New Architectural Realities

Doug Jackson and Michael Lucas
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This thesis design studio is a think-tank and design laboratory dedicated to a broad-based critical inquiry into new possibilities for architecture, as well as in architecture’s inherent potential to sponsor new performances, new experiences, and new understandings of the world.

It is geared toward those of you who aspire to advance architectural thinking and practice by challenging existing conceptions and assumptions about architecture and the experiences it affords, and demonstrating new possibilities for architecture to meaningfully intervene within the world.

This studio is open to a diverse range of possible thesis investigations, and is structured to help you to focus your specific interests and talents into an architectural proposition that is demonstrated through a well-researched and totally awesome thesis project.

Based on the diversity of interests of the students in the studio, these thesis projects will range from extremely speculative and experimental to those that are realizable with present or near-term materials and techniques. They will examine form, space, materials, technologies, cultural habits and customs—and even discoveries and modes of thinking from outside of architecture—in ways that open up new understandings of and possibilities for architecture. And they will be manifested in an incredible variety of compelling thesis design projects that could include buildings, furniture, cities, processes, games, virtual realities—and might be demonstrated across a variety of media and formats that include renderings, drawings, diagrams, physical models, full-scale prototypes, fictional or sci-fi narratives, films, graphic novels, or through some other creative means.

Although the work you produce in this studio will make comprehensive use of all that you have learned and experienced so far, it is not a studio that is intended to summarize your past experiences as much as it is geared toward speculating about the future. With this forward-looking attitude in mind—and with a commitment to rigorous research, thought-provoking discourse, radical experimentation, and compelling design work—the thesis work produced during this year will serve as an ambitious beginning to a long and fruitful career of culturally significant and profoundly visionary work.

FOR QUESTIONS ABOUT THESIS IN GENERAL, OR MY APPROACH TO STUDIO IN PARTICULAR, YOU CAN WATCH A VIDEO THAT I MADE HERE.

Introduction

Architecture is a struggle. Of course, such a statement must seem obvious to you at this point, since your entire time here at Cal Poly might uncharitably be described as a series of struggles against deadlines, against sleep, against your professors’ criticism, or even against your own occasional creative constipation. However, apart from these sort of everyday challenges, architecture is also a struggle of another sort: whether it is a struggle against time, a struggle against gravity, a struggle against environmental forces, a struggle against environmental degradation, or even a struggle against the legacy of its own production, architecture is ultimately a struggle against reality. In other words, architecture is characterized by its unique ability to speculate about and manifest forms, spaces, and experiences that intentionally constitute other realities — other representations of the world that are profoundly different from the everyday experience of the world, and which derive their meaningfulness, poignancy, and value from that difference.

This struggle to open up new realities is paralleled by an internal struggle that arises from architecture’s dual nature as both a discipline and a cultural practice. As a discipline, architecture maintains a proprietary body of knowledge that is enlarged and refined over time, and that gives it both a degree of integrity and prestige as well as an inertia that resists sudden or rapid change. Thus, to some extent, architecture is often characterized by what it has already done, and what it has been historically good at doing.

However, architecture is also a cultural practice, which means that it must operate within and respond to contemporary cultural conditions in order for it to produce work that is meaningful to contemporary society and the individuals that comprise it. Yet, since contemporary social and cultural conditions are neither homogenous nor static, this means that architecture’s existing body of knowledge and its familiar techniques might not be capable of producing work that makes any kind of meaningful difference. Rather, constantly evolving social, cultural, and technological realities require architecture to also evolve — and for architects to speculate about and debate the potential course of this evolution.

