PERSON-IFESTO

G Laster (BA 2018) and Emily Golding (BA 2018)

Welcome to the eg&g Test. It's simple, like the Bob SternTest ("Where's the front door?"), but more important. Go ahead and open up your current project. Here's the test:

Does your proposed space subjugate transgender and gender non-conforming (GNC) people?
We'll be more specific:

How are your bathrooms planned?
If the answer is one men's and one women's bathroom, you fail the test, meaning that your proposed space does indeed subjugate trans and GNC people. Extra points docked if you have urinals drawn into the men's, but not the women's, or if you have a baby changing station drawn into the women's, but not the men's. Don't even think about putting those symbols where 'female' is a stick figure with a circle skirt.

If this sounds harsh, consider first the struggles of being trans or GNC. Consider that gendered bathrooms are perhaps the foremost way that architecture and the built environment regularly inflict violence on trans and GNC bodies.

Bathrooms inflict gender in their stalls and signage. That the range of possible actions–directional door-opening, partitioned bowel-moving, mirror self-(dis)associating, general hygiene-doing, sudsy hand-wringing, paper towel basketball, etc – in gendered bathrooms is designed to be different conflates sex and gender. The two are not the same and neither is binary. Coercing people into spaces that negate their personhood is violence. Each "men" and "women" bathroom sign is a plaque honoring and perpetuating the erasure of trans, GNC, and intersex people. Each trip to relieve yourself as a trans or GNC person is a choice between the inward violence of denying yourself agency over gender identity and the external violence of being thought to be in the "wrong" bathroom.

Gendered bathrooms are manifestations of normative, patriarchal power structures that seek to subjugate trans and GNC people. They enforce "fundamental anxiety about gender ambiguity" that comes from "our cultural beliefs about the anchoring of social gender in our genitals and secondary sex characteristics." When architects design built spaces with gendered bathrooms, they reinforce architecture's continued alliance with these power structures and cultural beliefs (see also: the canon).

The violence of gendering bodies extends in all directions, to everyone. People who binarily express gender, though their gender identities are predicated on the absence of other genders or no genders or multiple genders, experience this violence too. When we buy into "male" and "female," we limit the possibilities of our many selves, of multiplicitous personhood. G remembers an age at which they accompanied both parents to their respectively-perceived bathrooms, an age at which they were deemed agender, too young to be binarized. Both authors still see this today, children being socialized and gendered by the codes they learn from occupying bathrooms. These learned codes unrightfully inform our behaviors for our entire lives.

The message to Trump in our studios is that "We Won't Build Your Wall." When we fail the eg&g Test, we do build his walls, though different ones than you might be thinking. We build the literal walls between traditionally binarized and essentialized genders, walls that exclude people who transcend the binary/essentialized system, walls that the federal government seeks to reinforce by denying public school students the right to use the bathroom of their choice.

Even when you pass the eg&g Test, you build those walls every time you step comfortably into the studio bathrooms, not questioning what they mean for trans and GNC students who are deprived of the right to safely use the bathroom without fear of being surveilled, accosted, or otherwise have their gender and gender expression policed by their cisgender peers. (In case you haven't noticed, the only gender neutral bathrooms in the whole building are literally buried out of sight in the sub-basement (e.g., has seen a cockroach there) and off-limits to students on the third floor) Yes, this happens; yes, this happens in our building; yes, you are absolutely complicit in this violence. To change this, take the following to heart: it is your job as architects to design and celebrate gender-neutral bathrooms, and it is your job as people to celebrate that menstruation, standing to pee, changing diapers, applying makeup, and anything else (that happens in the bathroom) has no gender. It is your job to change those damn stick figure signs. Be radically free of gender.

1. Gibson, James J. The Ecological Approach to Visual Perception. New York, NY: Psychology, 2015. Print.
2. Norman, Donald A. The Design of Everyday Things. London: MIT, 2013. Print.
3. Joel Sanders and Susan Stryker, "Stalled: Gender Neutral Public Bathrooms," South Atlantic Quarterly, October 2016.

ON THE THEORY OF SPACE: BETWEEN HEIDEGGER AND CHINESE LANDSCAPE PAINTING

Ziyue Liu

In November 2011, Wang Shu was invited as the Kenzo Tange Chair Lecturer to give a talk at the Harvard Graduate School of Design. Titled 'Geometry and Narrative of Natural Form', the first half of the lecture was devoted to a lengthy discussion the relationship between traditional Chinese painting and guiding principles for Chinese space-making. Wang Shu's idea of space consists of a real part, and an imaginary part in which the real half plays the role of an objective reflection of the environment and the imaginary half is a subjective projection of the painter's inner experience. This dualistic division of subject and object relates closely to Heidegger's theory of space presented in *Building Dwelling Thinking*.

