On the SOCIAL RESPONSIBILITY of ARCHITECTURE
housing experiments in diversity, equity & solidarity

ARCH 4602: Architecture Design VIII
6 Semester Credit Hours
College of Architecture
Texas Tech University
Spring 2022

Prerequisite: ARCH 4601. Provides instruction in advanced architectural design projects. Students develop integrated design skills as they negotiate the complex issues of program, site, and form in a specific cultural context. Integrates aspects of architectural theory, building technology, and computation into the design process.

Meeting Times
Monday, Wednesday, and Friday 1:00 pm - 4:50 pm both online and in studio.
Studio Section Instructor
Hendrika Buelinckx

COVID NEWS (TBA)
This studio will be online until February 4, 2020. Students are required to attend Zoom meetings which entails the use of internet, a webcam, and a microphone. Students will post their work on MIROboard https://miro.com/app/board/o9J_llpbIxk=/. Teaching modalities will be revised after that date.

Quatremere de Quincy: Cave | Shelter | Tent metaphor for masculine to feminine expression…

PROGRAM CRITERIA (PC)
A program must demonstrate how its curriculum, structure, and other experiences address
the following criteria.
PC.1 Career Paths
PC.2 Design
PC.3 Ecological Knowledge & Response
PC.4 History & Theory
PC.5 Research & Innovation
PC.6 Leadership & Collaboration
PC.8 Social Equity & Inclusion

STUDENT CRITERIA (SC): Student Learning Objectives and Outcomes
A program must demonstrate how it addresses the following criteria through program curricula
and other experiences, with an emphasis on the articulation of learning objectives and assessment.

SC.1 HSW in the Built Environment (Understanding)
SC.2 Professional Practice (Understanding)
SC.3 Regulatory Context (Understanding)
SC.4 Technical Knowledge (Understanding)
SC.5 Design Synthesis (Ability)
SC.6 Building Integration (Ability)

COURSE DESCRIPTION

ARCH 4602 - Architectural Design VIII - Social Responsibility of Architecture
Design VIII is the comprehensive studio in the undergraduate program. Students will research,
program, design, and develop concepts of materials and construction during the semester.
The studio will explore social, economic, environmental, and cultural issues within the local context.
Public input and feedback will be sought through public exhibitions. Precedent studies will include
traveling to visit architecture relevant to the project.

Architectural Design VIII builds upon the students' previously acquired knowledge and skills in
architectural representation, spatial composition, material & tectonic articulation, and structural &
environmental systems. This studio will challenge the students' ability to consider the social
responsibility of architecture and question our preconceived notions and perspectives toward design
program issues and the resolution of these problems. This ***housing experiments in diversity, equity
and solidarity studio*** *will investigate the preconceived notions and issues towards these problematic
issues in the social and architectural history of housing. Readings and precedents will reveal the iconic
from the vernacular the spontaneous*

Keywords/Topics
Research, precedent analysis, typology, morphology of residential developments; private versus shared
amenities, communal values, county/city regulations, man-made versus natural environments, ecological
considerations, socio-economic regulations.

NAAB 2020
Program Criteria (PC)
A program must demonstrate how its curriculum, structure, and other experiences address the following criteria.

PC.1 Career Paths
PC.2 Design
PC.3 Ecological Knowledge & Response
PC.4 History & Theory
PC.5 Research & Innovation
PC.6 Leadership & Collaboration
PC.8 Social Equity & Inclusion

Student Criteria (SC): Student Learning Objectives and Outcomes
A program must demonstrate how it addresses the following criteria through program curricula and other experiences, with an emphasis on the articulation of learning objectives and assessment.

