RapidTYPING: Studio for Designing Suburban Futures

*Investigating typo-morphology in architecture at the intersection of health and placemaking*

What can architects and architecture do to help forge a more resilient, equitable future for the suburbs of North America?

To help address this question, this studio will explore the pedagogy of *typo-morphology in architecture* using a lens sited at the *intersection of health and placemaking*. Our goal is to investigate how a newly invigorated reading of type as a design method might assist in envisioning more resilient and equitable opportunities for the retrofitting of failed suburban form (low density, use-separated, car-dependent places). Can such places be transformed into vitalized mixed-use neighborhoods, with affordable and aging-supportive housing at “missing middle” densities, and improved mobility?

We will work together to interrogate the workings of “type” in architectural and urban design, seeking to overcome conventional readings of typology and building type as solely synonymous with classification by function or program. Using this theoretical research as a springboard, we will commence a process of “rapid typing,” *rapidly designing one (small!) new building per week*.

Each design will be informed by a set of emergent practices and protocols for designing healthy places. We will then apply the resultant model (building or place) into the assembly of a coherent attachable fragment of urbanism, sited in a suburban context, chosen for its future transformation potential.

**RESEARCH COMPONENT**

The research will be two-pronged. Students will study: 1) the “wicked problem” of designing healthier urban places, and 2) the use of typo-morphology in architectural design.
Designing Healthy Places
The development of new toolkits for the design of healthy places is the topic of a Spring 2018 competition that we may enter; submissions are due May 23. The competition is organized by the ASCA, and sponsored by the NEA and the AIA: http://www.acsa-arch.org/programs-events/competitions/2017-2018-designing-healthy-places-competition

From the competition brief:

“Populations of all income levels have experienced an epidemic of preventable “lifestyle diseases” (high blood pressure, cardiovascular illness, obesity, diabetes, etc.) due to abundances in food, automobiles, technology, and energy—a challenge of affluence. If human evolution and behavior were shaped by scarcity, then abundance poses new challenges to our consumer habits and general decision making…

Beyond matters of physical health, the status of mental health is undervalued in the design of places. Former U.S. Surgeon General, Dr. Vivek Murthy, declared loneliness a serious health epidemic, a “more common pathology than heart disease or diabetes” in his practice experience. Loneliness directly impacts mental and physical health, and is a gateway condition to deviant behavior. Here, housing is an important form of protection when designed for affordability and sociability."

The following three areas of concentration are of primary interest: Affordable Housing, Housing for Aging, and Neighborhood Vitalization.

Typo-morphology in Architectural Design
In the studio, we will look to typo-morphological design methods. First, we will familiarize ourselves with recent theories of typology and morphology in architecture and urban design (Argan, Vidler, Rowe & Koetter, Moneo, Scheer, Leupen, Lee & Jacoby) while engaging in a playful series of weekly design exercises.

“The type presents less the ‘image’ of a thing to copy or imitate completely than the ‘idea’ of an element which ought itself to serve as a rule for the model.”
- Quatremere de Quincy, “Type,” Encyclopedia Methodique (1825)

Each week you will be assigned a general type and be asked to design a specific model of that type. Each model that you develop – of a building or an element of urban placemaking – will comprise a component in a emergent catalog or pattern book of opportunities for neighborhood design.

The end of this exercise is to assemble pieces from that catalog of typologically informed models into a vitalized neighborhood pattern of blocks, streets, buildings, and open spaces.