Heidegger's theory of space is directly linked to the convention of classical western philosophy. The dominant view of the world dictated by Plato's theory of form involves a two-world view in which the world of permanence perceived through the mind is distinguished from the world of change perceived through the senses. The opposition of reality and appearance becomes the source of binaries, such as universal and particular, cause and effect, solid and void, presence and absence, mind and body. One of its most significant articulations is the duality of subject and object which has fueled the critical development of the theory of space. Heidegger proposes an alternative theory of space questioning the philosophical foundation of the dichotomy of subject and object. Following Kant, he embraces the role of space as an inner condition of experience, while, adding to this view, he suggests that space is defined by man's action of reaching out for things that exist in the objective world. On this account, space stops being a permanent entity that floats above all beings, and human inner experience is projected onto the objective world through practical means. Existence is attributed to interactive activity and empirical involvement with the objective world. Space is functional. He distinguishes between three types of spaces: world-space as the external objective space , regions as imposition of human inner conditions, and Dasein's spatiality which describes a mode of human existence through activity which mediates between the previous two types of space. Such view does not deny objectivity or subjectivity altogether, but provides a synthesis of the two instead. The function of thinking out spreads subjective consciousness. As we act, we become spatial.

In his *Four Key Terms* in the *History of Chinese Garden*, Prof. Stanislaus Fung explains contradictory views of the world between Western canon and classical Chinese philosophy. He demonstrates this contrast between a dualistic theory rooted in the Western ontology and the single continuous worldview in classic Chinese thinking. Fung's point about classic Chinese worldview is explained through discussing the absence of binaries in the terminology of Chinese garden design. Since, in the context of classical Chinese philosophy, the world cannot be conceived as binaries, therefore, the 'world of truth' is absent, knowledge is not understood in terms of fixed ideals but as 'pattern and process in the world of flux and change, things and events are mutually shaping and being shaped'. This, however, does not exclude words of opposite meanings in the Chinese language. Because they exist in pairs, Chinese terms become plastic in their interpretation. In these terms, contradictory concepts are articulated reciprocally, such that one is becoming the other. Like classic Chinese worldview, these terms require incorporation of both sides of the concepts for proper interpretation.

Countering the participatory roles of opposing ideas, Wang Shu's subjective distance that separates the real and the imaginary part of the painting is a problematic consequence of self-reference. Elements in the painting operate on their own set of premises without establishing a clear sense of order. The white spaces between and around the two parts are physical barriers which do not participate in the conveying of meaning. The very top edge of the Hermetic Sages becomes essentially the same as the white space occupied by the inscription immediately to its right. They are both spoken of as generic sky due to a lack of reference to the rest of the painting. Alternatively, the space occupied by the inscription could be understood as part of a water system which is relatively inconspicuous in the composition. It is hinted first by the small pond right in front of the pavilion, extending next to a river suggested by a patch of coarse texture below the small low mountains located under the text, and finally reaching the sea represented by the blank surface above the low mountains. The subtle hint of water communicates between the contracted space in the foreground and the endless vast space beyond. Therefore, the termination of landscape is not at the steep mountains which is assumed by Wang Shu but at the infinite sea to its right. Or rather, there is no termination. Wang Shu's speculation would deny this possibility altogether, because the indifferent separation of the upper and low parts makes them inaccessible to each other such that the continuation of water system seems conceptually absurd.

Given the increasingly complex landscape of scholarship across many disciplines and cultural context, it is difficult and perhaps even dangerous to align oneself with any polarized ideas and concepts. However, there is a growing will to define an absolute 'Chinese-ness'. When Wang Shu was given the power to represent a group of scholars and architects whose works are still neglected by the West it seemed important for him to locate the collective effort of Chinese architects in the ever-accelerating currency of architecture scholarship through a unifying impression. Mediating space serves as an opportunity to dissolve such universal monarchy and to provide a place for resistance and liberation. In discussing the mediating space, the ends must stay open, as every moment passes by a whole new world unfolds before us.

THE UNTOUCHABLE TREES IN EASTERN TIBET

Thupten Wodzer

The steep slopes of Eastern Tibet were once largely forested with conifers. However, over 50 years of unsustainable logging dramatically decreased forest cover from 30% to 6.5%. Deforestation changes local hydrology and creates climatic fluctuations that increase runoff into the rivers and exacerbate flooding downstream. Consequently, the Chinese government had to institute a logging ban in 1998 following massive floods. While large logging was banned, small-scale logging continues at local levels to this day.

The villagers of Eastern Tibet fell trees for two reasons: for construction of traditional Tibetan houses and for traditional energy (fuelwood). Like in many cultures, owning a large house and a large stove has become status symbols among villagers. To secure the best wood for construction, the loggers high grade the remaining mature trees left over from earlier eras of deforestation. For firewood, they cut birch trees. As sun-loving pioneers, birches have grown into clear-cuts. With constant harvesting, the birch trees are being moved into a coppice system, which slows the forest's succession back towards its natural, conifer-dominant species mix.

A local environmental group dedicated to applying cultural practices to conserve forests in eastern Tibet, is applying the tsetar concept to trees to stop such logging practices. According to Buddhist codes of conduct, the most important principle is to refrain taking the lives of others. This code has been manifested by a popular Buddhist practice called *tsetar* in Tibetan, which means, "freeing captive lives." Freeing a captive life is considered to be the most compassionate deed for merit accumulation in Buddhism. Thus, Tibetans free yaks, sheep, and fish on special occasions. The lucky animals, which are marked as tsetar, become so "untouchable" that the owners would never consider butchering or selling them. Even yak thieves spare them. The group designed a tag called "green amulet" with *tsetar* mantra written on it. The amulet is a modification of the traditional red thread amulet for marking freed yaks and sheep. By tagging the trees with the amulet, the team liberated 10,000 trees in 2014.

