

DEEP FUTURES EXPO

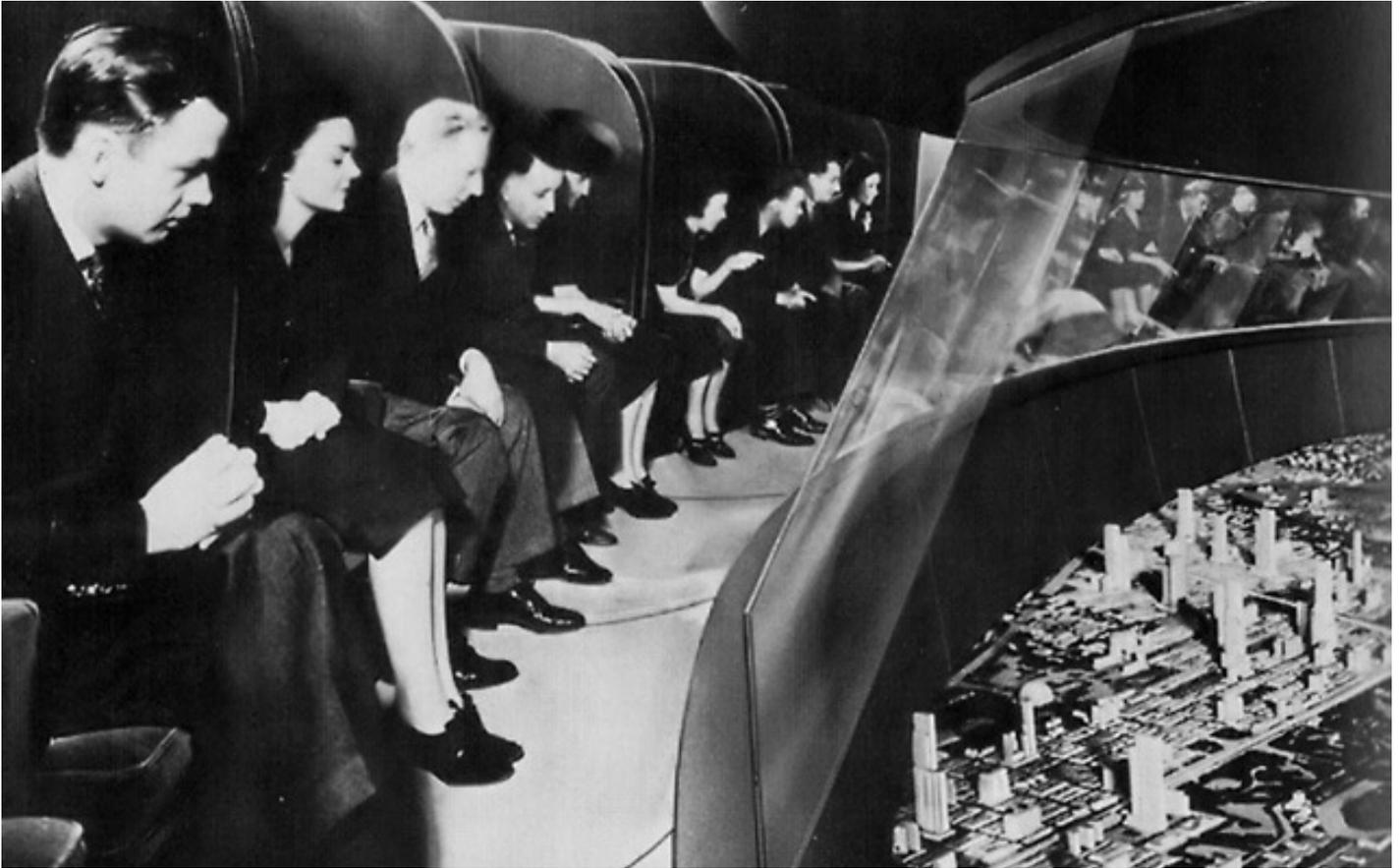
PROTOTYPES FOR THE FUTURE CITY

Premise

Nation X has decided to implement a new fully sustainable and economically viable city YXY. Rather than start the city from a traditional master planning approach, feasibility study or other means, Nation X has opted for the making of an elaborate fully functional and spectacular worlds fair expo:

The Deep Futures Expo City: Prototype 001

as an instigator and catalyst for the city's eventual development.