above: “Lucidity: The Threshold of Immersive Space” by Ben Pennell. Ben’s thesis asserts that one’s perception of reality is a constructed fiction that depends upon a limited perception of space, form, and atmosphere from which the mind constructs a seemingly coherent and objective whole. However, psychological distress occurs when new environmental information conflicts with the seemingly objective reality that the mind has constructed. In turn, Ben’s thesis explores the consequences of architectural space designed to frustrate the development of such a seemingly coherent reality. In his project for a mixed use development on the site of New York’s Penn Station, Ben demonstrates how space and spatial relationships can be structured in order to produce conflicting environmental information, and thereby permit a conscious awareness of the contingency and subjectivity of one’s sense of reality.
So, this begs the question: what is architecture, anyway? How should it perform? What is its value? Who should decide? The contemporary practice of architecture demonstrates numerous different ideas about the current nature of our discipline, how it should participate in the world, and how it might perform in the future. And although this plurality of ideas makes architecture a rich and fertile field, it also calls into question the discipline’s own sense of identity, and complicates its ability to assert this identity to society. That means that voices from outside of our discipline—such as developers, planners, investors, clients, and others—have an unusual ability to weigh in on the definition and scope of architecture, and to thereby limit and constrain its practice. In fact, no other discipline or profession is so potentially vulnerable to the assumptions and misperceptions of those who do not practice it.

In the absence of an absolute and permanent definition for architecture, however, all beliefs and positions about architecture are debatable. Therefore, the role of architects today is not simply to design architecture, but also to continually define it—to assert its relevance and its value within a diverse and fluid cultural context through the ongoing realization of new and compelling architectural performances. Since architecture is an open question, the primary purpose of a contemporary architectural education is to prepare students for the continuing responsibility to justify that openness through the manifestation of valuable new spaces, experiences, and realities—and to defend the value and validity of those various architectural manifestations.

An architectural thesis is the primary tool by which an idea about architecture is put forth for consideration and defended—by positioning that idea in relation to prior architectural precedents and discourse, and by demonstrating the value of that idea in the form of an architectural design. In contrast to a more traditional architectural design project, an architectural thesis is a conjecture about architecture itself—one that recognizes architecture’s continuing need to meaningfully engage in a form of public speculation and discourse about the future of its own evolution and the value of its possible performances. It is therefore less about the world as it is currently given, and more about the world as it might yet become. It is an idea, a desire—and your thesis design project therefore becomes the instrument through which your idea or desire about architecture is publicly communicated.

This is truly a unique opportunity for you to create work that is critical, visionary, persuasive, and transformative—work that has the potential to affect the architectural discipline, contemporary culture, and the world.

below: “Strange, Strange Architecture!” by Kealani Jensen. Kealani argues that Michael Hardt and Anthony Negri’s concept of the “multitude”—a description of contemporary society defined predominantly by the diversity and idiosyncrasy of individuals rather than by their shared ideas and practices—is constrained by contemporary space within the public sphere, which she is argues is modeled on commonality rather than difference. In turn, she asserts that architecture has the potential to create radical spatial difference within the public sphere by creating spaces and forms that promote multiple interpretations about their possible uses. These strange and uncanny spaces, she argues, provide the catalyst for idiosyncratic behaviors and performances by members of the multitude, which therefore have the potential to produce new cultural habits and practices.
What is an Architectural Thesis?

A major goal of the studio and associated seminar class will be to assist each of you in formulating a true architectural thesis based on your unique ideas and interests, and in selecting the appropriate project within which to demonstrate that thesis.

The difference between these two terms is crucial to understand. An architectural thesis is not a design project, but is instead a hypothesis, conjecture, or idea about architecture. It is not only a statement of personal interest, but is rather an intellectual contribution to the architectural discipline that synthesizes your cumulative experience, knowledge, and insight into a critical idea that has value, both to the discipline and society.

The thesis project, on the other hand, is an architectural design project that is employed to embody and demonstrate the architectural consequences of your thesis proposition. Its primary task is to showcase the value and credibility of the ideas you are proposing. However, like all design projects, it also becomes a vehicle for discovery during the process of design, and will therefore likely suggest refinements or modifications to the original thesis ideas that produced it. In that way, the thesis argument and the thesis design project will inform the other, such that both are developed in tandem throughout the year.

This particular studio will encourage theses (and thesis projects) that are radical, visionary, provocative—ones that suggest new possible performances for architecture, and which open up new ways for individuals and society to experience the world. It should appeal to those of you who are not simply interested in demonstrating what you have learned so far, or of imitating architecture-as-we-know-it, but who are instead interested in demonstrating a new vision of how architecture and the world could be. In short, it is designed for those of you who want to make a difference in the world, and in architecture’s relation to it.

