Advanced Studios:

Advanced Design Studios explore pressing issues in current cultural discourse through design. The issues have both timeless and current components, as the question of value and meaning – and the structure and interaction of the disciplines (itself one of the pressing issues) – continue their constant evolution. Consequently this Advanced Design Studios requires that you take a thesis-based approach to arguing for the value of your proposal. In the Advanced Design Studios competency in design is not the end, but the means. Your proposal cannot be excused on the circumstances of the brief, but must take part in a larger discourse of the histories and theories of architecture and landscape architecture, into which you must frame your proposals. You must make a convincing argument for the improved structure of the world that your proposed construction would enact in order for your work to succeed.

The Inquiry:

Speculations surrounding waters’ impact on the form of Quito’s public realm fifty years in the future.

Speculations on Water: Infrastructure and Institution

The Brief:

Student teams will speculate on future water infrastructure and growth in Quito, the largest city in Ecuador. Quito, to which we will
travel for a week, is growing rapidly. The only source of fresh water supporting Quito and surrounding territories is the shrinking ice caps on the volcanoes that surround the city. This is not a regional planning exercise but a fine-grained exploration of designed changes to the public realm.

The intent of each team's proposal will be supported by a detailed study of the conditions along a transect from the Pinchincha, the volcano directly over Quito, down to Tena, in the Amazon rainforest, where the Napo River ends Quito’s land reach.

The reciprocity between the city’s need for a water infrastructure and how that form transforms the shape of the city, is the site for engagement. As in the example of an Indian stepwell at the center of a Rajastani village, each team must propose both the infrastructure related to water and a social, political, or cultural institution associated with its management, and then speculate on how these changes will positively determine the city in 50 years.

Course Description:

The amount of new construction around the globe in the last twenty years staggering the imagination. Landing in Panama City, for example, you see a newly man-made landscape (composed of alterations at every scale) stretching into the sky and to the horizon. Little of it was there a quarter century ago, and almost none of it is cohesively imagined. The same is true of San Paulo, Austin, Berlin, Beijing, Melbourne – and Quito. Everywhere this development is tied to a loosening of strictures — on lending, zoning, planning, approval, oversight, tradition, propriety, political financing, environmental impact, and quality of construction — and a triumphant international real estate market, to which, let’s be clear, architecture and landscape architecture have willingly (mostly) been handmaidens, their voices increasingly mute or marginalized.

It’s perhaps the scale and uncertain control of this desperate, blind impulse to build that makes the consequence to you as architect and landscape architect so profound. You can proudly work all day on the perfect detail — a door jamb, a dry-stacked retaining wall — then walk home, eyes open to the ever-metastasizing world actually happening around you, and wonder if, really, good design at the scale we (mostly) serve or the impact we (mostly) have makes any difference at all beyond the internal discussions of our fields.

But it has also regularly been the case in our histories that the design disciplines have not merely been servile to what is, but have also served by speculating radically on what should be. These speculations have often had profound consequence (as in, say, Tony Garnier’s Une Cité Industrielle), or have at least stood as evidence of principle (as in, say, the work of John Hedjuk). This studio asks you –
working in 2-person architect / landscape architect teams – to speculate radically on a positive future. How will you propose the world to be better in 50 years?

The specific means for this speculation is, as described in the brief above, the proposal of water infrastructure and related institutions: the discrete constructions that will, by the consequence of their order and presence, determine the future landscape. Institutions and infrastructure are like chicken and egg: neither comes first – and neither is exclusively the domain of either discipline. In your designs, they must be fundamentally linked as one proposal – the infrastructure begets the institution; the institution demands the infrastructure – and for the sake of this studio they must be public.

The subject for your speculation the role of water in the future growth of Quito, both within its current limits and without. The specific site is the transect line through the existing city eastward, from the Pinchincha volcano, which towers over the city’s western edge, into the Amazon drainage to the east. All of this land is currently the subject of real estate speculation, much of which is financed by yet other kinds of speculation: oil in the Ecuadorian rainforest, mostly, but also international currency (Ecuador uses the U.S. dollar, which makes it a haven for money to go to ground).