In fall 2015, a member of the group enrolled in Yale School of Forestry and Environmental Studies, where he took courses on religion and ecology, which gave him an understanding of religious approaches to conservation. For his summer internship, he built on what has already started with a slightly different approach. From experience, the team has noticed that freeing trees in blanket fashion might become an obstacle for people's livelihood in the long run. Instead, *tsetar*-ing trees selectively in response to high grading allows the forests to become multifunctional; if a stand of a forest is serving an ecological, aesthetic or other important values, then that stand can be permanently protected by tagging with green amulets. On the other hand, villagers are allowed to collect firewood or necessary construction woods from untagged working forests.

However, acknowledging that people need wood in their daily life does not mean people are endowed with the right to fell trees unsustainably. In order to halt such practices and restore the reverence that Tibetan people have had for nature at a landscape level, the group also worked with the forested communities to revive a unique Tibetan cultural practice, *labtse*. Labtse is an altar in which the area mountain gods reside. The mountain god is called *zhi dak*, which literally means, "the landlord." Tibetans believe that there is spirit in everything; the mountains have spirits, and so do the springs. Those spirits are socially connected to human communities. The human communities think of themselves as tenants, not the landlords. The trees and wild animals belong to the landlord spirit. Therefore, the communities are only allowed to use resources mindfully.

Tsetar and *labtse* have deep roots in Tibetan culture and so can be easily accepted by the people when they are being applied to forest conservation practices. The combination of these two approaches can protect forests at both coarse (landscape) and fine (stand) levels and helps keep a balance between the ecological and human needs. This dual-scale, religious approach avoids extreme policy measures such as forced relocation in the interest of conservation and allows time for the communities to understand the forest ecology from a scientific perspective. Once the communities are restored with reverence for nature and a connection to landlord spirits, the group's next step to formally introduce silviculture, the practice of cultivation and management of trees, will be easy. At the mean while, this may also push the communities to redesign the houses and stoves more resource-efficiently.

Indigenous people and their beliefs have huge potential in conservation. The science community and indigenous communities need to work interdependently to conserve the limited natural resources. Conservation efforts that are divorced from local communities often fail around the world. The innovative blend of cultural and scientific practices can restore local people's cultural pride and sense of connection to the land. Thus, it encourages proactive engagement of the local communities in conservation. *Tsetar* and *labtse* may be uniquely Tibetan, but the concept of leveraging indigenous beliefs in nature can be replicated globally to balance local people's livelihoods and the environment.

FOLD XXII

INTERVIEW WITH KELLER EASTERLING

Keller Easterling is an architect, writer and professor at Yale University.

Paprika: In your class Globalization Space last fall, we discussed spatial products and the infrastructural network that is overarching or suspended from nation-state borders. Nowadays a lot of people say that there is an anti-globalization wave, with China's firewall, Brexit and the U.S.'s notion of strong border, how do you think this anti-globalization wave would influence the spatial products, infrastructural networks and the zones?

Keller Easterling: For me, it's a huge question. And sometimes I wonder when people talk about altering these trade agreements, whether they think that this is just about moving around corns or changing attires of prices, or whether they think this has to do with immaterial things. But what we studied is that the global trade system is also like a gigantic physical plant. There are thousands of thousands of acres of infrastructure, solid cities and installations devoted to this free trade that has lasted 30 years. So what happens to that? There is this full-throated anthem of nativism or nationalism. But does it really change anything about this infrastructure in place? Or if it does, how does it do so? It's very hard to predict now, what that would be. My sense of it is that this nationalist script is one that will just give more and more power to fewer and fewer people. Nationalism is sometimes like Oligarchy, and that kind of oligarchic thinking fits pretty well to the free-trade zone formula.

P: I know that we shouldn't be talking about centers and peripheries any more, but while the U.K. and the U.S. is withdrawing from the global trade system, China starts to export its infrastructure and labors. So I don't know if there is a second wave of globalization?

KE: Yeah. No one center and periphery but multiple centers of power and power moving in many directions.

P: We are also interested in your studio on the refugee issue. In the introduction of your studio Free Migration, you compared the refugees to the commodities. We thought this is an interesting comparison because indeed both are using the infrastructural space, but the difference between them is that the mobility of the latter is much higher. I wonder if you could tell us a little more about it?

KE: The comparison is interesting because there is enormous amount of ingenuity in infrastructural space. A lot of energy is devoted to make sure that these commodities and cheap labors are transported and lubricated through this system. But there is not a lot of creativity and ingenuity in solving problems about how people might migrate. The problems are stalled out because of a dumb on and off button deciding whether to grant asylum or not, grant citizenship or not. We have been very careful not to say that the same apparatus of free trade would apply to the movement of groups of people. We are just saying that the same ingenuity, the same kind of determined problem solving might be applied to designing another kind of passage or exchange between the sidelined talents, energy and time of migrating people and other needs in the world, with particular attention to the way in which spatial variables might be placed in that exchange. So we are trying to think of a global exchange with talents and needs that could allow someone to move through the world, either move to settle in some place, or to keep moving. Especially for those who never wanted the citizenship that the nation either withhold or bestows. So we are almost trying to see if spatial variables might be part of an exchange that would allow for another kind of cosmopolitanism.