SC.1 HSW in the Built Environment (Understanding)
SC.2 Professional Practice (Understanding)
SC.3 Regulatory Context (Understanding)
SC.4 Technical Knowledge (Understanding)
SC.5 Design Synthesis (Ability)
SC.6 Building Integration (Ability)

Student Learning Objectives
- methods of context analysis & mapping
- precedent analysis
- programming client needs and wants
- design concept generation
- site & form development (1" = 20')
- design plans, sections, elevations, and digital and physical models (1/8" = 1'-0")
- design detail development (3/4" = 1'-0")

ACADEMIC CALENDAR Dates (see also detailed schedule below)

1.12	W	All School Meeting 1.00 – 3.15 pm @ ZOOM – Lottery
1.14	F	Intro to Studio, Syllabus, Schedule @ ZOOM meeting
1.17	*M*	*HOLIDAY-MLK day*
3.08	W	**MIDTERM review**
3.14l18 M-F		*No Classes _ Spring Break*
4.18	*M*	*No Class*
05.02	**M**	**CoA-4rd Year Final Review**
05.03	M	Last Day of Classes
05.13/14		Commencement
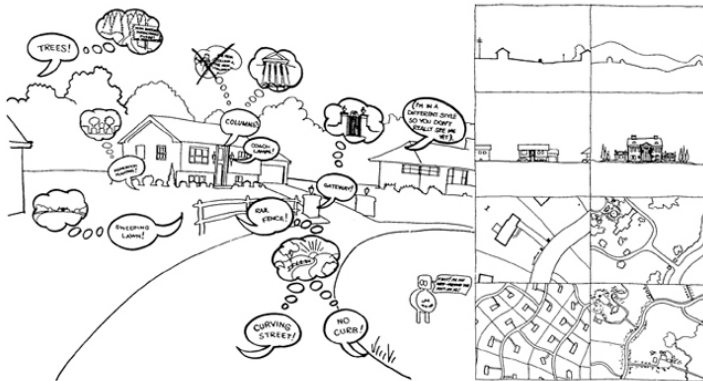
PRECEDENTS OF SUBURBAN SYMBOLS 🏠 SPRAWL SPACE & IMAGERY

Denise Scott Brown's Levittown & other suburban Symbolism exhibit 1970s.

This studio will evolve as follows:

Phase 1. Research
During the **research phase** students are to gather documentation and data pertaining to the central program of this studio: mid-density, mix-use, multi-generational housing. Students are to become familiar with a chronological development in housing solutions which they will further develop into a typology of housing plans throughout the ages. Students are responsible to read all assigned readings and lectures and distill their essence and report in various diagramming scheme. Site visits to existing developments will be conducted during this phase.

Phase 2. Design Exploration
During this phase each student will experiment with different methodologies to generate a wide variety of potential design solutions in a coherent design language. Diagrams, drawings, and models of the spatial composition of at least 6 different unit types will be proposed. Units may vary between 1 to 3 stories. At least one unit must be fully ADA compliant. At least one unit must be able to accommodate multi-generational family. At least one unit type must accommodate a single-parent household. Further variation between unit types may be obtained by varying the live/work percentage, the residential/retail percentage, the co-habitation of singles, the number of occupants, etc.

Phase 3: Design Development
During this phase the spatial composition of each unit type may be further differentiated in its tectonic articulation (cave|shelter|tent), augmented with its environmental systems, and situated in its ecological context. The tectonic articulation should include elements of the cave|shelter|tent (monolithic, planar ,and skeletal forms) metaphor. The environmental systems should be based on a thorough understanding of the fundamental design principles to create, if possible, a passive well-tempered environment. And the ecological context should optimize the earth, wind, sun, and water resources. The project site maybe a generic square city block or county plot in this region. No specific site is required. Proposals maybe generic solutions to areas open to future development.

