Professor: **Nanako Umemoto**
Teaching Assistant: **Hilary Simon**

VERY FAST AIRPORTS

Course Description:

BACKGROUND

The dawn of mass travel by jet in the early 1960's corresponded to the wholesale re-organization of airport infrastructure - as an extension and transfer zone from highway, the land-based modality, to airport terminals – the transfer zone to an air-based one. In the world of the terminal, the relentless and systematic exploitation of "free" or layover time between arrivals and departures has given rise to the advent of the city-like agglomerations of uses for the in-transit population. In competition with the more common Central Hub model for such agglomerations, an alternate organizational model for the airport terminal has arisen within the last 30 years. Developed for the demands of Low-Cost Carrier airlines, this model makes use of an extended network of smaller secondary airports and metropolitan multi-airport systems rather than singular point destinations. Often created around decommissioned military airstrips, these facilities provide lower landing fees to the airlines by allowing faster turnarounds for aircraft and consequently, more flights in and out of an extended family of decentralized airport facilities. Layover times are reduced dramatically by this mode of operation--these are fast airports. The conventional approach is to make the buildings as architecturally non-existent as possible. This studio seeks to create an architecture for these terminals. Consequently, the architectural experience must be correspondingly short and intense.

VERY FAST AIRPORTS

This studio will explore the design of a family of Low-Cost Carrier Airports. We will be looking at Ibaraki International Airport, which comprises a link in a chain of airports spread throughout Asia in Japan, China, and Taiwan. Located Northeast of Narita and still further removed from metropolitan Tokyo, the situation of Ibaraki suggests an alternate set of architectural consequences for the contemporary airport. The flattening or placelessness of airport space - the interchangeability of its stores, hotels and its waiting rooms worldwide - is simply in advance of the same ineluctable processes everywhere else. The utopian or dystopian effects are simply more pure because unlike in traditional places there is no history, no resistance - material, cultural or otherwise - to resist it. Such a situation has thus far fallen into two nihilistic formations, reactionary or celebratory which attempt to deliver representations of homecoming (it makes no difference whose home it is as long as it represents some aspect of "traditional culture") or more sophisticated models that celebrate the void itself. (From modernism to sci-fi – think "THX 1138" or architecturally dematerializing models like lightness, single surface projects, etc…) The airport has paradoxically found itself in a state of arrested development with the prevailing style being "high-tech". An architectural style emulating the aviation technology of the 1960's, high-tech has since spread to become a worldwide cliché. Being the standard architectural response to the airport wherever one goes, this worn style speaks neither to the specifics of place nor to the specifics of experience. The spaces of high-tech are spatially and structurally homogeneous.

We will explore another set of possible futures for the architecture of the airport. Eluding both the returnist and the nihilist models, we will consider projects that, while steering very close to groundlessness, may be redeemed in their shameless embrace of the artificial and the synthetic. A gastronomic analogy laid out in a spectrum: …traditional (of any stripe); to Nouvelle (fusion of Japanese and French minimalist), to fast food (late modernist industrial), to slow food (neo traditionalist), to molecular (faster than fast food and slower than traditional). We will focus on the molecular because it is artificial, experimental unburdened from traditional methods, seeking new effects through a rigorous orchestration of sensory experience by pushing the envelope of material effects.

Wagering that new public(s) might coalesce around new sensibilities, and given the multiple impending crises on Japan's horizon, the studio will in the most hopeful manner suggest a new cosmopolitan

paradigm – in other words – new ways of life that cross regional and international boundaries, yet create their own sense of the artificial local through material effects. While Modernism, or even High-tech produced a cosmopolitanism of sorts, the basic aesthetic thrust was to neutralize difference through homogenous and uniform spatial models and the emphasis on the representation of technology or the technological aesthetic. We, on the other hand, will explore a new cosmopolitan model, which while it may indeed be even more technological, will not make the representation of the technology dominant, allowing for other unique and inflected sensibilities to emerge. Asking the question "if" all is open and manipulable – from the genome to cultural practices what new positive worlds can emerge? And what new forms of architecture will foster such worlds? Japanese culture has historically shown an unsurpassed ability to invent, adapt and change. Moreover, it is one of the only societies that can lay claim to the ability to fast forward technologically in one period and to reverse technology in another. The stakes have never been greater.