P: Seems like it's not only for refugees but for everybody.

KE: Yeah. It's in advance of the refugee camp. It's like a choice before the refugee camp or a choice after the refugee camp but definitely not dealing with the refugee camp. Those norms that the refugee camp is the answer are so ingrained that the assumption is that we will just assume our downstream assignment and fix up enclosure with this bad idea. We refuse to do it. There is no possibility of ingenuity within that.

P: That brings me to another question, which is about the distance between ideas and reality. We feel like your design works, such as the protocols you have shown in Globalization Space, are interested in changes that could happen right away. It seems to be harder to realize an architectural idea, than just to exhibit it. What is making this so hard in your experience?
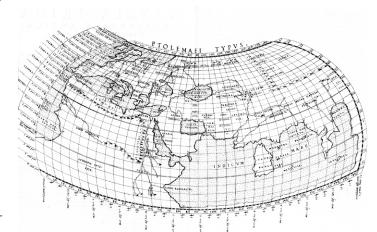
KE: It seems to me that architects need to have a different kind of audience, need to have a different kind of partnership and another kind of authority in global decision making. Getting to that table, getting to that conversation, educating global decision makers in a language of space practices is hard. I'm frustrated about it, because the economatrix, law, global standards, these things have authority. This kind of organs of communication have authority. And we are trying to insert some different kind of organs of design that might be used in global governance. But there is not a lot of fluency in that. It's hard to gain attention even for this kinds of projects and other kinds of audience. There is art world audience who is ready to hear it, but it's not the art world that we need to contact. And it's also quite risky. I think doing anything is suddenly risky. They could all be gamed by other power players, they could all go wrong. But the kind of organs of interplay are not about having a right answer, but about designing a certain kind of interplay that can also be responsive to the moments when it's out witted. So it's trying to give insurance to the moments when it's gamed by power. But all untested.

NEW WORLD UNFOLD

Chadwick Oliver is the Pinchot Professor of Forestry and Environmental Studies, and Director of Yale's Global Institute of Sustainable Forestry. His early important works in the book Forest Stand Dynamics which presents the understanding of how forest stands develops and can be managed silviculturally. His current interests lie in how to use this understanding to help resolve scientific, technical, environmental, and management issues at the landscape and global levels.

Paprika: Your research has been focused on the understanding of how forests develop and how silviculture can be applied to ecological systems most effectively. In your book Forest Stand Dynamics, you describe the four phases that trees go through in stand development. Could you tell us architecture school students more about it?

Chadwick Oliver: It's a book on how forests grow. It took a slightly different pathway when I first began looking at this subject in the 1970s with my professor here at Yale. Instead of examining the forest as a whole, which was the previous way foresters studied forests, we started looking at the trees as independent growing plants. As trees began growing, they formed patterns which is called an emergent pattern now. Since we concentrate on individual trees, it became interesting. Because the scope of this study expanded a little bit further into not beginning by saying this is the natural forest and this is people, we don't demarcate that way. Human and nature are not separated entity, they influence each other. Through the emergent properties of the forest and the interactions of individual trees, we are able to come up with a lot better understanding of how the forests grow and behave.

P: Were you looking at natural forest or commercial forest when you studied the behaviors of trees?

CO: We don't really separate when studying the behaviors of the trees. A tree, when it grows, it doesn't have a brain, so it doesn't know whether it's in a commercial forest or in a natural forest. It simply responds to certain variables in its environment. We not only look at forests that are not heavily managed by human, but also look at those which are managed. We study all of them. Because we don't demarcate between nature and human. Rather than demarcating the natural forest and the commercial forest with a hard line, we prefer to see the difference as a gradient, from the ones people adjust a little bit all the way to the extremely human adjusted ones. The trees might grow differently, but the fundamental reasons for these differences are not what kind of forests they are in, instead, the reasons might be the spacing among them, or whether the species are genetically modified.

P: What is a stand? And when did this concept come into being?

CO: The stand is a contiguous area of relatively uniformed soils, climate, species distribution and pass history. So that we can treat it as a group. It is an old concept which has been around for over 100 years. But the way in which forest grew within each stand was different earlier than it is now.

P: What do you think caused the difference?

CO: The early concept was that the trees in a forest helped each other. They were like a big family. And the big trees helped the little trees. Then, we found out that it was just not the case. It makes beautiful poetry, but it's just not very good science. Because the behaviors of the trees relative to each other could be explained much more if we look at them not as they are helping each other. Forests consist of some little trees and some big trees, in different species. (Drawing on paper) Everyone thought this big tree was helping those little trees, but when we looked at the age of them, we discovered that the little trees and the big tree were at the same age. (Drawing) So if the bigger trees weren't here, the little trees would have grown taller. We could understand the forest much better by considering trees competing, rather than helping each other. We also have found the same phenomenon occurring everywhere in the world. What's interesting is that no species wins always. For example, one species might grow very well on the very best soil, but when moved to poor soil, it might get very weak. And the other trees who behave better in the poor soil can stay stronger and win. Therefore, differences in soils, climate, or disturbance determine what kind of species or which trees would win in the competition.