While united under this common goal, each thesis and project will obviously vary greatly according to your unique interests. This balance between a shared sense of purpose and a rich variety of thesis positions, areas of research, and design projects will be crucial to ensuring a dynamic and synergistic studio—a studio that will operate more like a think-tank or laboratory dedicated to exploring the broad spectrum of future possibilities for architecture.

above: “Networked Authorship,” by Sam Clovis, which postulates that an architecture that truly engages the network would be one that monumentalizes the competing flows of authorship and feedback that characterize the contemporary experience of social media. The resulting immersive quality of perpetual experiential remix is demonstrated in a large micro-housing complex along New York City’s Highline—comprised of a large matrix for DIY individual dwelling pods linked by an array of responsive space-making mezzanines and partitions within a shared atrium, and screened by a “pixel skin” that amplifies the spontaneous social media interactions between the inhabitants and the public on the Highline and city streets below.
“Toward a Monstrous Architecture,” by David Hupp. David’s thesis argues that the architectural discipline’s rhetoric of radicality and innovation masks an overwhelming conservatism. He contends that architecture is inherently constrained by history and precedent, by its own discourse, and by the premeditated and authored nature of design itself—all of which narrow the field of potential for architecture’s formal and spatial production. Consequently, David explores forms of spontaneous production and differentiation which occur through evolutionary processes of mutation and selection, and interrogates the possibility of such heuristic and wasteful form of production as a type of “undesigned” and evolutionary architecture. Such an architecture would privilege monstrosity, freakishness, and otherness—and might ask humanity to evolve in relation to it, rather than assume humanity’s current condition as its basis for evaluation.

“IDIOSYNCRAcity,” by Natacha Schnider, proposes a series of interventions designed to introduce difference and idiosyncrasy into the modern city as a means to mitigate the homogeneity of use and activity that results from modern city planning’s emphasis on zoning similar uses into segregated urban zones, as well as its requirement of large amounts of time spent in transit through unengaging circulation spaces. Located in London, Natacha’s interventions take cues from the internet’s abundance of idiosyncratic, individually authored and customized content that can be aimlessly surfed through. They then translate this affordability of non-identical, inexact, and unpremeditated experience into physical spaces that allow Londoners to wander, discover, make program up as they go along, and revel in their own and others’ craziness.
“Social Interchange,” by Melissa Peter. Her thesis argues that the physical infrastructure of the city, particularly its transportation infrastructure, does more to socially and experientially segregate the city than it does to cohere it together. While the freeway system is often analogized to a network, Melissa demonstrates that it fails to provide the unstructured openness and combinatorial possibilities of a true network. Recognizing that such a physical network is impossible to construct, and that the intangibility and invisibility of the wireless network does not allow it on its own to remedy the problem, Melissa’s thesis develops a hybrid strategy that integrates the social connectivity of the wireless network with the physical presence of an architecturalized mutation of the freeway system—one in which its surfaces have been genetically altered into mixed spatial constructs for both vehicular and pedestrian social interaction.

“Little Bits of Los Angeles,” by Marki Becker. Her thesis argues that the reciprocal “non-spaces” of Los Angeles’ freeways and its sprawl of experientially sequestered suburban neighborhoods can be addressed by a series of intermediary structures designed to facilitate the spontaneous and unpredictable experiences and encounters that each can provide to the other. These “freespace” structures artfully mix pedestrian and vehicular spaces and programs in order to maximize the productive and playful interactions between the two, thereby neutralizing the social and experiential segregation that currently exists.

“Social Machine,” by Anthony Stahl. His thesis contends that rampant vertical urban development cannot produce the requisite amount of public social space according to the current model, since such social space continues to be relegated to the ground plane, which is becoming increasingly removed from the city’s occupants as the city grows vertically. Accordingly, Anthony’s thesis proposes a vertical infill typology meant to extend public social space upward along with the city’s growth, thereby promoting a coherent and vibrant three-dimensional social fabric integrated with the city’s future urban development.
Studio and Seminar Descriptions

The overarching goal of the thesis studio and associated seminar class is to formulate, investigate, and demonstrate new architectural realities. While the realm of practice rarely provides the opportunity for such a dedicated self-reflection of the architectural discipline, it is nevertheless crucial to the healthy growth and development of architecture as it continually negotiates its relationship to constantly evolving social, cultural, and technological conditions.

