To Future Thesis Students:

The past few weeks have been life altering. I started to write this letter in the midst of the coronavirus pause, but changes occurring in the extension of time for the prospectus response have been extreme. Nothing is as it was before. Yes, we may still be remote in the fall or not as we wait for President Armstrong’s notification in August, but now we have a much different agenda for thesis. Can thesis projects be relevant in these troubling times? How do we harness the power and demand for change in our university and profession? What does this look like?

Of course change demands a creative response and you are up for that I am sure. I can’t wait to hear and see your suggestions and solutions. This past year’s thesis students came into fall uncomfortable with the political landscape of our times and suggested novel ways of response – from leaving the earth entirely to making visible our un-socially responsive profession. But now we face something beyond just general distrust of our political and professional system. And we need to dig into that. How does race affect architecture? How does architecture affect race? What is the form of empathy, ethics, and anti-racism?

For all the hardship and change, these are perhaps the most dramatic times in recent history. How does this affect you? How does this affect you at your core? How do our actions right now affect our culture? Is it possible to use architecture to reflect or fix the divided culture we now inhabit? If at this moment we inhabit the infinite present, what does it mean to be radically present? How do we acknowledge our past in order to make a new future?

As the problems grow in the world around us, it is our chance to solve them - however small and seemingly inconsequential. How do we tear down prisons? How do we de-institutionalize racism? Architecture is a part of the problem. We can be part of the answer. We can bring beauty to a world starved for contact. We can clean water in a deregulated society. We can deliver fantasy to very harsh conditions. Using speculation, narrative, and science, it is my hope that we can build a new architecture to engage a new world to repair our political system, take down our racist culture, help the disadvantaged, locate cures, solve the climate crisis, or maybe just make us aware.

Arch 492 Thesis Seminar is used to research topics of general interest to the studio. In the past these readings and discussions have regarded, amongst others, narratives, tectonic development, program, and site. To further the demands of education and in particular, architectural education, next fall in addition to those themes we will look at racism, anti-racism, and social justice.
As a thesis studio, Studio 400’s concerns lie in the development of creativity, inquiry, personal endeavor, process, conceptual ideas, and spatiality. The thesis is a yearlong study regarding a visionary thesis 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; making/tectonics/historic collaboration; mapping site historically/figuratively/dimensionally; program theoretically/graphically; and installation/collaboration in Fall Quarter Arch 492 Seminar. These topics will be developed as initial essays and constructions based on your own thesis idea and statement. Explorations through research and writing for Arch 492 will be developed as physical constructions for Design Studio experiments in Fall Arch 481. The rest of the year, Winter and Spring, will concentrate on the conceptualization of your thesis as an architectural manifestation, and its continuous physical development.

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.

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 I Want You To for their BookShow in January 2020, 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. The problems of today, pandemic and racism, create new problems of density, ethics, and justice. If as Elaine Scarry suggests, beauty begets justice.

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.” The question is getting clearer. 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 – a novel virus, rampant racism, recession and repression, 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 – Inequities, Vellum, site exploration, programming, experiments, and installation. A note about Vellum – due to the pandemic with the hope things will be better in the future and acknowledging the Shop will not be open to the amount of students necessary to produce 180 pieces of furniture in one month, the Vellum exhibition will be moved to Spring 2021 but the construction of the furniture pieces will be extended over the whole of fall quarter.

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 social and the equitable, 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 for problem solving. For this we will review architectural solutions and read specific articles regarding topics from the inception of architecture through current processes and social concerns. 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 (both women and men). Lebbeus Woods states the architect must confront problems through, “the spatial, the social, and the philosophical.” Woods asks, “Are we prepared
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 thoughts, research, and 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); installation through collaboration, and the racial charged moments of the past and our way into an anti-racist architectural future. 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 cultural and spatial exploration of your thesis problem through – representation of narrative and manifesto; theoretical exploration of problem solving; physically dismantling the power structure of the built environment through mapping; programming the organization of the problem; and finally collaboratively creating the initial design of the BookShow (which will be installed (?) I use that term liberally) at the beginning of Winter Quarter), in addition to participation (participation may mean something new this year) in the Vellum Furniture Competition (exhibition in Spring 21). These topics are intertwined and we will explore them through the intersection of Arch 492 readings and Arch 481 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 currency. 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, culture, site, and process.