P: What do you think are the goals of managing the forest?

CO: From a scientific point of view, we have to consider that there is a goal. But for the survival of human race, certain things are very necessary, such as clean water, clean air, and biodiversity. One of the things we want to do is to maintain the biodiversity because the forest is a habitat for many species. The biodiversity has long been modified by human, we cannot undo it; but we can just learn how to modify it the right way. Normally we wouldn't consider touching the old forests, but when we began studying these forests, we realized that disturbances were natural. (Drawing on paper) There are five types of forests, some grow dense and young, others grow larger. Some of these larger forests would develop an understory type or into complex forests, but disturbances can take them back to an open structure, or to the Savanna kind. There are species that are in danger because a lack of certain structure. If we look at the number of species, most important forests are the open ground, the Savanna and the Complex.

P: Many of us though using wood is bad for environment. There seemed to be the tension between human settles and forests. However, according to your research, using wood as building material is actually reducing the carbon footprint of human settlements. And it seems that there might be more trees and forests than we thought before. Can you explain this to us?

CO: Three per cent of the dry land surface is covered by cities, and another 11-12% of it is covered by agricultural fields. So we shrunk the forested area here (shrink the diagram). Not only have we shrunk it, but we also have road crossing the forests. So animals have troubles getting from one place to the other. And another thing happened is that we've stopped many of the fires and other disturbances. So we don't have very much of open grounds and Savannas. We are losing these three important structures along with the species that live there. Now the problem is that we are growing much more wood than we are harvesting. So the forests are getting more and more crowded and the structures of forests become more and more toward dense and understory. So through our actions without intention we are threatening the biodiversity in the forests. Some people would say let's just leave it alone. But the trouble is that when we leave it alone, we get very big forest fire. We need to actively remove some of the trees to solve the problems mentioned above.

P: Aren't there a lot of forests taken by farmland? That seems like the cases for example in China.

CO: Actually, the forest land in developing countries is remaining just about stable. The farmland in some countries even gets less and less as the productivity of the farmland increases. In developed countries, we don't have a reduction in the forest area. Because we are not using very much of wood, the forests become too dense. We have around 5 of the forest left. The importance is that, in the remaining forests, we want to maintain the three important structures (Openground, Savanna and the Complex).

P: Is this how you find the necessity to connect forestry research to architecture?

CO: We will be doing two good things by using wood the right way. If we cut all of the complex forests, it wouldn't be a good idea because we are losing habitats for different species. The complex forests are great habitats, and it takes too long for them to grow. So instead of trying to grow complex forests and cutting them and growing again, we should just set those areas aside to a certain percentage. If we manage the dense and understory forests, we could cut some trees here and there, and let them go to Openings or Savannas, and grow again and cut again. So that we will always maintain the important structures for biodiversity. If we have some ways of using the wood, then that will pay for our cutting it out of the forest. Right now in the world, 15% of the forests is set aside for protection and the rest of it just used in different ways. If we make wooden buildings out of cross-laminated timbers, we will not only help maintain the biodiversity, but also save CO_2 from the atmosphere, because we are not burning fossil fuels to make steel and concrete. Thus, it is benefiting both sides. The point is that we have to make sure we manage the forests correctly and cut the right trees.

P: What is the current relationship between the forestry and the architecture fields? Are there a lot of active collaborations already?

CO: In the United States, Scandinavian countries, Russia and Japan, traditional houses were always built out of wood, but not with the big cross-laminated timber. The cross-laminated timber has only been around just for a very few years. I'm very excited about how much more is becoming adopted.

P: What is the difference between cross-laminated wood and other types of wood we used before as building material?

CO: Well, I would almost put it into three types of wood. One is the type we build single families houses out of, which is what we call it two by four plywood, that's kind of traditional. Then the laminated timber or veneer is kind of engineered wood like cross-laminated timber, but because they are cut into very thin pieces and glued. It takes a lot of energy. The nice thing about cross-laminated timber is that it doesn't take much energy because we don't cut it and glue it from small pieces. Cross-laminated timbers also have a tremendous amount of strength. Recently, people have been building 18-story high rise out of those.

P: What is the reason that wood have not been widely used for a long time? Is it because the cross-laminated timber technology wasn't mature enough?

CO: Yes, it's a quite new technology. Four years ago, if I googled on cross-laminated timber, I only got three places in the world reporting it. Now you get very many places reporting it. New manufacture plants and buildings are going up in many places. It's very exciting.

P: What is the forest management challenge right now?

CO: There are different generations of foresters. We had a generation growing up thinking the important thing was providing enough wood for people. And we need to say don't just think about the wood, but think about how trees live in the forest. Now the main management challenge is to change the demarcation, the way forester thinks. Besides the challenges with the foresters, we also have many environmental people who grew up with the idea that cutting trees in natural forests is bad. We are trying to change the way of thinking from both sides.

P: What are your current interests and the projects you have been working on?

CO: We are working on a project with the UNDP in Turkish forest service to make the forest management we just talked about completely transparent so that people will trust us since they can monitor the whole process. Through the management model we proposed, we could potentially provide enough employment for people all around the world, which will be a real benefit.

