese architect Tadao Ando (1992), and the world-famous Vitra Design Museum by Frank Gehry, completed in 1989. Amongst the best-known chairs commissioned by the company under its experimental Vitra Editions initiative, launched in the 1980s, have been Kuramata's *How High the Moon* armchair in nickel-plated steel mesh (1986), Sipek's *Ota Otanek* chair (1988), Philippe Starck's *Louix XX* stacking chair (1992), and Frank Gehry's *Grandpa Chair* (reissued in 1993). Amongst the many prizes awarded to Vitra was the Lucky Strike.

www.vitra.com

<http://www.suckerpunchdaily.com/2010/01/03/prototypes-i-iii/#more-3421>

<http://www.emergentarchitecture.com/projects.php?id=28>

The premise of the project is that Vitra wants to open a series of stores in the United States, New York, Los Angeles, Chicago, Miami and Dallas. The store will be a free standing object similar to the idea behind the Vitra Museum that Frank Gehry designed within their campus. These new stores will be emblematic of what Vitra will become in the 21st Century.

The project will incorporate not only the latest ideas in design but in technology, sustainability and materials. Similar to how furniture have a skins, This building will have the type of skin that is not only performative in a sense that it will be integral part of the mechanical systems of the project, it will run inside our outside where

it is necessary. This skin should also be beautiful and should produce some time of sensation. Think of it as sometimes a light skin and sometimes it should become like a sweater to the building. The project is instead focused on generating technological ambience. The divisions between technology and culture-- and building technology and architecture-- begin to dissolve into a hybrid spatial sensibility. Fluid flows, structural patterning, ornament, and lighting all combine into a coherent whole, generating an unexpectedly vivid and lively atmosphere.

The mechanical systems and structural processes will be legible, but in an ambient, atmospheric way. The aim is not the display of Structural Expressionism, but rather the creation of public space defined by crossovers of technology, culture, and sensation.

The employment of pattern and ornament is crucial to produce new architectural affects. This surface is an architectural device whose architectural affects come from its microsection and the fact that it erases a tectonic history of the discrete elements of the wall, network or landscape. It has complex geometric qualities. These adaptable surfaces resulted in part from the creation of an experimentation with the behaviors of heterogeneity and diversity. The objective is to produce an emerging, situationally adaptive emotive architectural surfaces derived from qualitative attitudinal shifts/transformations produced by systemic hybrids.

The form exploration will be concerned with yielding systemic hybridity in architecture by exploring two approaches that were previously thought to be both philosophically and methodological at odds with one another and experimenting with a suspicious "new way," performance and sensation. The thesis of how you can develop new tectonic and material systems using analog experimentation first and combining them later in the process with digital interpretations.

The projects should address the way materials are not just about performance choices but also a means of creating diverse sensations in a space, focusing on the effects produced by the materials' textures and surfaces. Through playful manipulation of such elements, beauty, ornament, and pattern have thus found their way back into contemporary design.

Site

You have two choices:

1. You can't put the showroom in Uptown. There's a *design within reach* there - people will only buy imitations. Therefore, we need to go to the real wealth. The showroom will go in the Park Cities area, anywhere on Preston between Mockingbird and Northwest highway. The best place is Highland Park Village - the first boutique shopping center in the US. You can put it there with Harry Winston and Jimmy Choo. <http://www.hpvillage.com/>
2. The second, if you want an urban condition, is downtown near Neiman's. It has good proximity to transit and the park by Johnson while having the right demographic.

Schedule

Monday	Tuesday	Wednesday	Thursday	Friday	Week
January		20 First class		22 Research Presentation	1
25 Maya Navigation Tutorial		27 Maya/Research		29 Maya/Research	2
February 1 Maya/ Analog Model		3 Maya/Analog Model	4 Maya Tutorial 5-8 pm.	5 Analog Model Maya Tutorial 5-7pm	3 6 Maya Tutorial 10-3
8 Structures Lecture		10 Digital Model		12 Digital Model	4
15 Digital Model		17 Digital Model		19 Digital Model	5
22 Construction Drawings		24 Construction Drawings		26 Construction Drawings	6
March 1 Rapid Prototyping		3 Rapid Prototyping		5 Final Review	7
8 New project Pin Up		10 Research Presentation		13 Research Presentation	8
15 Spring Break		17 Spring Break		19 Spring Break	9
22 No Class		24 Site Analysis Analog Model		25 Analog Model	
29 Mechanical Systems Lecture		31 Digital Model	April	2 Digital Model	10
5 Digital Model Ground Condition		7 Digital Model Mech. Surface System		9 Digital Model Mech. Surface System	11
12 Integration of all		14 Integration of all Systems		16 Integration of all Systems	12

Systems					
19 Drawings		21 Drawings		23 Drawings	13
26 Graphic Design and Oral Presentation		27 Graphic Design and Oral Presentation		29 Graphic Design and Oral Presentation	May 1 14
3 Final Review					15

Evaluation

Projects will receive marks based on the level of understanding of concepts and processes presented in class lecture. The most important evaluation will be the final product itself. Grades by the very nature of our profession will be both objective and subjective. Numeric-to-letter grade system will be used for grading purposes in this course. Grade A= 90-100, B= 80-89, C=70-79, D=60-69. With the above in mind, please note the following considerations:

Instructor Information

Email: gabe@theoremas.com

Office Hours: [Williams Building Room 14-A Tuesday and Thursdays from 1:30 to 3:00](#)

Websites

www.arch.columbia.edu
www.diangewandte.at/architecture
www.biothing.org
www.kokkugia.com
www.nmda-inc.com
www.sotamaa.net
www.xefirotarch.com
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www.materialsystems.org

www.sjet.us

<http://suckerpunchdaily.com/info.html>

<http://www.dezeen.com/2008/12/10/seed-archive-by-brittany-bell/>

<http://www.paulpreissner.com/>

<http://www.dezeen.com/2008/07/09/technicolor-bloom-by-brennan-buck/>

Bibliography

- The Fold. Gilles Deleuze
- Transmission of Affect. Theresa Brennan.
- **Form. Greg Lynn.**
- **A thousand Plateaus. Deleuze and Guattari.**
- Difference and Repetition. Gilles Deleuze.
- Critical Architecture. Edited by Jane Rendell.
- The Architecture of Time. Sanford Kwinter.
- **Earth Moves. Bernard Cache.**
- Form Follows Libido. Sylvia Lavin.
- Elegance. Edited by Ali Rahim.
- NOX. Lars Spuybroek.
- Contemporary Techniques in Architecture. Ali Rahim.
- Catalytic Formations: Digital Design in Architecture. Ali Rahim

Format

The criticism format will be discussions and pin ups in front of the entire group.

Reviews are very important and I take them very seriously, presentation is very important.

Student's attire is dress up.

Attendance is incredibly important after 3 unauthorized absences you will receive a letter of warning requesting a meeting with your corresponding program coordinator to discussed the reason of the absences and to determine future commitment to the studio. If the absences continue you will be dismissed from class.

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit <http://disability.tamu.edu>

Academic Integrity

For additional information please visit: <http://www.tamu.edu/aggiehonor>

“An Aggie does not lie, cheat, or steal, or tolerate those who do”