LUBBOCK
TEXAS
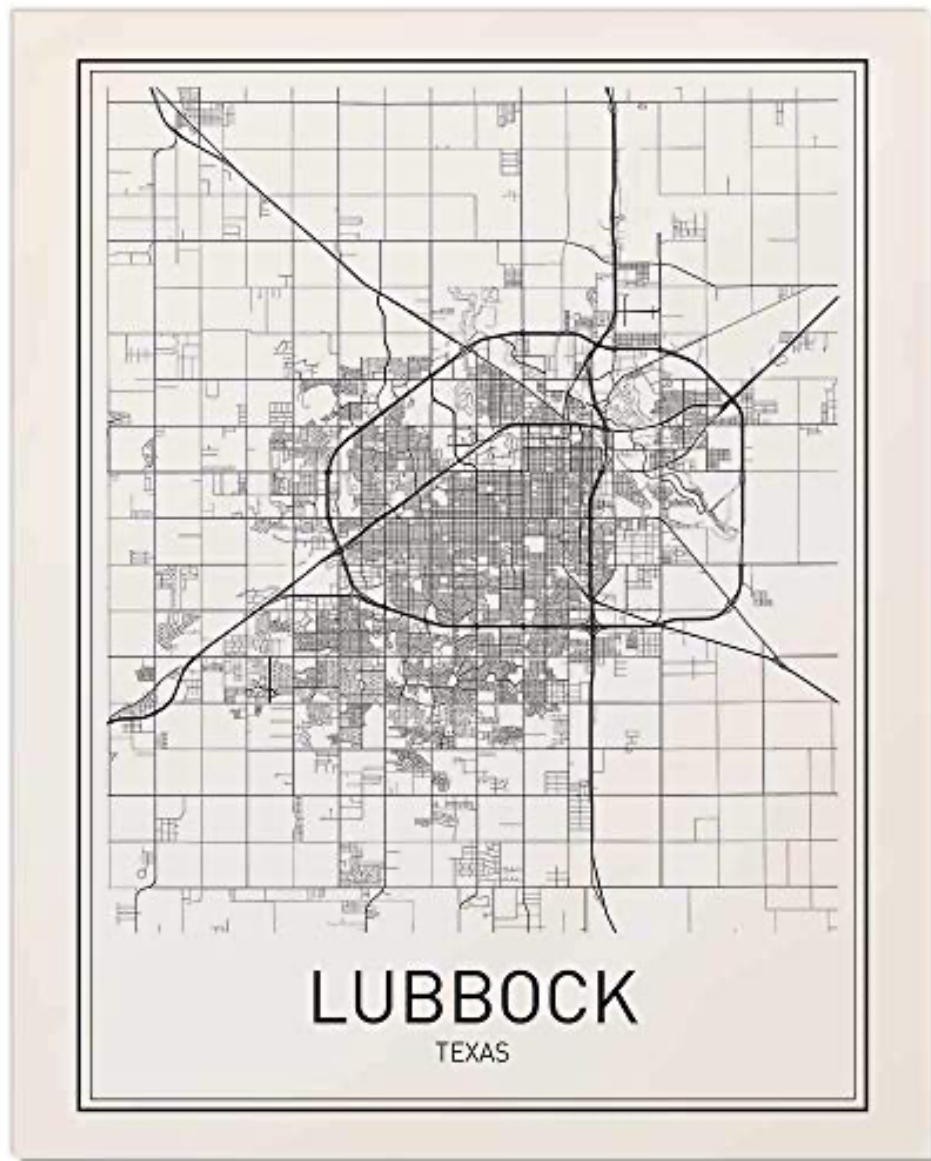
Deliverables (May be adjusted at the Instructor's discretion)

For both the Midterm and the Final reviews, each student is expected to produce a full set of architectural representations—*diagrams, drawings, models*—that communicate their design process and design proposal in a rigorous yet concise manner.

Each student is required to format, layout, and post on the MIRO board their work prior to each studio meeting. For F2F studios, the layouts to be printed should take into account standard paper sizes such as 11x17 etc. which should be printed and pinned up prior to start studio sessions. Standard Engineering scales and Architectural scale such as 1/16"=1', 1/8"=1'and 1/4"=1'should be used.

Criticism of each student's design proposal during each class session, pinup, and formal review will be the primary methods of assessment for this course. Each phase has its particular set of deliverables to be produced by each student individually. Each set of deliverables should clearly and rigorously communicate your design proposal in a set of diagrams, drawings, and/or models (physical and digital). Specific production specifications and documents required at the end of each phase are as follows:

Deliverables for Phase 1. RESEARCH

- Research documentation (.pdfs of articles and book chapters) submitted on OneDrive folder.
- Synthesis of Research – a Powerpoint/MIRO board submitted on OneDrive folder
- Chronological Housing Typology Diagrams – to be coordinated with peers (posted on MIRO board https://miro.com/app/board/o9J_llpbIxk=/ in square format frame-printed on 11x17 portrait orientation)
- Study models on 6"x6" bases to be photographed and included in Powerpoint.