PROGRAM
Following an initial two-week period of research, students will be assigned to design one new building-type or place-type per week, from small to medium in size. Each type might accommodate different programs, from residential (dwelling) to commercial (shops, workplaces) and civic (school, library, government) to public space (street, square, park):

• Double dwelling
• Four-plex dwelling
• Vertical stack, shop/work/dwell/learn
• Complete street + common/park/square
• Public hall, community/civic/gathering
• Wildcard! Choose your own type
METHODOLOGY
We will embrace the premise that practice produces proficiency. During the “rapid typing” phase of the studio, students will design one building/landscape “model” per week, following a given type. Each model will be designed according to the following weekly schedule:

<table>
<thead>
<tr>
<th>when</th>
<th>where</th>
<th>what</th>
<th>how</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon</td>
<td>Pin-up</td>
<td>New type assigned - Concepts</td>
<td>Pencils, markers, trace</td>
</tr>
<tr>
<td>Tue</td>
<td></td>
<td>Massing</td>
<td>Foamcore/museum board &amp; Rhino</td>
</tr>
<tr>
<td>Wed</td>
<td></td>
<td>Plans &amp; section</td>
<td>AutoCad</td>
</tr>
<tr>
<td>Thu</td>
<td>Desk crit</td>
<td>Site plan &amp; elevations</td>
<td>Adobe Illustrator</td>
</tr>
<tr>
<td>Fri-Sun</td>
<td></td>
<td>Rendered 3d view</td>
<td>Rhino &amp; Illustrator → Adobe InDesign</td>
</tr>
</tbody>
</table>

The table outlines the iterative design process that we will undertake. Students, working in pairs or alone, will rotate through this proscribed sequence each week to build up to a new scheme. A template will be used to organize each week’s design production.

At the midterm, the sequence or catalog of type-models designed to date, organized into a matrix, will be assessed.

SITE
One or two suburban sites in the New York metropolitan area ripe for retrofitting (office park, shopping mall, etc.) will be selected for the final phase of the studio. How could these suburban places be radically transformed?

"New York is not just Manhattan; it’s the outer boroughs and the suburbs as well. The boundary of city versus suburb has to go away; you need a regional metropolis that can be walkable and transit oriented."
- Peter Calthorpe, “Purging Suburbia” (2012)

Example of a Suburban Retrofitting Sequence: Mashpee Commons, MA (from Retrofitting Suburbia)
WEEKLY SCHEDULE
Note: schedule below is subject to revision through the duration of the semester.

W1
Mon 01.29 RESEARCH: HEALTHY BY DESIGN / TYPOLOGY 101
First day of class (Lottery and general presentation)
Thu 02.01 Studio (Portfolios DUE: M.Arch I, M.Arch II, and B.Arch 4th year students)

W2
Mon 02.05 RESEARCH: HEALTHY BY DESIGN / TYPOLOGY 101
Studio / Desk Crit
Thu 02.08 Studio / Pin up research
6:30pm. Lecture: Elizabeth Christoforetti

W3
Mon 02.12 TYPE: DOUBLE DWELLING
College Closed / Lincoln’s Birthday
Thu 09.15 Studio / Desk Crit
6:30pm. Lecture: Ivan Rupnik

W4
Mon 02.19 TYPE: FOUR-PLEX DWELLING
College Closed / Presidents’ Day
Tue 02.20 (Mon Schedule) Studio / Pin Up
Thu 02.22 Studio / Desk Crit
6:30pm. Lecture: Iñáqui Carnicero

W5
Mon 02.26 TYPE: VERTICAL STACK
Studio / Pin Up
Thu 03.01 Studio / Desk Crit
6:30pm. Lecture: Vishaan Chakrabarti

W6
Mon 03.05 TYPE: COMPLETE STREET + COMMON/PARK/SQUARE
Studio / Pin Up
Thu 03.08 Studio / Desk Crit
6:30pm. Lecture: Celeste Olalquiaga

W7
Mon 03.12 MID-REVIEW
Studio / Pin Up
Thu 03.15 Studio / Mid-review

W8
Mon 03.19 TYPE: PUBLIC HALL
Studio / Desk Crit
Thu 03.22 Studio / Desk Crit

W9
Mon 03.26 TYPE: WILDCARD + REVISIONS
Studio / Pin Up
Thu 03.29 Studio / Desk Crit

SPRING RECESS

W10
Tue 04.09 MATRIX / TOOLKIT
Studio / Pin Up
Thu 04.12 Studio / Desk Crit
6:30pm. Lecture: Mario Gooden

