

A large orange circle is centered on a light blue background. Inside the circle, the text "School of Architecture", "Spring 2021", "Graduate Studio", and "Descriptions" is written in white, stacked vertically.

School of Architecture

**Spring 2021**

**Graduate Studio**

**Descriptions**

# NO WONDER MUSEUM

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This studio takes an inquisitive peer into the world of spectacle experience institutions, like the WNDR Museum in Chicago's West Loop, by exploring architectural resolution and authorship. The WNDR Museum curates a series of high-resolution and individually focused digital and analog experiences for selfie-friendly consumption. The 'No Wonder' Museum, on the other hand, will be an alternate response that deploys 'low-resolution' architecture to contend with the stringent landmark district rules and to "build new collectives" with a generic museum program. Central to this endeavor is developing a nuanced thesis on the role of authorship, context, and place as a means to critically engage the "look what I stumbled upon" attitude of both the WNDR Museum and the proponents of "Low Res" architecture.

In order to achieve these goals, the studio is structured through a series of exercises to engage the concepts of low resolution and authorship. Readings, analysis, and design exercises build for students to develop individual arguments that play out as a museum proposal situated and represented in three contexts:

- 1/ In Context: on a West Loop lot
- 2/ Out of Context: as an object
- 3/ Projecting Contexts

SPRING 2021

Second-Year Graduate Studio Instructors:  
Barbara Materia, Thomas Kelley

# Open House

*If meaning in buildings is about relations one should expect to find it in three kinds – between people, between people and knowledge, and between people and things. Ultimately all are social for all are about people, but the focus shifts.*

Thomas A. Markus, Buildings and Power, Freedom and Control in the Origin of Modern Building Types, Routledge, 1993 p.39



SESC 24 de Maio, São Paulo.

1

In 1929 Walter W. Ahlschlager, a prominent local Chicago architect, was confronted with probably his most challenging project, the Medinah Athletic Club's design.

The forty-two-story club, located at 505 North Michigan Avenue on the finest part of the Boulevard, just north of the river at the Loop's rim, is a "20th century Arabian Nights dream" building. It is a mesmerizing sequence of exotic styles and atmospheres, a "contrast of contrast" of overlapping facilities, reaching the Chicago sky 513 feet above the ground. A potpourri of Grecian, Gothic, Medieval, Asiatic, Modern Italian, and Venetian styles, and a twenty-four-hour daily home of luxurious perditions. You could have landed on the Saracenic Dome on the top of the tower with a zeppelin to access your private studio-apartment or enter from the double-height Michigan Avenue lobby before taking one of the six high speed, self-leveling passenger cars to reach one of the 442 Club sleeping rooms or the Golf Course on the 23rd floor. It is never too early or late for a round of golf in the 18-hole indoor Golf Course's constant brightness. "It may rain, hail, or pour, but what does it matter to Medinah's golfers when this beautiful miniature green in ever perfect shape, for the putter and the mashie?" The Celtic Grill Room and the Spanish Tea Court with a modified version of the Alhambra of Cordova's fountain on the 3rd floor, the Oyster bar above the double height Ballroom on the 7th floor, together with the Rifle Range, the Special Exercise Room, the Turkish and Electric Baths, and Grecian Pool to refresh at its splash mixed swimming parties on a warm summer night on the 12th floor—among many other eclectic spaces—made the Medinah one of America's most distinctive club.