Deliverables for Phase 2. DESIGN EXPLORATION (tentative)

- 250 word narrative
- no scale Study models
- diagrams clearly summarizing research findings, design process and principles
- 1/16"=1'-0" Configurations with 36 instances of 6 unit types' Plans, street Elevations
- 1/8"=1'-0" UNIT types' Floor Plans, Sections, Elevations, Axometric
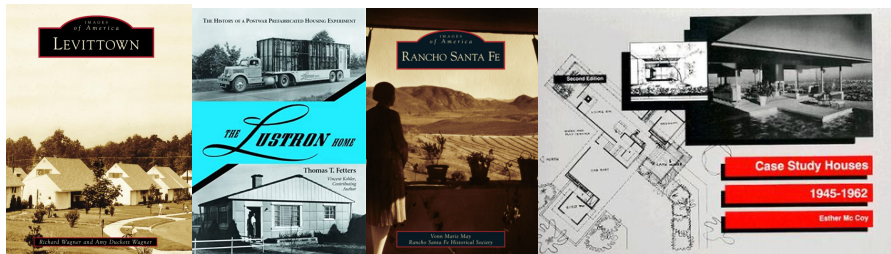- 1/8"=1'-0" UNIT types' Building Models (both digital and physical)

Deliverables for Phase 3. DESIGN DEVELOPMENT (tentative)

- 250 word narrative
- no scale Study models
- diagrams clearly summarizing research findings, design process and principles
- 1/16"=1'-0" Configurations with 36 instances of 6 unit types' Plans, street Elevations
- 1/8"=1'-0" UNIT types' Floor Plans, Sections, Elevations, Axonometric
- 1/8"=1'-0" UNIT types' Building Models (both digital and physical)
- 1/4"=1'-0" Tectonic Details

Reading List: (See ARCH Library and Readers on Onedrive)

- Hayden, D. *Redesigning the American Dream: the future of housing, work, and family life* (Revised and expanded). W.W. Norton & Co. 2002.
- Rendell, Penner, B., & Borden, I. *Gender space architecture: an interdisciplinary introduction.* E & FN Spon. 2000.
- Friedman, Alice T. *Women and the Making of the Modern House : a Social and Architectural History*. Harry N. Abrams, 1998. See Walker, Lynn and Dolores Hayden
- Robert Venturi, Denise Scott Brown - *Architecture as Shelter: City as Decon* Lecture date: 1991-05-02. https://www.youtube.com/watch?v=r1V-aBXQAm4 (Start @ 54')
- *The Rally - Part 2 - Denise Scott Brown*. AA School of Architecture. Lecture date: 1976-07-05. https://www.youtube.com/watch?v=EiXHrUEUVvY. (Start @57'). On Levittown and its social symbolism of suburbia.
- McCoy, E. *Case Study Houses 1945-1962*. Hennessey & Ingalis 1977.
- Leupen B., Mooij, H. *Housing Design: A Manual*. Rotterdam: NAi Publishers. 2008.
- Koolhaas, R., & al. Westcoast Showdown. (see Reader on OneDrive)
- The Berlage Sessions on "Architecture in Civic Service":
  1. "The Cohousing Movement's Stockholm" by Helena Mattsson. https://www.youtube.com/watch?v=1qb1W-gLtWA
  2. "Mulder's Amsterdam" by Linda Vlassenrood https://www.youtube.com/watch?v=72NPFFAbupM
  3. "The Architect's Patriarchy" by Namelok https://www.youtube.com/watch?v=6VPw6awWx0E

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REQUIRED STUDIO SUPPLIES

Sketchbook
Specifics to be determined by instructor.

Computer
Students must possess and maintain their personal laptop computer for this class. A computer is required from the first day of class . Printing is available in the building see https://www.depts.ttu.edu/architecture/coa-resources/current/printbureau_info.php. Technical problems such as printing issues, server crashes, software incompatibilities, or machine failures are not acceptable excuses for not having required assignment material at the time it is due. It is HIGHLY recommended that you purchase an external hard drive to digitally backup your work on a regular basis throughout the semester.