You will each produce work that is ambitious, radical, provocative, and visionary. Each thesis proposition will be conceptually profound, rhetorically convincing, well-researched, and of disciplinary consequence—and each will be demonstrated in a thesis project that is thoroughly designed at multiple scales, architecturally compelling, and represented in a diverse range of media that might include high-quality drawings, renderings, animations, diagrams, physical models, full-scale prototypes, fictional or sci-fi narratives, films, graphic novels, and more. The studio and seminar are structured to enable you to do this.

This year is somewhat unusual compared to previous years in that I will be on sabbatical and working in Japan during the Fall Quarter—and therefore I have asked Michael Lucas to teach the Fall Quarter studio (Arch 481) and seminar class.

I cannot imagine a better collaborator for teaching 5th year. Although Michael and I have different areas of expertise, our research and work shares a critical inquisitiveness about architecture’s generative spatial potential. We also share similar teaching philosophies and approaches—especially with respect to teaching thesis—and are equally motivated to encourage and support a wide range of rigorous and thought-provoking work. Therefore, the studio environment and experience will be consistent throughout the year.

In addition, both of us will be in continual communication with each of you throughout all three quarters. During Fall Quarter I will be connected with both the studio and seminar classes via Skype and email in order to provide desk crits, review work in progress, and participate in studio discussions. Likewise, while I am teaching the Winter and Spring Quarters of studio, Michael Lucas will continue to be available for desk crits.

Collaborating with Michael in teaching 5th year is actually something I have been wanting to do for some time. Michael's recent retirement from the Associate Dean position and return to teaching finally makes this a possibility, and my upcoming sabbatical in the Fall makes this coming year a good time to finally bring this possibility into fruition. I am therefore extremely excited about this coming year, and am confident that our complementary skills, experience, and efforts will provide a uniquely rich and rewarding studio experience.

On the following pages there is a more specific description of how the Fall, Winter, and Spring Quarters will be structured.

below: “Four Footnotes to History,” by Zach Crocker. Zach’s thesis targets contemporary architecture’s predominant post-critical emphasis on engagement in “the real” (through discourses of performance, sustainability, material production, etc) by arguing strongly for a value in the un-real or not-yet-real. In asserting the social and cultural value of fiction and architecture’s ability to productively engage individuals in such fictional constructs, he identifies four types of essential experiences which have largely disappeared within contemporary culture, and develops four corresponding fictional dwellings within which one can once again inhabit these crucial experiences. Each house is “sited” in Berlin—a timeless and fictional Berlin, in which the Berlin Wall still haunts the city, and is reincarnated in the form of these four houses.
Fall Quarter (with Michael Lucas)

Arch 481 Studio:
In order to assist in the concurrent development of your thesis arguments and thesis projects during the Fall Quarter, the design studio will operate as a laboratory and think-tank within which we will examine reality as an emergent condition, and will explore various ways in which architecture can meaningfully participate in the unfolding of this reality.

We will start by going backwards in an ontological sense—initially by asking lots of hard questions and looking for origins vs. conventional answers. All conventional hierarchies of meaning and connection will be considered fluid for further atomization and recombination. As a result, we see value in qualitative research as well as analytical gathering, first person research and original human content.

Based on the thesis topic or area of focus you each bring to the table, you will be assisted in establishing an appropriate project beginning and scope. Thereafter, you will each engage in quantitative and qualitative research built on techniques from the Arch 492 seminar, which will include an analysis of place, people and actions, precedents, and relevant discourse—as well as the development of intuitive and structured programming and the initiation of design for the thesis project. This design work will commence with preliminary material and tectonic studies (including through the Vellum competition) and lateral conceptualization studies.

Throughout the quarter our collective efforts will be guided by 3 basic premises designed to assist each of you in transcending commonplace assumptions about architecture’s possible actions and performances with respect to your unique areas of research. The first is that architecture brings forth the reality of its subjects through the experiences it affords, and that the emergent nature of these realities cannot be reduced to prescriptive programmatic descriptions. The second premise is that the world is not reducible to existing empirical, cultural, or aesthetic descriptions, and that architecture has the capacity to bring forth new phenomena—new experiences of the world—that fall outside of these existing frameworks. And finally, in accordance with these first two stipulations, the third premise is that this bringing forth of new experiences outside of existing frameworks means that the development of a critical work of architecture benefits significantly from the physical realization of artifacts as a form of experimentation and testing.