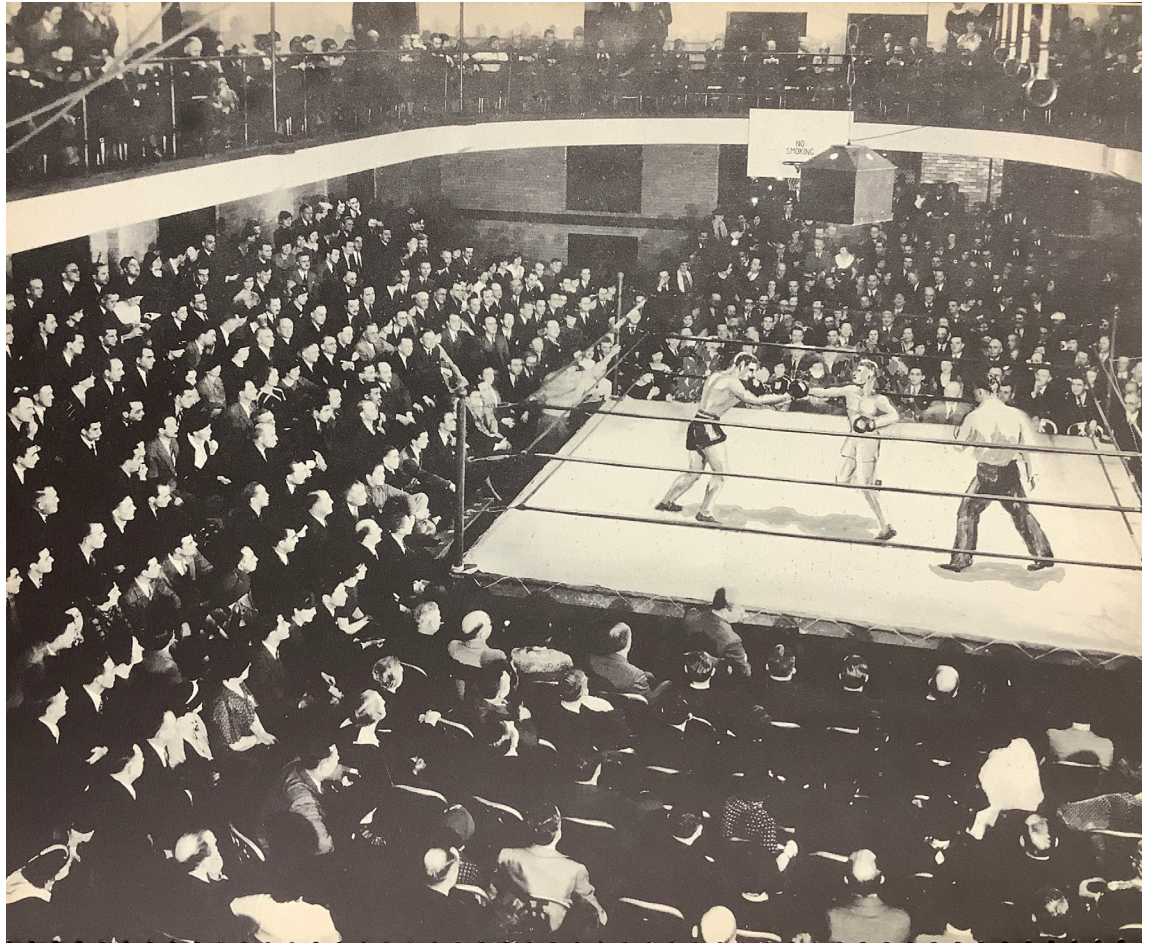
2

The Medinah is one of the many Athletic Clubs built in Chicago and across the country between the end of the 19th and the first thirty years of the 20th century: perhaps one of the most genuine American architectural type. Thanks to the skeleton-frame construction that allowed to overtake the frontier to the sky, all the city life was suddenly vertically assembled within the same envelope, like the Athletic Club—a container of spaces for culture, leisure, sport, and entertainment all stacked in a sequence—that served as a social condenser for public interactions, yet a private institution.

Is it possible to re-imagine the institution and typology of the American Athletic Club for the contemporary city? How to compensate for the absence of public structures often lacking in American cities?

The American Athletic Club directly inspires our building's program. At the same time, the openness, flexibility, and public aspect refer to the social condenser idea of the Russian Constructivist workers' club of the Soviet Union in the 1920s, the north European Houses for the People (Maisons du Peuple), and other cultural and recreational structures built in Brazil and elsewhere from the 1970s until today. Whereas on the other side of the ocean, the social condensers were entirely public; in the US, they mostly remained private institutions accessible only to its members, excluding all other users and the general public.