COMPOUND VOLUMES / ENVELOPE

We will explore compound volumetric models that incorporate multiple layers of surface & poche, from the smooth/continuous to the rough/discontinuous, and the neutral to the highly differentiated. The general organization of the various systems and programs is loosely established in order to maintain some modicum of efficiency for this type of terminal. Our projects will thus require an engagement with the requirements of packing sensory experience and material effects into a condensed and constrained environment. In the traditional case, the battle line for identity between airports, carriers, and commercial brands fits into the hierarchy of the architecture--the proliferation of "junk space" arises incidentally within established top-down constraints. In our situation, all of these elements should be considered from the get-go. This will require the manipulation of volumetric configurations into new and unforeseen models. Our charge will be to combine varied scales and programs of the airport into a cohesive and coherent whole.

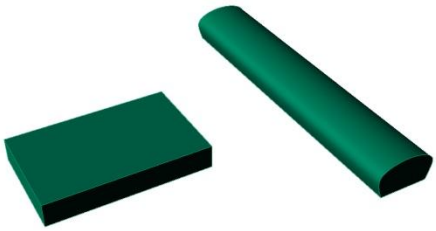
These airports will establish their context less by relating to the immediate locale such as Ibaraki than in their relationship to other airports in the network. The airport thus will be deployed in the site and remain essentially an autonomous organism, ie. it will bear as much relation to Ibaraki as the aircraft that use its field.

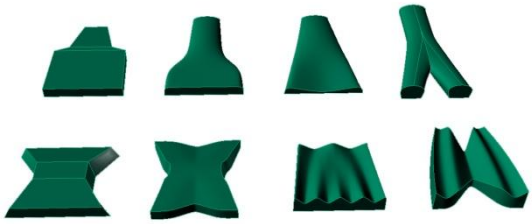
.

ASSIGNMENT 1A: CRUDE TYPES: OVERALL VOLUME

DUE: PINUP 06/14

Using the two base models used for Low-Cost Carrier airports (Pancake & Tube), create a family of typological variations (branching, pinching, etc) which would relate to the overall procession to one or multiple gates.





ASSIGNMENT 1B: MIDDLE SCALE

DUE: PINUP 06/24

Using the family of models generated in the first week, assume that the external envelope is comprised of a minimum of 3 geometrical datums--an outer, a middle, and an inner. This will create a sectional condition within the envelope which can be varied, so as to accommodate fenestration, light wells, etc at the small scale, all the way up to the large scale, which can accommodate small programs. These should range from continuous transformations to discontinuous inclusions.

ASSIGNMENT 2: THE SCORE

DUE: PINUP 07/01

Considering the speed and path of the traveler and that they will pass through this building in 30 minutes, it is possible to modulate their experience second by second with a high degree of precision. The analogy is musical: create a score that will take into account all of the ambient encounters from entry through ticketing, security, waiting, shopping, etc. Ultimately, the aim is for this abstract score to modulate the space and envelope of the airport.

POST-MIDTERM ASSIGNMENT: PHENOMENAL WEEK

DUE: PINUP 07/17

Using the 3D models generated for the midterm, this week will be a fast design charette exploring the manipulation of both interior and exterior atmospheres (color, light, etc). The scores you created in the earlier exercise will now acquire tonal variation.

Tentative Studio Schedule:

W– 06/05	**Studio Lottery**
F– 06/07	Studio begins
M – 06/10	Desk Crits
W– 06/12	Desk Crits
F – 06/14	**Progress Review**
M – 06/17	Desk Crits
W – 06/19	Desk Crits
F– 06/21	Desk Crits
M - 06/24	**Progress Review**
W-06/26	Desk Crits
F – 06/28	Desk Crits
M – 07/01	**Progress Review**
W – 07/03	Desk Crits
F – 07/05	Desk Crits
M – 07/08	Desk Crits
W – 07/10	**Mid-Term Review**
F – 07/12	Desk Crits
M– 07/15	Desk Crits
W – 07/17	**Progress Review**
F – 07/19	Desk Crits
M – 07/22	Desk Crits
W – 07/24	Desk Crits
F – 07/26	**Progress Review**
M – 07/29	Desk Crits
W– 07/31	Desk Crits
F– 08/02	Desk Crits
M– 08/05	**Final Review**