W11
Mon 04.16 SITE ANALYSIS
Studio / Desk Crit
Thu 04.19 Studio / Desk Crit
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Activity</th>
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<tbody>
<tr>
<td>W12</td>
<td>Mon 04.23</td>
<td>Studio / Desk Crit</td>
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<tr>
<td></td>
<td>Thu 04.26</td>
<td>Studio / Desk Crit</td>
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<td></td>
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<td><strong>6:30pm. Lecture: Georgeen Theodore and Tobias Armbrorst (Inteboro)</strong></td>
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<tr>
<td>W13</td>
<td>Mon 04.30</td>
<td>Studio / Pin Up</td>
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<td>Thu 05.03</td>
<td>Studio / Desk Crit</td>
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<td>W14</td>
<td>Mon 05.07</td>
<td>Studio / Desk Crit</td>
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<tr>
<td>W15</td>
<td>TBD</td>
<td><strong>FINAL REVIEW</strong></td>
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<td></td>
<td>Wed 05.23</td>
<td><strong>ACSA COMPETITION SUBMISSION DEADLINE</strong></td>
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READINGS

On Typo-morphology

On Designing Healthy Places

On Retrofitting Suburbia
Build A Better Burb website: http://buildabetterburb.org/browse-articles/

REFERENCES (PARTIAL LIST!)
Frederick Law Olmsted Jr. and Grosvenor Atterbury, Forest Hills, Queens, NY, 1909
Clarence Stein, Henry Wright, and Marjorie Sewell Cautley, Radburn, NJ, 1928
Mies van der Rohe, Hilbersheimer, and Caldwell, Lafayette Park, Detroit, MI, c.1960
Jorn Utzon, Fredensborg Houses, Denmark, 1963
Duany Plater-Zyberk, Seaside, FL, 1984-91
MVRDV, Ypenburg, Netherlands, 2005
Dover, Kohl + Partners, Glenwood Park, Atlanta, GA 2004
Ross Chapin Architects, Danielson Grove, Seattle, MA, 2007
Torti Gallas + Partners, Masonvale Faculty/Staff Housing, Fairfax, VA, 2010
WORKac, Nature-City, 2012 (project)
GRADING/ATTENDANCE POLICIES AND STUDIO CULTURE

Course Expectations:
• That students will develop a high level of independent thought and rigor and a willingness to go beyond both basic project requirements and their own perceived limits and abilities.
• That students will successfully complete all project requirements. No make-up or postponed project submissions will be accepted except in the case of medical emergencies or other extraordinary circumstances. Excused absences and project delays must be officially cleared by professor in advance in order to be considered valid.

Methods of Assessment:
• Attendance and participation in class discussions: 20%
• Project development in response to semester schedule: 50%
• Project presentation, completion and resolution: 30%

Key areas of Grading Assessment:
• Studio performance & work habits: Ability to respond to studio criticism & discourse in a consistent & clear manner throughout the course of the semester as demonstrated in the evolution and development of design work.
• Clarity of representation & mastery of media: Ability to utilize both digital and manual drawing and model-making techniques to precisely and creatively represent architectural ideas.
• Pre-design: ability to prepare a comprehensive program for an architectural project that includes an assessment of client and user needs; an inventory of spaces and their requirements; an analysis of site conditions (including existing buildings); a review of the relevant building codes and standards, including relevant sustainability requirements, and an assessment of their implications for the project; and a definition of site selection and design assessment criteria.
• Research: Understanding of the theoretical and applied research methodologies and practices used during the design process.
• Integrated evaluations and decision-making design process: Ability to demonstrate the skills associated with making integrated decisions across multiple systems and variables in the completion of a design project. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.
• Attendance: Consistent level of preparation and on-time presence for each studio class and evening lectures.
• Portfolio: Completion of portfolio as described below and attendance at all scheduled portfolio related events.

Portfolio
• All M.Arch I third year students and all M.Arch II students are required to submit a portfolio on February 1st, 2018. Third year students and M Arch II students may submit either a hard copy portfolio or email a link to a digital portfolio to hborgeson@ccny.cuny.edu. Digital submissions must be a link, not a file attachment.
• All B.Arch 4th year students are required to submit a hard copy portfolio on February 1st, 2018. Submit to your studio instructor.