Software
This studio will use:

- **Adobe Creative Cloud** which includes **Acrobat, Photoshop, Illustrator, Lightroom and InDesign** and may be rented with an student discount from Adobe at https://www.adobe.com/creativecloud/buy/students.html?PID=7163141

- **Rhino 7** for 2-d drafting and 3-d digital modeling which can be purchased with an educational discount at https://www.rhino3d.com/store?audience=Educational

- **Microsoft Office 365** which is free for students. Download and install suite from https://www.depts.ttu.edu/itts/software/

These and more software programs are available on the computers in CoA's Computer Lab on the 9th Floor and is accessible to all students. The use of AutoCad 3D, Sketchup, or Revit is *not permitted* in this studio course.

Printing and Plotting
Students will be asked to print their work regularly for desk-critiques and reviews. Students should expect to spend an average of $250 on printing over the course of the semester. This cost will vary per student. The Arch Library on the 9th floor also provide printing (please do not change paper in these printers).

Drawing and Model Making Tools and Materials
Students are expected to have at their desk @ least a roll of tracing paper, a set of white sheets of paper; a set of mechanical pencils 0.5 or 0.7 mm HB_Black, and model making materials. This studio will require physical model-making; you will need: a self-healing cutting mat, x-acto blade with #11 knives, Elmer's or tacky glue, a 24" metal edge ruler, architectural scale ruler, triangles, drafting tape and a box of clear push-pins. You may be required to purchase additional model-making materials during the semester. The shop on the Courtyard level is a good venue to obtain some materials. Model making materials might include vellum, bristol, acetate, chipboard, museum board, foam core, acrylic sheet, plastic, fabric, metal, piano wire, basswood, *mdf*, plywood, etc. !!! Spray-Can PAINT is not permitted; use water based paint only. Please consult the CoA shop Policy.

ACADEMIC REGULATIONS

Please consult the Texas Tech University Undergraduate and Graduate Academic Catalog 2021-2022 and the Texas Tech University Student Handbook for information about dropping a course, reporting illness, absence due to religious observance and academic integrity.

ADA Statement
Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make any necessary arrangements. Students should present appropriate verification from Student Disability Services during the instructor's office hours. Please note: instructors are not allowed to provide classroom accommodations to a student until appropriate verification from Student Disability Services has been provided. For additional information, please contact Student Disability Services in West Hall or call 806-742-2405.

Academic Integrity
Academic integrity is taking responsibility for one's own class and/or course work, being individually accountable, and demonstrating intellectual honesty and ethical behavior. Academic integrity is a personal choice to abide by the standards of intellectual honesty and responsibility. Because education is a shared effort to achieve learning through the exchange of ideas, students, faculty, and staff have the collective responsibility to build mutual trust and respect. Ethical behavior and independent thought are essential for the highest level of academic achievement, which then must be measured. Academic achievement includes scholarship, teaching, and learning, all of which are shared endeavors. Grades are a device used to quantify the successful accumulation of knowledge through learning. Adhering to the standards of academic integrity ensures grades are earned honestly. Academic integrity is the foundation upon which students, faculty, and staff build their educational and professional careers. [Texas Tech University ("University") Quality Enhancement Plan, Academic Integrity Task Force, 2010]

Religious Holy Day
"Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Texas Tax Code §11.20. A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence. A student who is excused under section 2 may not be penalized for the absence; however, the instructor may respond appropriately if the student fails to complete the assignment satisfactorily.

Discrimination, Harassment and Sexual Violence
Texas Tech University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from gender and/or sex discrimination of any kind. Sexual assault, discrimination, harassment, and other Title IX violations are not tolerated by the University. Report any incidents to the Office of Student Conduct, (806)-742-SAFE (7233) or file a report online at titleix.ttu.edu/students. Faculty and staff members at TTU are committed to connecting you to resources on campus.

Some of these available resources are: TTU Student Counseling Center, 806-742-3674, https://www.depts.ttu.edu/scc/ (Provides confidential support on campus.) TTU 24-hour Crisis Helpline, 806-742-5555, (Assists students who are experiencing a mental health or interpersonal violence crisis. If you call the helpline, you will speak with a mental health counselor.) Voice of Hope Lubbock Rape Crisis Center, 806-763-7273, (24-hour hotline that provides support for survivors of sexual violence.) The Risk, Intervention, Safety and Education (RISE) Office, 806-742-2110, (Provides a range of resources and support options focused on prevention education and student wellness.) Texas Tech Police Department, 806-742-3931, (To report criminal activity that occurs on or near Texas Tech campus.)

