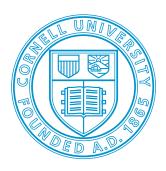
## COLLEGE of ARCHITECTURE, ART & PLANNING DEPARTMENT OF ARCHITECTURE

### FALL 2012 OPTION STUDIOS



Cornell University

# THE PETROPOLIS OF TOMORROW

#### **ABSTRACT**

The Petropolis of Tomorrowis a design and reasearch project to be undertaken at the Department of Architecture in collaboration with Harvard's Graduate School of Design, The South America Project (SAP) & The Initiative for the Integration of Regional Infrastructure in South America (IIRSA). The project examines new *Petropolises* - cities formed from resource extration - associated with oli extraction in Brazil

www.petropia.org



#### Neeraj Bhatia Cornell University

Department of ARchitecture
Arch 4101/4102/5101/5116/7912

B.Arch., M.Arch. and M.Arch. II Option Studio
M/W/F 12:20pm-4:30pm
Milstein Hall Studio
Fall 2012



#### montréal's champs de mars: towards *la ville parlante?*

Cornell Architecture | Fall 2012 Urban Design Option Studio | MWF 12.30 – 4.30pm | Instructor: Foster (jf252) | 6 c/u



#### Project Background & Description:

In, 2010, the Ville de Montreal held a nationwide ideas competition for the redesign of the urban landscape around the Champde-Mars metro station, an urban void that separates downtown from Old Montréal, and the historic St Lawrence River waterfront and the Vieux-Port. The competition was prompted by the possibility of covering and reconfiguring the exit ramps of the east-west Ville-Marie expressway, a key piece of urban infrastructure that is now nearing the end of its functional life. This urban void is edged by a number of significant buildings: the City's main municipal offices, the historic City Hall and Courthouse, the Palais des Congrés (Montréal's main conference center), and the new CHUM (Centre Hospitalier de l'Université de Montréal, a major teaching hospital), and is bounded to the north by the Quartier Chinois (Chinatown). The space not given over to the highway trench is anchored by the modernist Champ-de-Mars metro station, with its striking stained glasswork (a hallmark of many Montréal civic buildings) -- one of the few landmarks dating from before the construction of the expressway.

The Champs de Mars could be seen as a memory—place, a 'fault line' in the socio-spatial topography of Montreal where the complexities of post-colonial memory integral to Canadian culture have been repeatedly negotiated. The southern side, now mostly given over to parking, is framed by a former military parade ground and traces of early Montreal's fortified city walls, which were demolished early in the 19th C. when the imposing City Hall and courthouse were built on the east-west ridge that divides the river from the downtown. One block away is the enormous, now disused Canada Pacific Station through which travellers transferred from ocean going ships to westbound trains to Ottawa, Toronto and the Canadian prairies. However, one could also see it as an opportunity for a kind of urban experiment that is rare today. Because of its strategic location between new and old Montréal, and adjacency to the massive new CHUM, the Champs de Mars site could be the key to the revitalization in the surrounding urban area. A conventional response to this urban scar would be to re-integrate it into the immediate surrounding urban fabric — to restore the disrupted street grid/volumetric massing, upgrade pedestrian access to Old Montréal, and create public spaces befitting the large civic and historic buildings in the area. An alternative approach would be to treat the Champs de Mars as part of the larger urban field, but as a somewhat 'other' space without an obvious function, a charged or catalytic void where one can engage current debates about urban sustainability that are hard to address elsewhere in Montreal.

