Studio 400
ARCH 481/ARCH 492 FWS 2019 – 2020
Karen Lange

Schedule: 481 MWF 1-6 pm
492 F 9-12 am

Studio 400 is about the development of your ideas through creative inquiry and personal endeavor. Through small- and large-scale investigations, this studio looks to achieve the radically present in architecture through explorations in design and making.

What does it mean to be speculative in the current world? How do we think about a future/our future? There appears to be a hopefulness in our collective thoughts that was not available just a few years ago. With this positivity is it possible to design objects or solutions that will make a difference in our lifetime? How can architecture aid the world? How can we as designers innovate?

Studio 400 regards a place and pursuit/formulation of the student's own voice in architecture. Through research, investigations of scale and material experimentation/exploitation, and a studio-collectively designed installation, the student develops an individual thesis translating research, theory, and concepts through making in order to define an architectural solution of creativity.

Thesis is a yearlong study regarding a visionary idea of your choosing and the consequent evolution of that idea through research, experimentation, design, and design development. As a studio we will study ideas of inquiry/creation/narration/research; making/prototyping/solving; diversity in thought and action; site knowledge/urban conditions/climate; theoretical programming; and collaboration. As an individual you will make responses to the conceptual ideas of research and studies. Together we will inform each other and play off strengths and criticism.
As a professor I am very interested in the individual projects within the studio but also the total experience and the creation of something beyond those parts – how you as a studio work together. I would like to pursue issues of collectivity and diversity within the day-to-day of the studio. The collective action of the studio has the ability to create amazing depth in individual thesis projects. To augment this idea of collaboration, the studio as a whole creates a class installation reflective of the total studio. This past year the studio built the installation Wet Dreams for their BookShow in January 2019, demonstrating a collective consciousness relying on the different strengths of the participants – all were involved in the designing and making.

Architecture has traditionally been about problem solving...modernism tried to solve the problem of growth and densification of cities through new housing types and initiatives; the international style made sense of the new world order after WWII; Post Modernism reacted against the fearfulness of what the new world order was becoming (a step to the past, a sophisticated narrative); deconstruction blew up the whole thing as a commentary on function; but nothing has prepared architects for the problem solving necessary in today’s world. The problems of the past seem trite – too many people in too small an area (how about too many people on too small of a planet?); global economies (what about earth first? Hand-made? Small organic farming? Cooperatives? To say nothing of farming initiatives, water retention, pollution mitigation, planet saving, resource solving ideas.) And the fear of new world orders – well they are here – terrorism, ecoterrorism, architectural terrorism.

So where do architects stand today? As Mark Wigley put it in an interview with Surface Magazine, “If it’s possible, you invite somebody with a toolbox who can give answers. You call the architect when it’s not even clear what the question is.” Architects have the capacity and education to respond to very complex problems. You have been trained to look at a problem from many sides, to not judge it immediately, to search for other answers. It is this problem solving skill that I hope to mine; that you will use thesis to save the world. Think about it – plastics in the ocean, droughts, rising sea levels, warming climates, severe weather, polluted landscapes, cars and transportation, energy reliance, infrastructure failure, and the affects of all this on humans – disease, phobias, poverty, overcrowding. While not trying to be pessimistic, in fact just the opposite, there are problems and you can solve them – projects can be solved by architectural initiative. Data mining allows a view into other worlds – microcosms of self or environments – new materials/resources, new energies, new modes of working, new modes of thinking.

Thesis exists in the in-between, the ambiguous space between real and unreal, proto-professional and professional, construction and vision. With all of this potential, thesis studio is inherently about problem solving, but not solving in a complete way but in an open-ended manner – suggestions of possibilities. This studio opens a discussion of the interaction between user and architect/building as conceptualized through narration (determining your
main ideas and the potential for the story they will tell), making (in terms of early scalar development, modeling, construction), mapping (re-reading and documenting the site along with the potential of site), programming (in light of the thesis problem, in terms of diagramming, graphing, charting), and occupying (in terms of installing, full scale mock-ups, detailing). The required reading texts of Arch 492 seminar work hand-in-hand with design studio assignments – Vellum, site exploration, programming, experiments, and installation.

Innovations in technology chart our passage through the past decades as we respond to life changing solutions brought about by changes in materials, such as steel, plastics, and glass, which brings about changes in function and how we live, particularly in urban areas, with a throw away culture, and with the connectivity of computers. These in turn cause changes in our perception of the world through different scales such as space exploration and medical exploration. These changes in the way we see and experience affect our understanding of our own situation, and in turn is reflected in the way we create art. Warhol used advertising and the printing press to question our understanding of art. Similarly, Venturi elevated popular culture into the architectural milieu through his writings on Las Vegas; Lebbeus Woods redefined crisis and architecture and its possibilities; and young architects everywhere turn new materials into spatial installations questioning both our means of construction and contemporary notions of space and occupancy.

As you have mastered the architectural art of representation, thesis is where the student begins to think about things beyond their control, where answers are not readily apparent. Ideas are made real in architecture through research and experimentation, investigation and representation. Thesis projects become real through technical and poetic speculation of narrative and site, material and detail, space and form, the conceptual and the physical.

