

11:25-12:05
12:05-12:45
12:45-1:25

2024.10.08 Upper St. Clair (Tracy Smith: Lunch & Learn)

How MANY SENIORS, JUNIORS, ...?

2024 Round Table Forum: What is the Future of Architecture?

CHANGES JUST IN LAST WEEK!

Central Valley H.S. Junior (Beaver, Pa) student email (2024.09.14): **what will my future career as licensed architect look like? What degree: 5yr. Arch. major vs. Eng. major w/ AI minor & Arch. master?** As A.I. gets more advanced, **would I be able to find long-term sustainable job in 5 to 6 years?**
Silicon Valley/Architecture industry's current advise: don't ignore/compete with A.I., learn to **work better/efficient/productive with A.I. as a tool.** Sustainable?

Frank Gehry **CATIA/Dassault Systemes**: El Peix/Fish (1992), Guggenheim Museum in Bilbao (1991-1997): **A.I. advance beyond a tool, all-in-one package?** **Disrupted architecture with the computer**, from CATIA to CNC (Computer Numerical Control), in the fabrication & construction of buildings. **20 YRS. Ago** **5 MIN.**

Zaha Hadid (passed 2016)/Patrik Schumaker (April 2023): **text-to-image (DALL-E 2 / MidJourney)**: "For me it's always been very similar to verbal prompting teams, referencing prior projects and ideas and gesticulating with my hands." "That's the way of generating ideas and I can do that now directly with MidJourney or DALL-E 2, or the team can do it as well on our behalf, and so I think that's quite potent." "I accept all of that into our oeuvre." **PRE/POST BILBAO** **LAST YEAR** **10 MIN.**

How MANY SAW FILM?
Megalopolis (Francis Ford Coppola: Opened Sept.27): An architect & scientist (Adam Driver, with Nathalie Emmanuel, Aubrey Plaza) rebuilding New York City as **a utopia with a magical material, megalon**, a multi-scalar, genetically modulated, physical intelligence, with computational growth algorithms, applied across material, architectural as well as urban scales, **combining architecture & biology**.

Neri Oxman (MIT Professor, just opened **Sept.27 36K sq.ft. wet lab architectural office** on Manhattan's West Side: 787 11th Ave.): "Architectural toolbox not limited by the **crafting board** or computer, but as **enabled by a Wet Lab**. If an architect has access, we open the doors for not only constructing things out of already existing materials, but **literally growing things**. The ability to use living cells, this allows us to incorporate functionalities that were never available inside a product or a building. One example is **melanin**, the pigment in our skin, incorporating inside glass, in order to mediate between heat and light in the interior environment. So, you literally build a first of its kind, **biological skin in an architectural façade**." **LAST WEEK** **15 MIN.**

Totems (2019): Environmentally responsive melanin-infused glass structure, provides UV protection, changing throughout day: clear, translucent, opaque.

AVERAGE LENGTH of A HOUSE?

Aguahoja I (2022): **decay over disposal** (brown-rot fungi: cube lignin): energy capture vs. wasteful/disposable economy: **dissolving fasteners**.

Average house lasts 34 years: value of architect advising on **human propensity for tiring taste**: outdated/updates vs. timeless

Forever Chemicals/architectural materials: nanoplastics/polyester penetrating brain/blood barrier, fusing neural synapses, Parkinson disease (NIH 2023).

Disrupt architecture with wet lab, in **how we design (petri dish)** and **how we build (growing, living structures, able to adapt/heal/decay)**: **PRE/POST WET LAB** **25 MIN.**

Future: A.I. will disrupt architecture industry, replace many parts of current practice, eventually architects (**automated DIY: YouTube, soon A.I. assistant**). However, as a technology, will also make advances in **many other fields: biology, energy, neuroscience**, that will be combined with the construction of buildings. Practice of architecture will be experts in these other fields. Traditional architect will still exist, but not competing with automated A.I. architect, rather offering **human designed spaces: preserve humanity by preserving spaces with human sensitivities (somatosensory: tactile, limbic: emotive, symbiotic: withoutdoors)**.