Every project develops their own general issues out of a query of architectural significance. It is important for thesis to develop problems which

“This willingness continually to revise one’s own location in order to place oneself in the path of beauty is the basic impulse underlying education. One submits oneself to other minds (teachers) in order to increase the chance that one will be looking in the right direction when a comet makes its sweep through a certain patch of sky.” - Elaine Scarry
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 architectural accountability, 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 re-searching 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 thesis ideas. In design studio we will be studying site, material, social implications of design, and program through Vellum, detail experiments and challenges to the quality of material, site installations, and discovery of emerging patterns relative to program and culture.

In Fall we will experiment with the idea of scale in design studio. We will have scale material experiments that relate to the finer details of your future project. To begin you will construct a manifesto making visible your initial narrative or theory. After that we will be participating in Vellum with a furniture piece that could relate to your thesis or could be an idea that you have been thinking about for a while. This will be a 1:1 scale, designed and constructed prototype of functioning furniture, in the broadest sense (this is up for discussion after we see the state of the Shop). After Vellum we will move on to particular experiments of design based on your thesis topic.

In Winter we will continue the study of contemporary issues as they relate to your personal project. Besides the group installation project, Thesis BookShow, you will be developing architectural issues of your project: form, circulation, structure, and environmental systems, based on your architectural concept. Ideas of thesis, no matter how creative and extreme, need to be translated into a form that is broadly defined as architecture. While I progressively define architectural form, ideas can be substantiated through architectural representation.
In the Spring we will continue the development of the project at the level of design detail and large-scale decision making. In the past, the work produced in spring was large scale models, digital renderings, and architectural representations. This past spring the final show was a website. We will react to the circumstances we are given. It is very important for you to see the consequences 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 at the end of the year. Last spring the Detail Show occurred online. 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. While field trips in the past have been to Japan, China, Mexico City, Chicago/NYC, and Boston/New York, next year will be something very different. It would be great if we could go camping somewhere early in fall – Sequoia, Pinnacles, Yosemite, Big Sur(?) – but this past spring we couldn’t even go out to dinner. Luckily this last year we were able to drive through the Southwest before the world shut down. It was a great and enlightening field trip. Hopefully we will be able to go somewhere.

I am open to original ideas for thesis. For me thesis is about exploration. And hopefully saving the world. I hope you have had a chance to visit Studio 400’s website – https://400camgirls.cargo.site. Please contact me if you have questions – klange@calpoly.edu

Thank you.

Prior to showing up for the first day of studio please watch: 13th on YouTube or Netflix; 8:46 on YouTube; and read something, really anything, to ground yourself in what is going on today, suggestions: “The Case for Reparations” by Ta-Nehisi Coates or any part of the New York Times best seller list: https://www.nytimes.com/books/best-sellers/combined-print-and-e-book-nonfiction/

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
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 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 duality of violence and resistance; two characterizations that are, in many ways, not so different.

**MJablonksi 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 centering ethics.

**FAstiazaran 19** - If motion pictures possess and exert power over its audience, it is realistic to assume it is not only the viewer who watches the picture, but also the picture that watches the viewer. This role-reversal brings back the inquiry of film’s effect on feeling and defined humanity. The future of cinema lies in novel and experimental screening. This thesis proposes a new theater for the experimental art of filmmaking, for the new audience with new ways of observing.

**CHubert 16** - 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—became a driving force for research and provided a wider range of study. The proposal operates between the relevancy of VR and AR. 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.

**SGuo 19** - Our awareness of reality is questionable, we are ignorant of the source. There must be a point in the multiplication of counterfeits where we realize the falsity in our convictions. Transforming our perceptions through the exaggeration and estrangement of modern mass media can provoke an outcry against the accepted.

**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.

**SBreaux 20** - This thesis was born out of a deep curiosity for how the culture of the South will change in the near future as it is increasingly forced to acknowledge the true nature of its past. It contains an ongoing translation of research into architectural languages and tangible project. A majority of these were focused on better understanding how preservative processes would materialize as a set of architectural moves or languages. Entertaining an idea that preservation could extend beyond physical means and enter the realm of the less tangible leaves one with the difficult task of defining which actions would be appropriate.
Wet Dreams 2019

I Want You To 2020

String 2011

Showroom 2016

Stuck 2015

Zip 2013

Pipe Dream 2017

White 2012

Limbo 2018