Quito – which we will visit for just over a week – is home to the most intact Spanish Colonial city in the Western Hemisphere. That old city (the first UNESCO World Heritage site) is now, of course, only a small piece of a vast urban expanse — 1.6 million inhabitants — growing ever outward. Over the last few hundred years, Quito’s expansion occurred north and south along a narrow hanging valley originally settled by the Inca. That valley is distinctly defined, bound on its long, steep west and east sides by the Pichincha volcano and an uplift ridge, and on its narrow north and south ends by mountains and an (essentially uninhabitable) valley that protects
the city from the ash of the massive and iconic Cotopaxi volcano, visible to the south of the city.

The Site:

Quito’s gradual north / south expansion was traditionally defined by large and iconic monuments and monumental buildings, alternating with and public voids – squares and parks – that once gave the city both a rhythmic scale and a physical identity. But the current explosive growth, driven by an energy economy, continued movement from country to city, foreign investment, etc., lacks any plan that respects that older order, and such a plan may not, in fact, be possible.

There are several reasons for this. First, the geophysical limits that defined the traditional city’s domain have been reached (a new subway line has just been completed along its length: expanding this further is considered irrelevant). But the city wants to grow even faster, as money pours in to do so. Second, a new, bigger airport was recently completed in the large, adjacent valley to the east, which has realigned how the city operates. This valley sits at lower altitude (the Inca tended to build above the malaria line), where it is often less cloudy. Aircraft approached the old airport by descending along the length of Quito, which restricted building heights to avoid collisions; now that restriction had been lifted, and a new scale of construction dwarfs the old order, as towers sprout everywhere. Third, a rapidly expanding upper-middle-class in Quito has brought with it a desire to consider city life in a different way, which has brought about massive suburbanization.

This has occurred to the east of Quito, in the same valley in which the new airport was built (growth to the west is limited by the severity of the massive Pinchincha ridge, which also regularly erupts on its west face). That valley, centered about the towns of Cumbaya and Tumbaco, is rapidly transforming in a quilt-like pattern, as its haciendas – large, family-held agricultural estates – are being purchased and subdivided. Though much of it is still agricultural (Ecuador’s most lucrative product after oil and bananas is roses, which are grown east and south of Quito, and shipped around the world), so too was most of old Quito. Like the Hill Country west of Austin, this area will soon be city.

The eastern edge of the Cumbaya valley (on the far side from Quito) is formed by the last ridge of the Andes: beyond that, the slope of the Amazon drainage begins. While this area (which we will visit for 3 days) is still mostly cloud and rainforest, it too is in the path of Quito’s speculation, connected by a major highway through the Papallacta pass, where there is a popular hot springs spa. At the bottom of that long slope are a series of towns, like Tena, that mark the eastern limit of Quito’s terrestial reach. Here the Napo River
begins the system of water movement that, streaming down into the Amazon drainage, acts as the highway for the petroleum industry from which most of Quito’s wealth is derived.

But oil is not the only source of revenue or speculation in Ecuador. Eco-tourism (and birding in particular) is the third highest economic sector after petroleum and agriculture, and growing. This is a consequence of a number of factors. First, the range of natural environments is astonishingly broad, from the Amazon drainage up to the Andes, then down to the Pacific slope, and out to the Galapagos. Second, unlike temperate regions, equatorial eco-systems tend to be remarkably stable (daylight length is the same all year, and temperature range is limited), which means species diversification of fauna and flora is very high, with a tendency towards specialization (and, thus, fragility) in evolution. Finally, and crucially, one direct consequence of these eco-systems’ specialization is their fragility. Ecuador is one of the few countries in the world in which the right of nature to exist is guaranteed in the federal constitution, and this is true of city space as well.

All of this growth is, of course, made problematic by the need for fresh water. Quito’s water supply, and water reserve, is contained in the ice caps on the surrounding volcanoes. These ice caps are shrinking and at some point their capacity will be outstripped by demand. This is not the only water dilemma Quito faces. Much of the drinking water in Quito is bought in plastic bottles. The city does little to reclaim wastewater. It has no public space relationship to the rivers that do course through it (the Spaniards already paved over major drainages beginning in the 1500’s). Volcanic ash can quickly cause the entire storm sewage system to clog (when the Pinchincha erupts, people quickly take to the streets with brooms).

The Assignment:

Given this context, the assignment for this Advanced Design Studio (in which, again, you will be working in 2 person teams) has, as its subject, water. Though water conveyance, collection, treatment, and storage is one issue – and you have to consider water collection in some form: rainwater, surface sheet flow, ground water from springs or wells, reclaimed waste water – it is not limiting. The project might arise considering the transportation of water from elsewhere across your site by pipelines or aqueducts (the opportunities will arise by elevation and orientation). In addition, you have to consider wastewater reclamation, new waste water, erosion, flooding, human safety, water quality. And, really, these technical concerns are the means by which to address a more fundamental problem: the formation of the public realm.