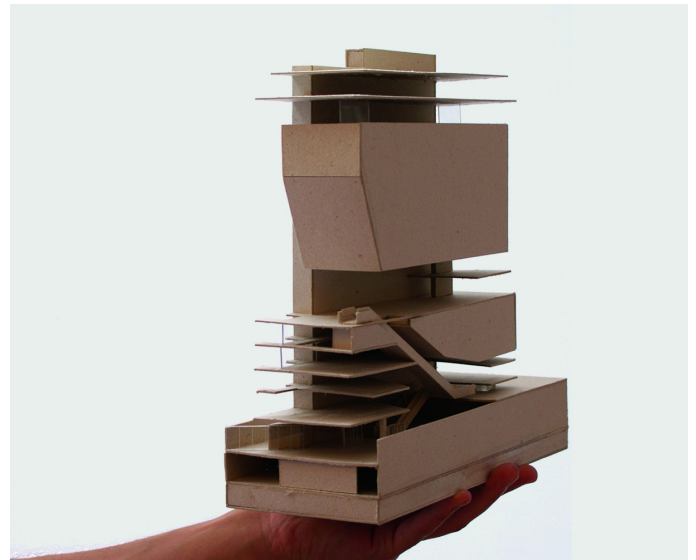
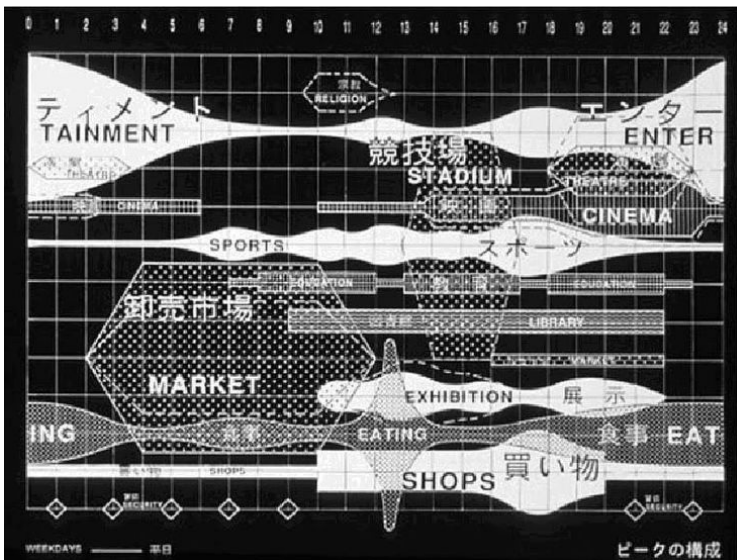
*The Gymnasium with chairs arranged for the evening bout. Many a fistic gladiator has pommied leather against leather wihtin the canvas floored ring – the Medinah Athletic Club, Chicago.*

3

Nowadays, the Athletic Clubs are slowly disappearing in favor of totally different structures dedicated to a single specific program—such as sports tower clubs—all neglecting the old buildings' architectural experimentation, programmatic complexity and schizophrenia. If once they were a laboratory for visionary and original architectural ideas, they became rational and banal frameworks, still not open to all.

By looking at the Athletic Clubs and other historical and contemporary examples of multi-functional buildings, the studio aims to design an urban container for diverse programmatic demands. We will explore architectural alternatives for a semi-private structure enhancing its public component, an infrastructure for the contemporary city, and a catalyst for different users.

The project entails the design of a mid-rise building within an empty city lot in the Chicago Loop. The design will include a mixture of working and living spaces, leisure, education, sports, and cultural activities, resolving the interaction between public and private programs in connection with the dynamics of the immediate surroundings and the city at large. The site's analysis and its context should serve to solve and enhance encounters and frictions between the architecture, the program, and the city.



### Studio Description

We will put a particular emphasis on the following design aspects:

- ◆ Architecture as an urban infrastructure
- ◆ Assessment of programs and users
- ◆ Architecture informs structural solution and vice versa .

### Assignments & Design Tools

The studio is organized into three parts:

- ◆ **Case Studies Analysis** (individual but collective) *Weeks 1–2*
- ◆ **Site Analysis** (in group but collective) *Weeks 3–4*
- ◆ **Design:** Concept *Weeks 5–8*, and Design Development *Weeks 9–16* (individual).

In addition to conventional plans, sections, elevations, and isometric drawings, we will produce diagrams and collective maps/plans. We will work as well with small home-made models (paper, bristol, foam), digital photographs, and images/collages.

### Reviews and Pin-ups

We will have whole-studio collective reviews from Week 1 to 4 before splitting into sections for individual critiques, from Week 5 to Finals. Whole-studio Pin-ups will occur every week or every other week to keep fostering the studio culture during the design phase. The format and platform will be determined collectively.