By the end of the quarter, your thesis intentions will be fully articulated and your thesis project will be underway. Your project will have a critical position with respect to spaces, materials, site, structure, volume, skin, paths, and light—in an integrated way, and focusing on holistic thinking across scales of architectural development from nano to tool to hand to body to others to community to ecology. The studio is a comprehensive study of the design skills and judgment necessary for a beginning practitioner to ground and radically conceptualize architecture: the human condition, architectural theory, design experimentation, technological integration, and professional communication.
Arch 492 Seminar:
The thesis seminar will address a selected group of philosophers, architects, artists, situations and works. In accordance with the three premises articulated above, we will examine the implications and openings of phenomenological, eco-phenomenological, and speculative realist philosophies through readings from Heidegger, Merleau-Ponty, Harman, Irigaray, and others—and will discuss their possible applications in architecture.

The practical goals of the thesis seminar are to provide a working opening/clearing for the architectural embodiment of your unique thesis intention, in a real time and place, and to guide the research and development of your specific thesis topic. Doug Jackson will be a virtual part of several meetings and the community from day one as we proceed.

below: Stephen Zecher, Aug, Vision  
below: David Hupp, The Twins

left: Greg Schaal, Sling Chair
below: Ben Pennell, C1000

above: Marki Becker, The Strangers

above: Grace Choy, Möbi
left: Michael Charters, Extenze

MICHAEL AND I BOTH EMPHASIZE PHYSICAL TESTING AND EXPERIMENTATION AS A CRUCIAL MEANS OF IDEA DEVELOPMENT. DURING FALL QUARTER, VELLUM IS ONE OF MANY PHYSICAL STUDIES YOU WILL UNDERTAKE AS YOU DEVELOP YOUR THESIS.
Winter and Spring Quarters (with Doug Jackson)

Winter and Spring Quarters are marked by the continual development and refinement of your thesis project, concluding with the public presentation of your work.

During the Winter Quarter your thesis projects will be developed thoroughly, with an emphasis on the plausible and compelling manifestation of your unique thesis position within your design project. Desk crits, reviews, and peer-discussions will be geared toward facilitating design development across multiple scales of consideration, and through multiple media. In addition to this ongoing design development, I will also help each of you to clearly and convincingly articulate your design ideas—graphically, verbally, formally, and spatially.

By the end of Winter Quarter each of you will have a substantially complete thesis project, supplemented by a substantially complete thesis book. Spring Quarter, in turn, will be primarily devoted to the refinement and public presentation of this work. Since your thesis project is unique in terms of its scope of critical inquiry and design speculation, the studio calendar is designed to allow you ample time in Spring Quarter for the production of unprecedented forms of design representation.

At the conclusion of Spring Quarter each of you will have a unique, profound, and thought-provoking architectural thesis and thesis design project that is fully developed and compellingly represented. These will be on display not only at a final 5th Year Show (the Chumash Show), but also in a final comprehensive studio show. In the past these studio shows have been curated and designed by the studio as a collective, and have resulted in some fairly impressive exhibitions—which you can see some images of on the next page. This coming year, we will decide as a studio if we would like to continue to collectively design our studio show, or whether we would prefer to pursue another approach instead.

Sometime during Winter or Spring we will also attempt to take at least one major studio field trip. The specific destination and time of such a trip will be decided by the studio as a whole. During such a trip, if possible, we will also attempt to present our work at another school of architecture—both in order to make our work public, as well as to gain constructive feedback from noted critics at other institutions.

In addition, we will do other things as a studio—day trips, dinners, drinks, etc.—both to bond as a studio but also just to have fun.
At the end of the spring quarter, our studio displays its work in a final exhibition.

In previous years, the studio has decided to collectively design the exhibition. These exhibitions were opportunities to both present each student's thesis project, as well as to create an engaging environment that encouraged visitors to fully explore the content of each project.

This year, we could continue to do this, or try a new approach. Either way, we will make this decision as a studio.