This thesis studio combines the nature of conceptualizing the big idea with experimental 1:1 scale objects, and individualized thesis projects with a collaborative installation. Thesis has the ability to define, analyze, synthesize, and produce a solution to an enormous challenge, be it environmental, cultural, infrastructural, large scale or small. You will develop the main idea through manifesto and research, leading to narration and experimentation, while collaboration forms a bond through the studio that allows themes and constructive criticism to flourish.

It is the intention of Studio 400 to develop a culture of acceptance in which the studio works as a unit to research and develop individual projects through individual writing, discussion of architectural discourse, shared speculation, field trips, and studio and individual installations. It is my intent that we study the theory of the last 100 years, concentrating on the past 50, specifically as regards ideas. For this we will review architectural concepts and read specific articles regarding topics from the inception of architecture through current processes. This is a studio concerned with the thinking about architecture, but also about the process of design.

Perhaps over time the problems are much the same – overcrowding, short supply of resources, and intolerance to our fellows (women and men).

Courage is an important factor in any creative effort. It can be most active when knowledge in too early a stage does not narrow the vision. – Anni Albers
Lebbeus Woods states the architect must confront problems through, “the spatial, the social, and the philosophical.” Woods asks, “Are we prepared to construct an architecture without function, a way of life founded on continuous invention, the invention of reality?” Or, he asks, “will we deny the imperatives of these understandings and sink back into the illusory comforts of mere history?” Each age has their own reaction. With the depth of information available today let this be the age of invention.

Maybe trash is your thing, or water pollution, or noise pollution, new energy resources, a rare disease or a common one, childhood hunger or obesity, possibly the lack of education or the lack of art in education; gridlock or bike paths or bike safety; maybe terrorism abroad or at home; housing in all its forms; and then there is mental illness or physical limitations. Architects are well positioned to review these problems with fresh eyes. Thesis is about generating ideas and solving problems. Let it be about big ideas, or small problems writ large. Sometimes thesis is about saving the world.

Description
In the Fall Studio 400 will not only develop thesis books graphically but also the methodology in which to refine the research and thinking necessary to define the transition from written word to material/spatial object. In the Seminar, Arch 492, we will reflect on the architectural design and theory of the recent past, specifically looking at readings regarding: narration and representation; problem solving across time; mapping and site - theory and research; program (of idea); and installation through collaboration. These topics will inform a method of problem development and solution through readings, essays, and discussions.

In Fall Quarter Design I would like to study the analysis of the spatial exploration of your thesis problem through – representation of narrative or manifesto; theoretical exploration of problem solving; defining the site through mapping; programming the organization of the problem; and finally collaboratively creating the initial design of the BookShow (which will be installed at the beginning of Winter Quarter), in addition to participation in the Vellum Furniture Competition. These topics are intertwined and we will explore them through readings and spatial assignments.

The topics of discussion in seminar are means with which to engage architectural issues in your own project. They will inform your thesis and your ability to communicate difficult concepts into written texts and vice versa – to learn from difficult texts. The thesis itself is a way to define what your project is, the issues involved in its potential and proposal, and the methodology of research and process that begins to develop your concerns. In addition, your thesis will define your program and technological concerns. The written thesis is the product of Arch 492, but it is informed and facilitated by the creative acts that generate the work of Arch 481.

Fall Arch 492 relates to the general ideas of current theory and the ideas of thesis. While you will be developing the specific details of your project, we as a class will be looking at and discussing the larger view of architecture and its relation to conceptualizing, site, process.
Every project develops their own general issues out of a query of architectural significance. It is important for thesis to develop problems which can be researched historically, perceptually, theoretically, and physically. Problems of architecture are not only related to architecture as a topic but to site, energy, larger issues of region — both physical and metaphysical, culture and time. Issues of currency suggest actions which occur in almost every project within the studio. Generalized topics are made specific to site, program, and the desires of the designer. Making, programming, and occupying affect the conceptualization, fabrication, form, use, detail, structure, and development of all projects.

In the first quarter we will experiment through both studio and seminar with scale, material, program, and site trying to find new ideas and concepts within emotion, haptic response, mapping, and diagrams. You will be looking at and designing responses to the physical nature of your project in design studio while researching your issue, or idea of importance, through a methodology of digital and physical searches, essays, and case studies. In total, the sum of the projects and research will be your thesis book. As a collective the studio will then design an installation for the beginning of winter quarter to showcase the thesis books.

In Arch 481, Fall, we will be looking at areas of speculation by researching and constructing material aspects of theoretical issues. In the past my studio has developed material experiments in which to study not only the issues of making but to construct the issues of the project. In design studio we will be studying site, material, and program through Vellum, detail experiments and challenges to the quality of material, site installations, and discovery of emerging patterns relative to program.