### Deliverables

Deliverables will be communicated for each assignment/phase at 1/16" and 1/40" scale. We might increase the scale to 1/8" for a final section drawing. We will insist on the cross/transversal section as our key drawing. The list of deliverables includes:

- Program Diagrams
- Other Diagrams (use, distribution/circulation, structural system, etc.)
- Plans, Sections, Elevations, Isometric
- Physical Models



How Emails Grow Tomatoes:  
Architecture, Data and Agriculture



Top: Aerial from Google of Greenhouses, Westland, The Netherlands  
Bottom: Aerial from Google of Facebook Data Centre, Clonee, Co. Meath, Ireland

### Agenda

Hot Farms is a year long, research seminar and design studio that explores the spatial potential of symbiotic systems. Specifically, it applies scientific and geospatial research of data infrastructure and agriculture toward the design of new spatial scenarios that combine food production with data storage. It aims to utilize the vast amount of heat currently expelled from data storage facilities into the atmosphere (incoming cold air is used to cool the servers and the warm exhaust is then released) for the production of food, to not only solve the exhaust problem but more significantly to identify how the combination of data and agriculture might inform new configurations of landscape and architectural space at local and regional scales. In other words, we will explore new spatial configurations based on the premise that your twitter account is a resource for food.....**TWITTER FEEDS!**

## **Industrial Symbiosis + Design**

Industrial symbiosis combines aspects of two or more disparate industrial processes into a synergistic relationship, for example, waste from data becomes a resource for agriculture. *The Foundary*, in Cleveland, Ohio combines a data center with aquaculture. The exhaust heat from servers keeps water to just under 74 degrees, the optimal temperature to breed Sea Bass. In Montreal heat from a bitcoin mine is used to farm crickets (cricket powder is high in protein) while a facility in Bessières, France uses heat from an incinerator to produce over 5,000 tons of tomatoes per year in an adjacent facility. *Greenfarms*, in Ontario utilizes heat from an ethanol plant in its 45 acre greenhouse. In all arenas of study, it is now recognized that the future integration of systems (data to energy to food to trash) into urban and regional environments is not merely a question of efficiency and function but is also a question of design. Design has the capacity to ask questions; propose scenarios and offer stories that articulate how metabolic systems shape environments. In this context, the seminar and studio understands “industrial symbiosis” as an environmental strategy by integrating data and food production systems, and more significantly, as a design tool to envision the future planning of a regional territory.

Research in the seminar will be technical and spatial and range from high density food production and forestation to historical and contemporary agricultural formats and typologies, supported by theoretical and design texts on the topic of data and agriculture.

## **Products**

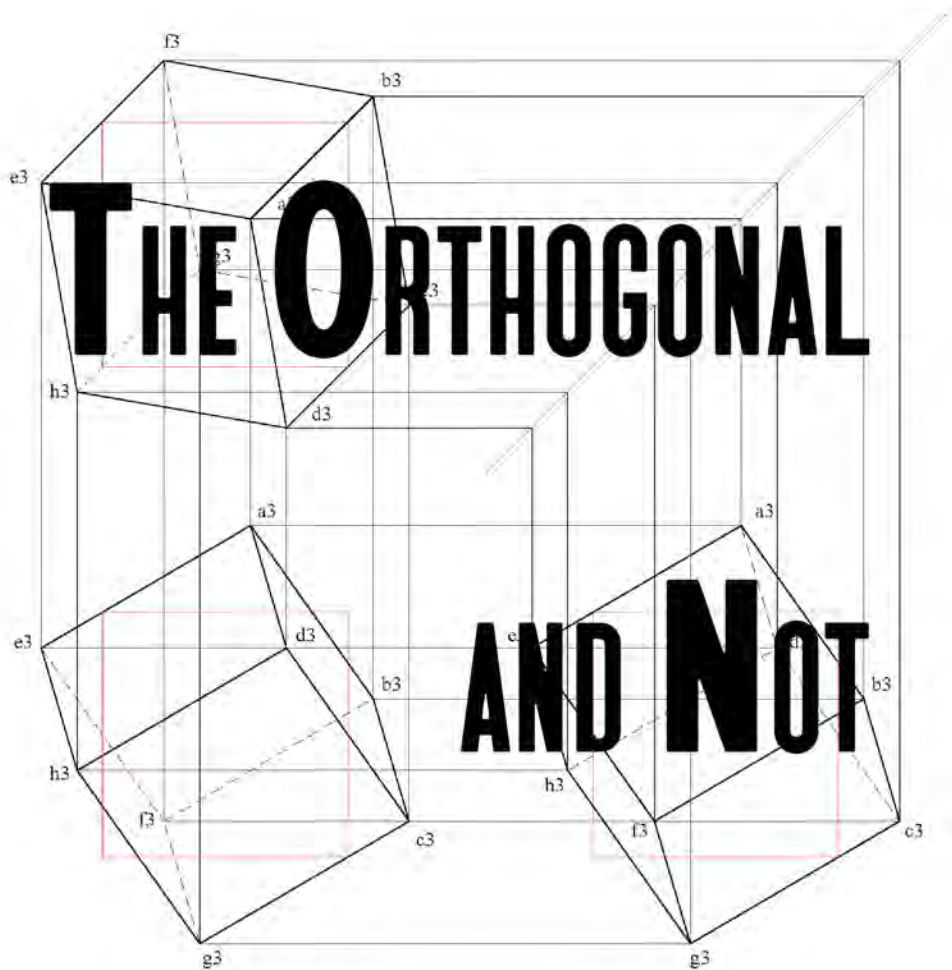
The final product for the seminar is a research booklet, that will act as a manual for the design projects that follow in the spring semester. Design projects will comprise a series of short movies, models and drawings that in combination explain the spatial opportunities possible if emails could grow food. A symposium and technical workshop(s) will augment student research. Schedule and contributors TBD.