P: What do you think is the role of technology in forestry management?

CO: We develop a system which is a digital model simulating forests grow (Opening desktop). We have this technology which we can take up an area and we can fly over it with a satellite so that we could get an inventory of it. For example, this forest has about 3000 hectares. We can get a range of how this forest is like. We could look at how forest grow. We've just grown it and this is what it looks like in 2065. We can also tell you how the forest will look like if we cut it in a certain way this year. For example, let's leave about five trees to the acre. And then this is what it looks like right after we have cut it, we plant it afterwards, and let the forest grow until 2065. This software can show you how the forest will be like by then, we had a forest that was in the open structure, then it was in a savanna structure, and now it is growing back probably toward a complex structure. And we can keep managing all the forests Until we get a complex structure.

P: Is this based on historical data?

CO: Well, yes and no, we get the inventory, and then satellite stations spend years and thousands of dollars remeasuring trees to get growth models. So we can project how it's going to look. And then we just have an automated system here. In Europe they have a satellite that circles the earth about every 11 days and does radar scanning so that you can look at the radar and determine how the forest is like in any place on the Earth, so that we know whether we are following our plan. If we put it up online, people can follow us (Google has asked me about it), so that our management method can be more trustworthy. We are using very unnatural scientific tools, like satellites and data to maintain biodiversity in nature, which is important for humans to live.

P: Bringing the traditional building material wood back to our contemporary architectural design arena is very interesting to us.

CO: That's it. That way!

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Demarcation is both spatial.

Conceptually, demarcation is the first step of our action; it often happens unconsciously. We are trained to classify the world in a particular way, to give names to whichever object we see. We operate within our disciplines. From the division of knowledge, we receive both the gospel and the curse of isolation. Spatially, the earth is only legible to human through demarcation. We divide it into grids and sovereigns and zones and agri-cultural fields and oceans and lands and suburbs and cities and buildings. Demarcation is a double-edged sword,

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On Thursday, April 13, Dean Berke announced, on behalf of the Board of Directors of Perspecta, the selected theme for the upcoming Perspecta 53, titled "Onus," developed by Caroline Achéatel, Paul Lorenz, Paul Rasmusson, and Alexander Stagge. Here is what they proposed. We look forward to its release in 2020.

More than any other profession, the ethics of architecture are elastic. In theory, the terms are rigid. Architects are trained and licensed professionals, bound to competently execute contractual terms for paying clients. Yet reality is blurrier. Although capitalism creates responsibility only between designer and client, the outcomes of this bond are pervasive. Much of the built environment is ostensibly designed for one client's needs, yet its effects reverberate politically, environmentally, and culturally, affecting large swaths of the population in unexpected ways.

In the face of struggle between client-based responsibility and commitment to public welfare, where do the loyalties of the architect lie? What ethical burden must architects shoulder in the sheer act of building and what is the cost of contractual refusal? Lawyers operate under onus probandi. Doctors invoke the Hippocratic Oath. Architects exist in a comparative ethical purgatory in which designers often choose only to see their work's broad reaching impacts if it fits their brand identity. In the face of this ambiguity, this issue of Perspecta's stance is clear. Through the theme of Onus, we argue that in assuming the mantle of architect, designers must acknowledge and embrace the weight that rests upon them, shouldering holistic responsibility for the environmental, cultural, and political obligations that accompany any attempt to alter Earth's landscape.

The burden is heavy, and many architects attempt to shrug it off, claiming expertise in aesthetics. Other see this ethical hydra as beyond their scope of work. Defeated, they ask, how can a medium that is so infatuated with permanence hope to evolve, addressing and accommodating society's pressing, yet ever changing, needs?

Indeed, it is true that traditional architecture operates on a temporal scale that is largely disconnected from social shifts and change. Architecture is often bound up in power networks and commissioned by the wealthy, thought of as a luxury good or as a panacea to the thorny problems of the developing world. It is clear that our medium, funded by those who are most powerful, has implicit obligations to those most vulnerable, but. Balancing this burden is a great area. Consequently, this issue examines these complex power dynamics, questioning how architects can prioritize their social justice obligations, or negotiate conflicting agendas.

Collectively, the weight of these varied threads of accountability—to the Earth, to geographic cultures, to other species, to other people—seems paralyzing, requiring immaculately designed solutions to the world's most indeterminate and painful challenges. But without this onus, what is our purpose as architects? As the writers, architects, and thinkers we hope to feature in Perspecta 53 reveal, the assumption of these burdens as part of life's work offers the most acute opportunity for architecture's greatest good.

Furthermore, architecture not only lies a sense of ingrained social responsibility, but a political one. The timeline of architecture may be slower than the work of other disciplines, but in today's changed climate, architecture is propaganda. Architecture's language can reinforce or disturb political structures. It is placed on the architect to determine his or her political stance, in an era where remaining silent still denotes an ethical choice. Moreover, considering the implications of the building industry on our planet can no longer be sequestered within the jargon of sustainability. As cities densify, as land subsides, and as coastlines exponentially dissipate under rising tides, architects must grapple with a climate future that necessitates new ideas about our planet are eroding. At the same time, the final frontiers of the Arctic, tourism on Mars, and a hyper-connected digital urbanism offer alternately terrifying and exhilarating premises to our species, but at what cost?