More photos and videos:
- Probe 2013 photos
- Everything 2014 photos
- Everything 2014 video: Trailer
- Everything 2014 video: Adventure Time with Blair
- Everything 2014 video: Network Culture
- Everything 2014 video: Cultural Exploration
- Striptease 2015 photos
- Striptease 2015 video: Trailer
- Striptease 2015 video: Live Feed
- Striptease 2015 on Designboom
- Lucid 2016 photos
- Interspace 2017 photos
Doug Jackson Bio

I am an architect, writer, and educator. Prior to coming to Cal Poly my entire career revolved around questioning assumptions about architecture, designing work that embodies new ideas about architecture, and sometimes even constructing that work. Now, at Cal Poly, I am thrilled to get to help students do all of that as well.

Previously, I served as a principal along with Wes Jones in the award-winning and internationally-acclaimed office of Jones, Partners: Architecture (J,P:A), and during this time our innovative work was widely exhibited and was featured in numerous national and international publications, including the monographs Instrumental Form and El Segundo, published by Princeton Architectural Press in 1998 and 2007 respectively. While with J,P:A I was responsible for the design and management of a variety of projects, including the Confluence Point Bridges and Ranger Station in San Jose, the Andersen Consulting Corporate Headquarters in Kuala Lumpur, the India Basin Technical Center in San Francisco, the “Shuffle” installation at SCI-Arc, and the HSI Productions Satellite Office in Culver City. I was also the graphic designer for our award-winning monograph, Instrumental Form, the graphic director for our follow-up monograph, El Segundo, and the author of our firm’s patent for our Residential Program Deck (PRO/dek) system.

In addition, I have maintained an independent design practice whose constructed as well as speculative design work has been featured in numerous books and design journals, and has also been exhibited both nationally and internationally—most recently at the Architecture + Design Museum in Los Angeles and the GA Gallery in Tokyo. I am also the author of a book titled SOUPERgreen!—Souped Up Green Architecture (for which I received a grant from the Graham Foundation for Advanced Studies in the Fine Arts) and the guest editor for a special issue of the Journal of Architectural Education titled “Environments.”

I am a licensed architect in the State of California, and I received my BArch from Virginia Tech and my MArch from Princeton University. Before coming to Cal Poly I taught graduate and undergraduate design studios at the Southern California Institute of Architecture (SCI-Arc) and the University of Nebraska–Lincoln (where I was the Hyde Chair of Excellence—an invited position that has also been occupied by Wolf Prix of Coop Himmelb(l)au and Peter Cook of Archigram). I have also served on studio and thesis juries all over the place, including SCI-Arc, UCLA, UC Berkeley, USC, CCA, Harvard, and Columbia.

I’m around most of the summer, so if you want to talk to me about thesis studio and/or your thesis ideas then please don’t hesitate to call, e-mail, or drop by my office.

Michael Lucas Bio

I am happy to teach at Cal Poly. I joined the faculty at Cal Poly, San Luis Obispo in 1997 after almost twenty years of practice in the Ohio Valley and Chesapeake Bay regions. I have tended a Christmas tree farm in the mountains of central Pennsylvania, played outfield and pitched baseballs, worked in a Pittsburgh open hearth steel mill, and advocated for the homeless of Baltimore. I rebuilt much of the first-year curriculum along the way, with lessons learned from teaching thesis from 1998–2010.

As a designer, my work began with careful yet modern interventions into historic districts in urban Cincinnati and Baltimore, as well as rural Easton and the mill village of Oella, Maryland. Later I added an emphasis on community and educational situations. My projects include a microschool for thirty special needs children set within an active convent, a research library for a graduate school of music, a twenty-eight-year-old daughter and thirty-year-old son. My built work where I was lead designer received awards from the Cincinnati, Baltimore, Maryland, Southeast Pennsylvania and Pennsylvania Chapters of the American Institute of Architects.

I was named one of three Cal Poly Distinguished Teachers for 2007-08 (the first awarded to a CAED professor in 20 years). My publication since coming to Cal Poly has included the phenomenology and hermeneutics of American space (in particular industrial vernacular and Native American situations), eco-phenomenology and environmental ethics, speculative realism, and phenomenologically-based pedagogy. I am a Planning Commissioner for our local coastal town of Morro Bay, and have been working on my own home there for years...Don’t ask me to sing or dance, although I like those as well as, if not preferred to, painting or sculpture for being allied with the embodiment of architectural media.