The project has three simple variables.
The first variable is the location. Teams will subdivide the territory into distinct units related to water and then claim a unit for change.

The second variable is the program. Each team must identify a social, political or cultural institution relevant to the purpose, presence, and phenomenon of water in the site and city. Each team will develop a specific function with regard to this larger programmatic trajectory, then give form to all the constituent parts that advance the institutional mission and be transformative of the units selected: an example of which is a step well, which, while guaranteeing a supply of clean drinking water, also serves as public space, theater, palace, laundry, public offices, etc. The function must be commensurate in scale with what is expected of an Advanced Studio (i.e., larger than a pool or spa!). That said, function in this studio is NOT the justification for form. Sustainability, as you should be aware, is partly responsible for this approach, as the idea of program-driven form — that hallmark of the Modern — slips into the past. Sustainable urban consequence is the justification for form in this studio.

The third variable is time. The proposal of today establishes the Quito of 2070. The expansion of Quito, must be beautiful, and teams must demonstrate what will be. That’s the actual design problem. This project is driven by cultural identity and theories of value, not program. It is speculative, and meant to be part of a long history of influential proposals, which includes the speculations of Piero della Francesca, Boulée, Ledoux, Garnier, Melnikov, Tatlin, Speer, Taut, Le Corbusier, Wright, Archigram, Super Studio, Krier, and OMA, among many, many others. You must place your project in that history.

The studio will be assisted by Professor Maria Isabel Paz at the University of San Francisco in Quito [USFQ], who will join us for many of the daily trips in Quito.

**Crucial Note About Travel:**

Read this section carefully. This is a travelling studio: we will visit Quito and areas just to its east, departing Austin on Saturday, September 28th and returning Sunday, October 6th (most flights depart around midnight on Saturday). All of the areas we will travel to in Ecuador are Category 4, the safest of the State Department’s listings for Restricted Regions. This travel will require additional cost to the student beyond tuition, fees, and supplies. As of this writing the approximate additional cost to students will range somewhere between $900 and $1,350. A number of variables control this additional cost, including airfare, which cannot be purchased until after the studio lottery; hotel costs, which cannot be established until the number of participants is set; and the amount of Mebane funding available, which has yet to be determined. Please note that
the above high and low figures already include assumed Mebane funding of between $700 and $900: this amount is traditional, but not guaranteed.

You must have a valid passport to travel; it must be valid for six months after the date of our return. Please check. If you are not a US citizen you must verify if entry visas for Ecuador are required of you. Prior to the studio lottery you must verify that you can obtain those visas in a timely manner. You will need to obtain any necessary visas on your own, but must wait until the studio lottery result to proceed.

Finally, Quito is 9,500 feet above sea level. Note that high elevation can have adverse physical effects, and may not be recommended for certain health conditions. Verify with your doctor if there are any reasons why you should not take part in this travel prior to the studio lottery.

Note that participation in this travel studio is voluntary. Most of Ecuador (and all of the areas we will be in) is currently listed as a Level 4 Restricted Region, which is the least dangerous of the Restricted Region categories. The University of Texas policy with regard to Restricted Regions, which must be posted on official documents for this program, is:

**UT Liability Disclaimer:**

*No University of Texas at Austin student, faculty, or staff can be required to travel to a Restricted Region. Any participation in travel to a Restricted Region is strictly voluntary, and the traveler assumes full responsibility for all risks associated with this travel.*

See also UT Risk Notification Statement below

**Format:**

The studio will be broken into three parts: a four week session during which we undertake analysis and precedent exercises, as well as exercises to form groups; a week-long trip to Quito for site exploration; and an eight week development of a group proposals. Additional exercises will be undertaken aside from this work, including the development of a library of prototypes.

**One Voice or Many:**

This particular studio project favors group-of-two authorship over collective apprehension, with the advantages and shortcomings that entails, both to you as a young designers, and to the designs you make. You must think about and be sensitive to the many communities affected by your proposal, but for this project you are very much the author, accountable for the world you propose. The nature of the criticism in this studio will be similar. We will be giving you our opinions in as unvarnished a form as possible, but we are also not experts on the communities in which you will be working.
The purpose of our criticism therefore is to help you sharpen your own particular world-views, and how your design proposes a better world as you see it. Again, there are advantages and disadvantages to this approach, but it is the chosen pedagogical model of this studio.