Civility in the Classroom
Texas Tech University is a community of faculty, students, and staff that enjoys an expectation of cooperation, professionalism, and civility during the conduct of all forms of university business, including the conduct of student–student and student–faculty interactions in and out of the classroom. Further, the classroom is a setting in which an exchange of ideas and creative thinking should be encouraged and where intellectual growth and development are fostered. Students who disrupt this classroom mission by rude, sarcastic, threatening, abusive or obscene language and/or behavior will be subject to appropriate sanctions according to university policy. Likewise, faculty members are expected to maintain the highest standards of professionalism in all interactions with all constituents of the university. Consult TTUs Statement of Ethical Principles.

LGBTQIA Support
I identify as an ally to the lesbian, gay, bisexual, transgender, queer, intersex, and asexual (LGBTQIA) community, and I am available to listen and support you in an affirming manner. I can assist in connecting you with resources on campus to address problems you may face pertaining to sexual orientation and/or gender identity that could interfere with your success at Texas Tech. Please note that additional resources are available through the Office of LGBTQIA within the Center for Campus Life, Student Union Building Room 201, www.lgbtqia.ttu.edu, 806.742.5433.

Attendance Policy
CoA's Attendance Policy states that students are responsible for attending all scheduled class meetings for the full class period. A total of four (4) absences is considered excessive, requiring the student to drop the course or receive a grade of "F" in compliance with drop deadlines. Arriving late or leaving early will be recorded as a partial absence. All absences are considered unexcused except absences due to religious observance or officially approved trips. Students are expected to comply with rules for reporting student illness requiring absence from class for more than one week or immediate family member deaths. See Academic Regulations. Attendance is defined as full participation in all studio activities including group and individual critiques, lectures, presentations, demonstrations, discussions, in class assignments, and possible field trips. Attendance requires students to have the necessary tools and supplies available for all studio activities (i.e.: computer, drawing and modeling materials, and shop safety equipment). Excessive tardiness, leaving early, lack of participation, walking in and out, undivided attention, goofing around, and disruptive behavior will be recorded as an absence. In addition, working on assignments from other classes is **not** allowed during class time.

Retention of Work

I give the College of Architecture and Texas Tech University, and/or Texas Tech University System (herein, "Texas Tech") the absolute right and unrestricted permission to collect, use, publish, reproduce, edit, exhibit, project, display and/or copyright work created by me during the course of my education at Texas Tech, through any form (print, digital, physical model, broadcast or otherwise) at any campus or elsewhere, for art, advertising, future accreditation, visiting committees, recruitment, marketing, fund raising, publicity, archival or any other lawful purpose.

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Grading

Evaluation of student performance is based upon the ambition of daily studio progress and the resolution of final products presented during formal reviews. Final reviews are our exams. Persistent production and hard work are expected. Improvement and growth are essential. The general criteria will consider the following:

(1) strength of idea;
(2) articulation and development process
(3) technical competency, clarity, and craft;
(4) clear architectural position as communicated in words/models/graphics
(5) passion, commitment, dedication and rigorous work ethic.

Instructors conduct expert reviews of overall student performance relative to all students in the course, following major stages of the semester. Evaluations are based on years of experienced review of student work and are not negotiable. Evaluations are considered relative to intention, development, and resolution of each project on a 0-100 scale.

Project weighting for the semester will be:
20% / Phase 1-RESEARCH as evidenced in the final design proposal.
30% / Phase 2-Design Exploration
40% / Phase 3-Design Development
10% / Participation

Participation is defined as complete work, delivering work on time, attendance record, professional behavior, studio dialogue, and time given to iterative development.
Note: All assignments must be completed in a timely manner. Extensions to due dates will not be granted. Expect a substantial reduction of your grade for late or incomplete work.
Attendance to the CoA's Lecture Series and other lectures is mandatory and will be considered in the participation grade.