#### [Mechanics as a Part of Architecture] Arch 4101/4102/5101/5116/7912

[Vitruvius, De Architectura I,3,1:

*The parts of Architecture itself are three: Building, Dialing, and Mechanics].* 

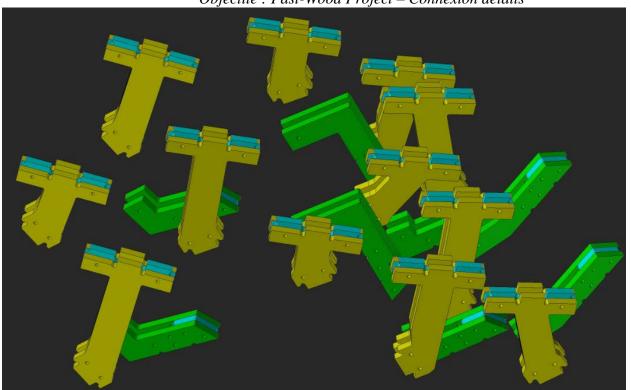
[Fall/2012] [Milstein Floor Plate] [Monday, Wednesday, Friday, 12:20-4:30 pm]

Instructor: [Bernard Cache] [201A Rand Hall, objectiles@gmail.com]

Office Hours: [Tuesday 2:30-3:30pm + by appointment]

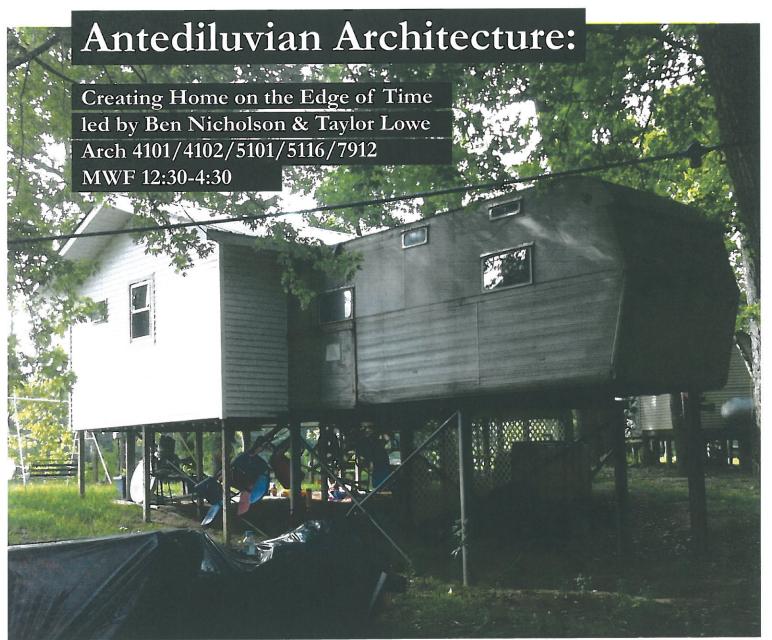
Grading: [Letter grade]

Objectile: Fast-Wood Project – Connexion details



This studio focuses on digital fabrication at the nexus of architecture and mechanics.

At beginning of the 20<sup>th</sup> century, mechanics entered into the rhetoric of the Modern Movement in order to claim for new forms of architectural practice and buildings. But actually, mechanics had been conceived as an essential part of Architecture since the 1<sup>st</sup> treatise of our discipline, i. e: the De Architectura of Vitruvius. The purpose of this studio is to test to which extend mechanics can be a part of architecture in the digital age. To be sure the manufacturing of architectural components is increasingly mechanical, and it will be one of the scopes of the studio to explore the possibilities at hands on the campus and in region of Ithaca. But due to the current market structure, architects use other softwares than mechanical engineers and, despite many claim, there is little integration of design and manufacturing. The main scope of the studio will be pass over this persistent divide between architecture and mechanics, back and forth, in order to understand what a real integration of design and manufacture could resemble.



weekend riverhouse on the Wabash in Posey County, IN (2012)

Red state and blue state architecture ain't quite the same thing: the studio will examine the soft underbelly of the vernacular of Rural America, where city inspectors are run off the property, and the construction industry is hacked with a visceral poetry that leaves you gobsmacked.

The studio will take full advantage of Cornell's academic firepower (investigating birds' nest morphology in the Cornell Lab of Ornithology) and the sweet temperament of country gals and good ol' boys who get everything done in a way that makes sense: a civil meeting of the minds.

A Midwest road trip is planned that engages high and low culture, blurring and mining viewpoints to make them indistinguishable. The studio project is a journey into the microcosm of design, in which the closer you examine the parts, the more is revealed.