**Required Material:**

What is typically required in design studio along with items necessary for hand drawing and modeling (a parallel bar will be required). The SANAA rule will also apply in this studio: “if you do not have a model, [or drawings we can draw over] you do not have anything to talk about.”

**Review Culture:**

We will have frequent pin-ups, and reviews with visitors. We are firm believers in the value of a critical review culture. In that culture the basis of *professionalism is honesty*. Honest public assessment of your own work can be a difficult experience. Review dynamics have an element of instability, and criticism can often seem personal. This is sometimes justified on the basis that developing a tough skin prepares you for practice, though that’s hollow: two wrongs do not make a right. But please note that a review, even very critical, should be a dialogue that you, as the author of the work, should take some control over. It should not be a passive experience on your part, either conceptually or actually. This requires a level of dispassionate awareness and communication on your part. What are you trying to accomplish? Why is this meaningful? What do you feel you are succeeding in? What do you understand and not understand? Present well (put yourself in the reviewers’ position before you map out what you want to say), talk back, ask questions, argue your point.

If you feel criticism you have received is unwarranted and personal rather than professional, either from us or any visiting critic, do not hesitate to speak with us about it. Note that often reviews do not discuss what you think they should. We admire the particular discourse that happens in reviews (just as we admire the particular discourse that happens in desk crits). It will often seem tangential to your work; but one definition of architecture / landscape architecture is that it is “the activity that architects / landscape architects do,” and one way that a LOT of architecture / landscape architecture happens is by projection in conversation. Your attention to the tangential discussion is as critical as your attention to the direct discussion; the onus is on you to make clear when you do not understand the relationship of what is being said to your work.

*That said, in this studio you may NOT present a project by describing the chronological development of the design.* Please re-read that
last sentence, and think about it for a moment. You may design your presentation any other way. A default possibility is to 1. Generally describe the facts of what you are proposing; 2. Describe the reasons you feel the world you are proposing is good given the specifics of the general circumstances (trajectories in site, culture, economy, material culture, etc.); and 3. Referencing the history and theory of architecture / landscape architecture, describe why you believe this is good architecture / landscape architecture.

**Required Reading, books:**  
*The Possibility of An Absolute Architecture*, Pier Vittorio Aureli (MIT),  
*A Line in the Andes*, Felipe Correa [on reserve, Architecture Library]  
*Damero*, Alfonso Ortiz [on reserve, Benson Library].

**Required Reading, articles:**  
TBA

**Adobe:**  
We [you will invariably] use Adobe software in this course. When accessing Adobe software in SOA computer labs, you will be prompted to sign in with an Adobe ID. You are not required to purchase Creative Cloud services to sign in on our lab computers, but you are required to create a free Adobe ID. That can be done here: [https://accounts.adobe.com/](https://accounts.adobe.com/)

**STUDIO COURSE GRADING POLICY**

Grading will be based on four areas of performance:

**ambition:**  
The degree of ambition in the ideas and undertaking

**grasp:**  
The understanding of the project at hand, combined with an appropriate process of inquiry

**process/effort:**  
The consistent and rigorous development and abundant testing of ideas

**resolution:**  
The demonstration of competence, completeness, and finesse through representation and designs that responds to a range of critical positions

Your work will be evaluated on its rigor and evolution over the semester.

**Grading descriptions:**  
A : excellent work  
Project surpasses expectations in terms of inventiveness, appropriateness, verbal and visual ability, conceptual rigor, craft, and personal development. Student pursues concepts and techniques above and beyond what is discussed in class. Project is more than complete on all levels.
B : good work
Project is thorough, well researched, diligently pursued, and successfully completed. Student pursues ideas and suggestions presented in class and puts in effort to resolve required issues. Project is complete on all levels and demonstrates potential for excellence.

C : acceptable work
Project meets the minimum requirements. Suggestions made in class are not pursued with dedication or rigor. Project is incomplete in one or more areas.

D : poor work
Project is incomplete. Basic skills including graphic skills, model-making skills, verbal clarity or logic of presentation are not level appropriate. Student does not demonstrate the required design skill and knowledge base.

F : unacceptable work
Project is unresolved. Minimum objectives are not met. Performance is not acceptable. Note that this grade will be assigned when you have excessive unexcused absences.