DF EXPO 001 will be a showcase, test bed and dry run for the eventual building of city YXY

Background

Within the spectrum of the evolutionary history of cities from their origins (research DF1) as places of mercantile exchange, gathering of a polis (agora, forum), development around arable land, food supply, access to goods, climatic and environmental opportunities, access to natural resources etc...cities have historically evolved over time for the most part organically, in some cases randomly and usually without anticipation of inevitable change and futures. Traffic congestion, pollution, energy consumption, disrepair, gentrification, obsolescence etc are all unanticipated events that define our contemporary cities and urban environments.

Today however the very real premise of building new cities from scratch, as centers of intense human interaction, can anticipate and even calibrate constant flux and change as we shift from predominantly geographically centered city thinking to economically and technologically tethered sustainable urbanisms. A new city today does not necessarily need (although it is by no means a hindrance) access to connected waterways, or fertile arable land, nor do they necessarily need to be located in close proximity to existing infrastructure, sources of un-renewable energy, mineral resources or even be attentive to climatic variables and stability (especially given the gyrations in climate change now being manifest by global warming). Rather in devising cities from scratch one could envision urban viability in almost any place, circumstance or domain providing there is political stability and a need to build.

Some variables and necessities for rapidly implementable, sustainable and viable city growth and economic success include amongst other things certain core staples as far as urbanism is concerned. Essentials such as

- state of the art people and goods transport systems (namely manifest in and around airport infrastructure, high speed rail, data driven shipping cargo ports and channels and the like). People movers such as rapid rail, maglev rail (Shanghai), personal electric vehicles and other forms of technologically tethered intelligent means of mass and personal physical mobility.

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- environmentally sustainable and state of the art designed and engineered structures capable of rapid implementation, constant change and able to deal with variables such as extreme weather, temperature fluctuations and potential calamity. - State of the art agricultural facilities, green houses, hydroponic farms, and
- fresh water supply by utilizing technologies such as desalination, distillation, sewage and waste purification by means of natural organic systems.
- waste management and reuse, refurbishment, grey water, rainwater retention, recycling (cradle to cradle)
- biodegradable building systems and so on.
- Robotics is central to any new city from zero scenarios, as a means of
- transport of goods, use in construction, urban renewal, replacement at all scales, refurbishment, delivery, maintenance etc.

A city from zero would effectively be centered on these and other criteria where data is above all the key driver and data in every form would be the means by which such a city would not only sustain itself but also thrive. In some ways a data centric city has its roots in the deep past of urbanism and city growth, be that cities predicated on military efficiency, goods transport, industrial production, and even geomancy and more esoteric mystical motivations. All cities in one form or another have been places working around information as seamless exchange. Today that exchange is predominantly if not entirely electronic and digital, one only needs to look at a place like the world's stock exchanges, which in many way mimicked city growth and emergence by being places of the exchange of information and goods, quantities, values etc, which from their humble beginnings as gathering posts for trading and bartering, have evolved into virtual microcosms of urbanism yet existing only as data centers and virtual locales. In fact the advent of virtual reality as spatiality (3d asymptote) coinciding with data proliferation is the very basis from which new city space itself can be seen as emerging. Data driven, electronically seamless and technologically robust environments effectively are now the places of exchange of services, goods, sustenance, entertainment, sport, education, finance, healthcare and so on, and one could say data and technology are also capable now of dealing with the more ineffable and abstract aspects of city growth and existence in such territories as delirium, distraction, chance, and desire.

Assignment

each student chooses a technological advancement for a deep future scenario and based on that subject's potential designs a pavilion for the DF EXPO 001

some examples

- new modes of transport, GPS self drive vehicles, electronically managed highways, self parking and car share programs
- health related facilities, dwelling environments
- robotic assist , robotic building, maintenance, services etc
- solar and other sustainable energy related advancement, wind farming and harnessing, geothermal energy, smart skins and surfaces
- transport hubs as urban environments
- transformable dwelling and office environments
- sports and other places of public spectacle as new hubs and social condensers

important expos

London 1851 _crystal palace
 Paris 1889 _eiffel tower_halle des machines
 Queens New York 1939_futurama
 Brussels 1958_phillips pavillon_atomium
 Montreal 1967_habitat_fuller dome
 Osaka 1970_metabolism
 Sevilla 1992_high tech sustainability