In Fall we will experiment through both studio and seminar with material, program, and site trying to find new ideas and concepts within narratives, haptic/detail response, mapping of site/activities/space/infrastructure/social occurrences, and diagrams of spatial activity. You will be looking at and designing responses to the physical nature of your project in design studio while researching your issue, or thesis problem, through a methodology of digital and physical searches, essays, and case studies. In total, the sum of the projects and research will be your thesis book. As a collective the studio will then design an installation for the beginning of winter quarter to showcase the thesis books.

In Arch 481, Fall, we will be looking at areas of speculation by researching and constructing material aspects of theoretical issues. In the past my studio has developed material experiments in which to study not only the issues of making but to construct the issues of the project. In design studio we will be studying site, materials, program, detail experiments, site installations, and discovery of emerging patterns relative to program. We will be looking at problem solving means and their application to your thesis.
In the Spring we will continue the development of the project at the level of design detail and large scale decision making. In general the work produced in spring is large scale models, digital renderings, and architectural representations. The act of model making at large scale is the closest, short of 1:1 building, that you will get to spatial development. I think it is very important for you to see the consequences, at least physically represented to scale, of your spatial design decisions.

In addition we will participate in the four all-of-fifth-year displays throughout the year – Abstract in Fall, Section in Winter, Detail in Spring, and Final Show in Chumash at the end of the year. In the past all of the fifth years shared a four day comprehensive critique in which every project was reviewed and we will do this again this coming Winter. There will be other critiques throughout the year, formal and informal, in studio and out of studio.

Field Trips are up for discussion and decided on by the studio. Studios in the past have been to Japan, China, Mexico City, Chicago/NYC, and Boston/New York. In addition we could go camping somewhere early in fall – Sequoia, Pinnacles, Yosemite, Big Sur(?) – the studio will decide. This past year the studio chose to go to Mexico City and Puebla, before that Chicago, and before that to Japan/Tokyo. Fall is the optimal time for a thesis field trip as the field trip has the potential to affect the studio outcomes when it occurs early in the year. This coming summer I suggest we quickly decide on a field trip location and time. The university demands advance notice especially for overseas trips - so we need to decide where and when quickly.

I am open to original ideas for thesis. For me thesis is about exploration. And hopefully saving the world.

I am hoping you were able to view last year’s studio show in Berg and the all-of-fifth-year show in Chumash and to see this year’s show in Berg May 22nd and Chumac May 24th. If you missed them or have any questions please contact me – klange@calpoly.edu Thank you.
Innovation – finding an idea and solving a problem, or in the case of an architectural thesis – of making an architectural problem out of a physical or social problem. Examples of past thesis ideas;

ABeit-Tchoutcheca 16 - This project metaphorically presents a clear solution to a problem that may or may not yet exist. Invisibility affords resolution. In the unstable state of political unrest, with jihadists advancing on preserved ruins, there is no protection for architecture. Removal of architectural eradication is possible only in the most vivid imagination, for here we can dispel laws of gravity and physics, thus imagining a solution to the unsolvable.

YSuleiman 18 - My inquiry involves introducing an architectural process that decodes and recodes representational politics- that is, destabilizing the relationship between the architect and their tools, architecture and the system environment. I believe that architecture exists in a dualism of violence and resistance; two characterizations that are, in many ways, not so different.

MJablonski 19 – The project emerged gradually by experimental and often metaphorical attempts to fuse my overlapping interests in architecture and philosophy. Of the vast number of links between the two discourses, I am specifically interested in the ones that can produce an activism grounded in speculative and decentering ethics.

KDoyle 17 - Cerebral space develops perception through psychological entities of dreams, memory, altered consciousness, and the subconscious; perception is altered by the mind, which affects interaction with reality. Spatial perception of the psychological realm informs the perception of the physical realm.

CHubert 16 - Beginning with the suburban mode, this project explores the American experience through a comprehensive understanding of patterns and values related to suburbia. The geopolitical consequences that unfold as a result of suburbia’s preeminence—from energy to war—began a driving force for research and provided a wider range of study. The proposal operates between the relevancy of VR and AR. Charged with demonstrating a truly mediated way of life for its inhabitants, the project relies heavily on both embodiments of the technology. Existing in desert seclusion, the homes and the families they house establish a relationship so intimate that the distinction between the real and the virtual becomes imperceptible. A cross between a power plant and a rural neighborhood, this project is the new suburbia.

JVarholick 12 - Models are named entities which allow for transferable meaning, however psychological or subjective. Models also establish token a priori and types a posteriori. That is, ideas of *type,* the model itself is formed of instances which must be experienced first. This distinction implies that models are always approximate, imperfect, as they are almost always informed by an incomplete set. The knowledge gained through empirical process will be in the form of models within propositions. Therefore, this Knowledge will always be approximate. We may only approach accuracy with more comprehensive and particular/detailed observation.

KRichter 16 - Through the pairing of psychological theory and architectural manipulation, one can begin to re-envision the idea of embodied therapy and confront the epidemic of psychological instability constructed by our society.
Principles for the Development of a Complete Mind: Study the science of art. Study the art of science. Develop your senses- especially learn how to see. Realize that everything connects to everything else. – Leonardo da Vinci