Grading Criteria:
A (+/-) Work meets all requirements and exceeds them. Presentations are virtually flawless, complete, and finely detailed. Work exhibits professional, “museum quality” level of craft. Student has developed an individual design process that shows a high level of independent thought and rigor. Work shows evidence of intense struggle to go beyond expectations, and beyond the student’s own perceived limits of their abilities.

B (+/-) Work meets all requirements. Presentations are complete and finely detailed. Work exhibits professional level of craft. Student has developed an individual design process that shows a high level of independent thought and rigor.

C (+/-) Work meets minimum requirements. While presentations may be complete, student has struggled to develop an individual design process and/or is lacking in craft or design resolution.

D (+/-) Work is below minimum requirements. Presentations are incomplete, student has struggled to develop an individual design process and/or is lacking in craft or design resolution.
F    Work is well below minimum requirements. Student does not develop adequate design process, and/or does not finish work on time.

INC  Grades of “incomplete” are not given under any circumstances unless there is evidence of a medical or personal emergency. In such cases, instructor and student develop a contract to complete work by a specified date, as per CCNY policy. Classes / work missed due to illness must be explained with a physician’s note.

Notes:
C is the lowest passing grade for M.Arch I and M.Arch II students.
Working in teams does not guarantee the same grade for each team member; grades are based on a range of criteria for each student.

For more information on grading guidelines and other ccny policies and procedures, consult the current CCNY academic bulletins: http://www.ccny.cuny.edu/registrar/bulletins.cfm

Office Hours:
Office hours are set by appointment. If a student needs to speak in private with a studio critic they must email in advance to request a meeting time. Students may seek office hour appointments to discuss any matters of concern including personal, private matters and general inquiries about course related work, grading, assessment and content.

Probation & Dismissal: for program specific information related to grades, academic standing, probation and dismissal, please see your program academic advisors:
B.Arch: Arnaldo Melendez & Sara Morales
M.Arch: Hannah Borgeson

Studio Culture:
Working in the studio is mandatory. Studio culture is an important part of an architectural education. Please see the Spitzer School of Architecture Studio Culture Policy, which can be accessed on the SSA website here: https://ssa.ccny.cuny.edu/about/policies/.

Absence & Lateness:
Arriving more than ten minutes late to class will constitute an absence. Two unexcused absences will result in a whole letter grade deduction from a final grade; three will result in a failing grade. It is expected that all students will participate in all scheduled working, midterm and final reviews and contribute constructively to the discussion.

Absences due to Religious Observances:
Students who will miss any class sessions, exams, presentations, trips, or the like due to a religious observance should notify the instructor at the beginning of the semester so that appropriate adjustments for observance needs can be implemented. This could include an opportunity to make up any examination, study, or work requirement that is missed because of an absence due to a religious observance on any particular day or days.

Noise Policy:
The studio environment should be a quiet and respectful place where all students can work and think in peace. At no time may students play music out loud in studio, even at a low volume. If you desire to listen to music, either during class hours or after hours, headphones are a requirement. Conversations must also be kept to a reasonable volume to respect classmates and those students in adjacent studios.

Readings & Journals:
Students are expected to keep a journal or sketchbook throughout the duration of studio to document their thought process & take notes of any texts, books, terms or references that are mentioned by either the studio critic or fellow classmates and to selectively follow up on these and any other assigned readings before the next class.

Academic Dishonesty:
As a student you are expected to conduct yourself in a manner that reflects the ethical ideas of the profession of architecture. Any act of academic dishonesty not only raises questions about an individual’s fitness to practice
architecture, but also demeans the academic environment in which it occurred. Giving or receiving aid in examinations, and plagiarism are a violation of an assumed trust between the school and the student.