Finally, while architecture still maintains a monumental cultural obligation. Architecture once carried the burden of being the "great work of humanity," a role it may arguably wear more lightly today. Yet the impact of form, aesthetics, and disciplinary dialogue still demands continuous discussion. Society doggedly seeks originality yet desires that regionalism be preserved. Confronted by this, what is the architect's cultural obligation to place, identity, and local custom?

OCCUPY ALL STREETS

Kassandra Leiva

Ultimately, hosting the Olympics is an incredibly complex circumstance, and the protest-filled Rio's path to the 2016 Olympics is no exception. The convoluted socio-demographic, economic, and political landscape of Rio de Janeiro is meticulously parsed out in the book Occupy all streets: Olympic Urbanism and Contested Futures, edited by Bruno Carvalho, Mariana Cavalcanti, and Vyjayanthi Rau Venturipalli.

The book is divided into nine essays by multiple different authors, each honing in on a particular set of issues forming part of the backbone of the Olympic dilemma. The first essay defines Rio as a "city of epithets" and serves as introduction while setting a clear frame of reference for the rest of the book. In the past, such epithets have included Cidade Maravilhosa, Porto Maravilha, Cidade Integrada, and more recently, Olympic city. For the most part these epithets have been responses to the socially divided city, Cidade Partida, that is Rio's reality.

The second essay speaks to how branding and rebranding has had a way for the city to steer its path towards an ideal future. But particular to Rio's Games, the fact that 2016 Olympics were under a "global gaze" pushed the desire for the city to catch up to contemporary modernity. Moreover, the essay points out that favela branding helps create 'specificity.' The result is either a thrill effect or downplaying the relevant concerns embedded in favelas. However, just exactly how favelas are affected by the attention is not fully elaborated upon. How did favela dwellers adapt to their new roles? In any case, the process of reinventing the city of Rio de Janeiro has been a method for creating continual cultural consumption by both city dwellers and foreigners.

In the following essay, the authors delve into one of the neighborhoods adjacent to the Olympic constructions. Paramount to understanding the politics behind the grand Olympic master plan is comprehending the socio-economic make up of the Barra da Tijuca to which the Olympic master plan would expand to create the Olympic village. Generally, the population of this neighborhood considers the "new rich." Here the essay also focuses on how local favelas have capitalized by starting their own rental system to accommodate influx of labor to the city. The focus on this topic is paramount to understanding a different side of the story that isn't simply about favela evictions. However, what happens after the need for labor is no longer the case is more difficult to guess.

Another essay speaks to Rio's proposed 'future' and how its exclusivity has rendered many stranded and forgotten, resulting in incredible solidarity through protests on the street. Who has the right to public space? The conversation on public space continues with an essay on Parque Madureira. Like most Olympic era constructions, this park was meant to brand Rio as a place of leisure and fitness. When the park was taken over by protesters against police brutality, the layered narratives became incredibly powerful. Another essay elaborates, how the visibility garnered through media has elevated the power of protests. Other essays speak to alternatives to Rio's reality such as bottom-up strategies-as opposed to the top-down system that is so ubiquitous-in urban, architectural, and even political realms.

So much of the attention that has been paid to the protests has resulted from the inflated viewership in the years leading up to the games. But can the momentum keep up even after the Games? The book lacks an exhaustive description of the Olympic site legacy as a whole as it stands. Occupy All Streets is not a book that delineates the projected path of Rio de Janeiro as it's Olympic infra-structure evolves. Regardless of the ultimate result, this book probes into the social and historical background of recent and present issues as way to project into the future. In Occupy All Streets, possibilities are proposed and no certainty that the

might be the ultimate medium or technique of architecture. I prefer the word technique because technology has this kind of ideology of history of progress built into it that can be problematic.

ON THE GROUND

Submit tips to On the Ground at otg.paprika@gmail.com

"... we encourage you to find a more appropriate outlet for your grievances." Rudolph Quon Commissioner Larkin McCann admonishes after accusations of "dropping the [birdie]" let loose on the school-wide listserv.

Commissioner McCann made good on his promises, and badminton promptly resumed at lightning speed, resulting in many flipped coins.

The Architecture Lobby sponsored a talk titled Bodies in Space by Quilian Riano, Parsons professor offered provocative ideas about participatory design and collective practice, but ran out of time to lead a drawing exercise. We want him back!

No lecture = no reception = hungry students, Students ventured across the street to feast on tater tots and pigs in a blanket at YUAG instead. Alas, the event was boozeless.

A large contingent of YSOA turned out for the Woman in Practice panel, led by Equality in Design. The panelists shared their insights about being a woman in the architecture workforce. It was refreshingly candid. The first outdoors 6 on 7 of the year, the so-called-Mega-Mixer, ignited a touch of class to the standard recipe of PBR + Oreos with chamber music performances.

government will necessarily act one way or another. It is left up to the reader to connect the dots.

4/15 Finally a free Saturday.
4/16 Happy Keller Easterling.