GRADING SCALE
A - Superior/Excellent (90-100%) Work that exceeds the level and requirements requested by the instructor. Consistently showing scholarly initiative, innovation, attempts, discrimination and discernment.
B - Above Average (80-89%) Work meets the requirements of the instructor, and exceeding the level requested in a few. Often showing scholarly initiative, innovation, attempts, discrimination and discernment.
C - Average (70-79%) Work meets the requirements of the instructor and requiring minimal corrections. Work satisfactory but needs improvement. Inconsistently showing scholarly initiative, innovation, attempts, discrimination and discernment.
D -Unsatisfactory (60-69%) Work that is often inaccurate or incomplete, not meeting the minimum requirements of the instructor. Rarely showing scholarly initiative, innovation, attempts, discrimination and discernment.
F - Unacceptable (0-59%) Work that is unacceptable therefore, not defined.

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ARCH 4602: Architectural Design VIII—**C|o|A**—TTU—**Social Responsibility of Architecture**—Spring 2022— Syllabus | 11

HOUSING PRECEDENTS
Regional vs Classical, Iconic vs Alternative

Tepee, Pueblo, Cliff dwellings
Palladian villa plans Palladio
Housing plans, (1869) Catherine Beecher
Prairie style housing by F.L.Wright

Post WWI-early modernism
Domino-house (1914-1915) Le Corbusier- pun from Domus (Latin for house) and Dominoes
Dodge house (1916) I. Gill
Eigen Haard housing, Amsterdam (1917-20) M.De Klerk
Kings Road House (1922) R.M. Schindler
Lovell Beach house (1922) R.M. Schindler
Pueblo Ribera court (1922) R.M. Schindler
House am Horn (1923) G. Munche, W. Gropius, et.al.
Rietveld-Schroder house (1924) Rietveld
Lovell Health House (1927) R.Neutra
Villa Savoye (1928) Le Corbusier
Tugendath house, Brno (1928) M. van de Rohe
Melnikov house Moscou (1929) K. Melnikov
E1027 (1930) E. Gray & J. Badovici
Maison au bord de l'Eau (1934) C. Perriand
Utsonian Houses (1930s-40s) Frank Lloyd Wright

Post WWII-mid-century modernism
Lustron homes (1947-51)
Levittown (1947)
Case Study houses 1945-1962
Habitat'67 Montreal (1967) Moshe Safdie and Associates.
Capsule Hotel Tokyo (1972) K. Kurokawa
CARLA-Aliamany Valley Community for Military Family Housing (1974) B. Willis
https://beverlywillis.com/technology/carla/
Nemasus I and II (1987) J. Nouvel

Master Planning
Parc de la Vilette (1986) B. Tschumi
Masterplan Almere-Centrum (2000) OMA R. Koolhaas

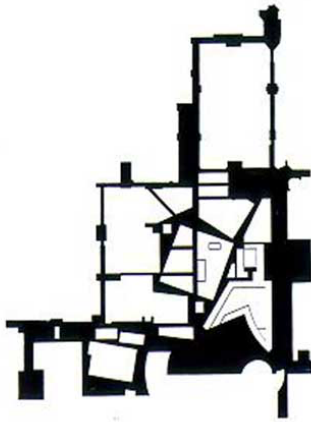**Future**
The Home Competition 2021 see Past Results
https://www.thehomecompetition.com/
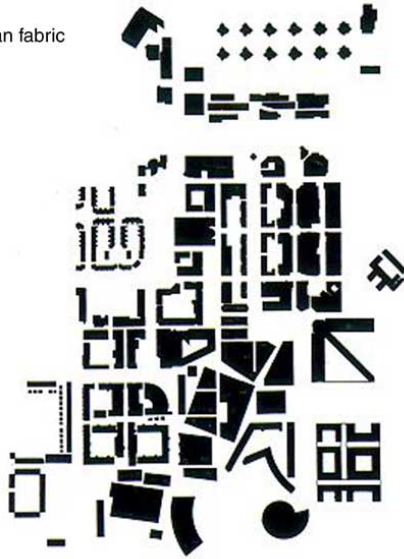
Figure ground study

public spaces   urban fabric

Almere Masterplan (2000) OMA Rem Koolhaas