Plagiarism, i.e. the presentation as one’s own work of words, drawings, ideas and opinions of someone else, is a serious instance of academic dishonesty in the context as cheating on examinations. The submission of any piece of work (written, drawn, built, or photocopied) is assumed by the school to guarantee that the thoughts and expressions in it are literally the student’s own, executed by the student. All assignments must be the student’s original work. Any copying, even short excerpts, from another book, article, or Internet source, published or unpublished, without proper attribution will result in automatic failure of the entire course.

CCNY Academic Integrity Policies: [http://www.ccnycuny.edu/academicaffairs/integritypolicies.cfm](http://www.ccnycuny.edu/academicaffairs/integritypolicies.cfm)
In particular, consult the academic integrity brochure for students: [http://www.ccnycuny.edu/academicaffairs/upload/brochurepdfversion.pdf](http://www.ccnycuny.edu/academicaffairs/upload/brochurepdfversion.pdf)
For more guidance about understanding standards for plagiarism in the digital age, see: [http://www.nytimes.com/2010/08/02/education/02cheat.html?_r=1&emc=eta1&pagewanted=print](http://www.nytimes.com/2010/08/02/education/02cheat.html?_r=1&emc=eta1&pagewanted=print)
For citations, use the Chicago Manual of Style “notes and bibliography” method: [http://www.chicagomanualofstyle.org/tools_citationguide.html](http://www.chicagomanualofstyle.org/tools_citationguide.html)

**AccessAbility Center (Student Disability Services):**
The AccessAbility center (AAC) facilitates equal access and coordinates reasonable accommodations, academic adjustments, and support services for City College students with disabilities while preserving the integrity of academic standards. Students who have self-identified with AAC to receive accommodations should inform the instructor at the beginning of the semester. (North Academic Center 1/218; 212-650-5913 or 212-650-6910 for TTY/TTD).

**Library:**
The school’s library is a shared resource that is necessary supplement to all research and design work. Please direct questions to the library staff or the Architecture Librarian Nilda Sanchez: nsanchez@ccny.cuny.edu

**NAAB (National Architectural Accrediting Board):**
The National Architectural Accrediting Board (NAAB) is the sole agency authorized to accredit US professional degree programs in architecture. Since most state registration boards in the United States require any applicant for licensure to have graduated from a NAAB-accredited program, obtaining such a degree is an essential aspect of preparing for the professional practice of architecture. While graduation from a NAAB-accredited program does not assure registration, the accrediting process is intended to verify that each accredited program substantially meets those standards that, as a whole, comprise an appropriate education for an architect.

More specifically, the NAAB requires an accredited program to produce graduates who: are competent in a range of intellectual, spatial, technical, and interpersonal skills; understand the historical, socio-cultural, and environmental context of architecture; are able to solve architectural design problems, including the integration of technical systems and health and safety requirements; and comprehend architects’ roles and responsibilities in society.

The following student performance criteria are addressed in this course:

**Realm B: Building Practices, Technical Skills, And Knowledge.** Graduates from NAAB-accredited programs must be able to comprehend the technical aspects of design, systems, and materials and be able to apply that comprehension to architectural solutions. In addition, the impact of such decisions on the environment must be well considered.

**B.1 Pre-Design:** ability to prepare a comprehensive program for an architectural project that includes an assessment of client and user needs; an inventory of spaces and their requirements; an analysis of site conditions (including existing buildings); a review of the relevant building codes and standards, including relevant sustainability requirements, and an assessment of their implications for the project; and a definition of site selection and design assessment criteria.

**Realm C: Integrated Architectural Solutions.** Graduates from NAAB-accredited programs must be able to demonstrate that they have the ability to synthesize a wide range of variables into an integrated design solution.
C.1 Research: understanding of the theoretical and applied research methodologies and practices used during the design process.

C.2 Integrated Evaluations And Decision-Making Design Process: ability to demonstrate the skills associated with making integrated decisions across multiple systems and variables in the completion of a design project. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.

Students should consult the NAAB website www.naab.org for additional information regarding student performance criteria and all other conditions for accreditation.

CONTACT INFORMATION:

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