X : (excused incomplete)
Can be given only for legitimate reasons of illness or family emergency. Simply not completing work on time is not an adequate cause for assigning this evaluation. It may only be used after consultation with the Associate Dean and Program Director’s offices and with an agreement as to a new completion date. Studio work must be completed before the second week of the next design semester in which you are enrolling, according to School of Architecture policy.

ALL GRADES ARE SUBJECT TO DEDUCTIONS FOR ABSENCES, LATE WORK AND LATE ARRIVALS.

ATTENDANCE:
Attendance is mandatory. Participation in discussions and work in studio is expected. *The minimum penalty for more than three unexcused absences is a full letter drop in your final grade for the course.* Please contact your instructor prior to class if you expect to be late or miss class. A student who misses classes or other required activities for the observance of a religious holy day should inform me as far in advance of the absence as possible, so that arrangements can be made to complete an assignment within a reasonable time after the absence. A student who fails to complete missed work within the time allowed will be subject to the normal academic penalties.
ACADEMIC INTEGRITY: Policy on Scholastic Dishonesty: Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University. Since such dishonesty harms the individual, all students, and the integrity of the University, policies on scholastic dishonesty will be strictly enforced. Refer to the Student Judicial Services website for official University policies and procedures on scholastic dishonesty. Please refer to The Role of Faculty in Confronting Scholastic Dishonesty brochure published by Student Judicial Services for information on confronting students who violate scholastic dishonesty policies. For further information, visit the SJS website at http://www.utexas.edu/depts/dos/sjs/ or call 471-2841.

DISABILITIES: At the beginning of the semester, students with disabilities who need special accommodations should notify me by presenting a letter prepared by the Services for Students with Disabilities Office. To ensure that the most appropriate accommodations can be provided; students should contact the SSD Office at 471-6259 or 471-4641 TTY.

SECURITY, SAFETY: STUDIO The studio is an exceptional learning environment. Since it is a place for all, it necessitates the careful attention to the needs of the individual. Please see your instructor if there are any problems (music, visual pollution) that you are unable to resolve on your own. All spraying of fixative, spray paint or any other substance should be done in the shop. Security is a necessary component for a studio that is accessible 24 hours a day, 7 days a week. Please keep all exterior doors locked after hours.

UT Risk Notification: The University of Texas at Austin must review international travel to destinations on the UT Restricted Regions List, as determined by the IOC. Travel to any location on the UT Restricted Regions List involves a certain degree of risk.

It is important that travelers UNDERSTAND & CAREFULLY CONSIDER THE FOLLOWING RISKS:

The US Embassy nearest your destination may temporarily close/suspend public services for security reasons.

The US Embassy nearest your destination may not be able to provide emergency assistance should you require it.

If there is a need to evacuate in an emergency, flights maybe suspended and other departure or shelter options in place maybe limited or non-existent.
Access to hospitals, emergency medical care and medications maybe limited or non-existent.

Should you experience difficulties, the University of Texas at Austin and their contracted emergency assistance provider, International SOS, may not be in a position to provide you emergency assistance.

Participation in travel to a UT Restricted Region has inherent risks which may include kidnapping or death. These risks can never be completely eliminated.

Risks of travel to your destination may include (but are not limited to) dangers to health and personal safety, including possible death posed by natural disaster, disease, terrorism, crime, civil unrest, and/or violence.

Additional risks include (but are not limited to) minor and major physical injuries, emotional and psychological injuries inflicted accidentally or intentionally by others, and/or catastrophic injuries, including paralysis and death.

There maybe additional health, safety, and security factors that have not been brought to your attention by the University of Texas at Austin.

It is HIGHLY RECOMMENDED that you visit and CAREFULLY REVIEW the following websites:

http://world.utexas.edu/risk/travel/policies UT International Travel Policy
http://world.utexas.edu/risk/resources UT Health & Safety Resources for International Travel
http://www.utexas.edu/emergency UT Emergency website
http://www.internalsos.com International SOS website (member ID:11BSGC000037)
http://www.travel.state.gov U.S. Department of State website for Travel Advisories and consular information sheets for the intended destination
http://www.cdc.gov U.S. Centers for Disease Control and Prevention website for information on health issues and recommended vaccinations for travel to intended destination
http://www.who.int World Health Organization website for information on disease outbreaks and emergencies

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OFFICE HOURS: By appointment