## **Site**

The site for the research is Dublin, Ireland which is currently one of the largest data clusters in Europe with 47 data service farms in operation. Focus is on the area around Dublin, alongside the M50 motorway, a ring road sound the city and the T50 fiber optic cable, approximately 45 km from the city center, where data storage facilities currently cluster for easy access to the fiber. Vast amounts of heat is exhausted from these clusters, to the point that the vicinity around the data centers is rendered a microclimate. The physical context for these data farms is banal and un-designed as the boxes are built with little regard for site qualities and local residents. There is continuous controversy in Ireland over the government’s willingness to attract data farms since they do little for the physical community and given they are automated do not provide employment in the area. A hyperscale facility might only employ 30 people. Ireland has the third highest emissions rate of any European country, a third of which comes from the agricultural sector.

*The seminar and studio are supported by the SOM Foundation Research Prize, 2020, which was created in 2018 to cultivate new ideas and meaningful research with the goal of addressing critical issues of our time. This year’s topic, “Shrinking our Agricultural Footprint,” seeks to define new spatial conditions that reduce our agricultural footprint and advance approaches to sustainability and resiliency in the short- and long-term future.*





## **studies in eccentric geometries, tectonic improbity, and politics**

This seminar takes as its premise that in architecture, as in other cultural fields, a set of disciplinary concerns develop that are unique to the field. This set of concerns is neither a fixed code nor a canon; the concerns are apt to be contested and subject to extrapolation, abandonment, or rebuttal. Rather, what they provide—at any given time—is a more-or-less common arena for creative discourse and disputation. Today, disciplinary interests in architecture are viewed by many as disengaged from the world and its pressing needs. This seminar posits instead that it is precisely from architecture's disciplinary obsessions that we create new ways to engage and reflect upon the world. The seminar and subsequent studio will look at a series of narrowly defined excursions into geometric eccentricities that arose in the later decades of the twentieth century. These will be contrasted to normative geometric and tectonic conditions that dominated architecture for centuries—including during modernism. In these eccentricities we will trace a tendency that sought to systematically dismantle architecture's propensity for order, control, and probity. A parallel line of research, initially led by two MAD-Crit students and later undertaken by all, will examine the cur-rent—contested—status of the monument and its implications for architecture and cities.

### *Tectonic Improbability: non-orthogonal grumblings*

We will examine the progression of increasingly eccentric, atectonic works of architecture over the last fifty years including earlier antecedents through formal studies, geometric diagrams, and timelines. We

will examine ways this progression put into question—among other things—orthogonality and rectitude, the coincidence of building form with architecture's drawing conventions and ground as architecture's stable substrate. This will be contrasted to current reactionary formal impulses. We will examine these opposing tendencies of the present and near-past architecture and propose that the urge to return to stability, while perhaps inevitable in our uncertain and troubling times, is also made impossible by the disciplinary difficulties introduced in our recent past. The seminar will develop knowledge and tools for this undertaking to be employed in our subsequent spring design studio.

*Politics: Monuments and Civic Life*

Architecture is still largely executed through commissions involving a great deal of money, resources and labor, and arises to serve a client's personal, corporate, institutional, or governmental needs. This has likely always been the case, but so has the architect's delicate task of neither rejecting nor uncritically reflecting and projecting those circumstances and that power. In architecture, attempts to create explicit political expressions often result in built platitudes of indifferent form. However, characterizing any architecture as autonomous is also illusory. Executed in the midst of larger events architecture is inevitably colored by those events, shaping—even if unconsciously—their tenor and sensibility, and altering its reception by the world. This relationship will be examined in a parallel set of studies that considers the present, contested, status of the monument and through that examination explores the changing relationships between architecture and art, politics, and social life.