CLASSY AFFAIRS
First Years
For the first time this semester, first year students are working with the definitive site for the 2017 Jim Vlock Building Project. Six schemes presented at the Midterm on Monday are now being transformed to fit a narrow New Haven lot. #scale!
Second Years
Second years celebrate with vino e formaggio after presenting their field guides Pecha Kucha.
Third Years
Congrats to Paul, Caroline, Paul, Stagge and Paul for being chosen as Editors of Perspecta 53. We know where you guys will be three years from now.
Post Pros
Post pros united for a BP-style team photo. "You can't choose your family, but sometimes you can't choose your friends either," one post pro commented.
Articles
Read former Dean Caesar Pelli's thoughts on professional disappointments and the wonder of complex projects in John King's April 12th profile in the San Francisco Chronicle. http://www.sfchronicle.com/bayarea/place/article/Transformative-towers-in-SF-intriguing-to-top-11066726.php
GTFO
Post-pro work from the last two years of the Lynn studio is on display at the Lynn Museum through May 2nd. Take a roadtrip to Mass.

(headline continuation) ...in conceptual and ...rcation seems to ...ur action; it often ...usly. We are trained in a particular way, ...ichever object we ...hin our disciplines. ...knowledge, we re-el of specialization ...lation. Spatially, the ...to human through ...ide it into grids ...zones and agri-...ceans and lands ...ies and buildings. ...uble-edged sword,

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John Durham Peters is a writer, a media historian, a social theorist, and a professor in the Department of English and the Program in Film and Media Studies at Yale. He is also the author of various books and articles, including The Marvelous Clouds: Toward a Philosophy of Elemental Media (2015), Courting the Abyss: Free Speech and the Liberal Tradition (2005), Speaking into the Air: A History of the Idea of Communication (1999).

Paprika: Discipline is a kind of demarcation. We find interesting is that both media study and architecture are discussing demarcation, from expanding its meaning to the immaterial realm. In your book The Marvelous Clouds, you discuss the ocean and the air as medium, in the field of architecture, some of us discuss the urbanization of the oceans and the atmosphere as well. Do you think there are differences in point of view between media studies and architecture?

John Durham Peters: Thank you. I think there is a geographical conception of disciplines, basically nationalism, with every discipline wanting to have its own territory. When you get into another discipline, it is like traveling abroad, and you have to get your passport. It is a 19th-century model that every discipline has its turf. I don't think that is the best model for disciplines today because disciplines have a lot more in common than they think they do. Probably a media scholar and an architectural theorist share more in common than a media scholar with another media scholar. There are variety within disciplines. There are media scholars who study topics like FCC policy, or public opinion polling, or social media messaging. Within media studies, we tend to be a lot less worried about who is genuine or fake. Because the barrier to entry is so low to be a media scholar. One thing I say is that if you can tell the difference between rating and share, in terms of TV audiences, then that makes you a media scholar. That's the kind of insider thing that no one really cares about outside of the field. There is a kind of border policing, that definitely happens, for example, in graduate school admission, job hiring, giving grants—you need to have credentials, which is very similar to passports and Visas.

P: In your book, the Marvelous Clouds, you emphasized the importance of the materiality of medias. In architecture, all we focus on is the materiality aspect of space. One of our discussions about the architectural space, or built environment in general, is that they are powerful but also powerless. Professor Keller Easterling in the architecture school once said that the steel itself couldn't do anything, but the stories and fictions attached to it are so thick that they can bend the steels, turn them into buildings and civic projects[?]. I wonder how do you see the power of the materiality, regarding space or medium?

JDP: For me, passivity is a kind of power. In the western tradition, we often associate power with activity, with dynamism. The word for power in Greek is dunamis. But I think that passivity is a very powerful way of being. If you think in terms of politics, like passive resistance, which is not passive at all. But if you think of what Martin Luther King did, or Occupy Wall Street, it's actually a politics of being in a space, taking over a street and doing nothing in particular very deliberately. Demobilizing other people's activity can be a very powerful protest. If you think of built environment like steel, you can say it's passive, but also it's totally definitive. You can't argue with a steel building, you can put graffiti on it as a form of resistance. 9/11, of course, was a kind of resistance against the steel building. You turn an airplane into a weapon. That's such a drastically abnormal way of resisting—and abusing—steel.

In my books, I talk about immateriality as being really important. What goes to define what is the central point is, who gets to define where the grand meridian is in Greenwich? It may seem completely natural to say that the zero point of longitude is in Greenwich, but in fact, it's a reflection of political power. It is software something material or immaterial? Is architecture material or immaterial? Isn't the ultimate technique of architecture the blueprint? Or the plan? Not so much the building, but the drawing?

Even with Zen, there is a kind of purpose. You always get the kind of contradiction when you have a purpose without a purpose. How do you go to a Zen Garden and not meditate? Because if you go to a Zen garden to meditate, then it's not Zen. So it is a paradoxical question. In Western tradition, there is a negation of thinking about passivity too. In some ways Western philosophical traditions and Eastern philosophical traditions have very deep affinities. For example, Chuang tzu is very close to cynicism, Confucius is close to Aristotle in emphasizing important relationships and

P: There is a difference between stillness and passiveness, right? Passiveness is with a purpose, but do you think the total stillness, for example in the Eastern Zen meditation, is without any purpose?

JDP: I have to confess that I'm very skeptical about divisions between East and West. Zen, as we know it, was partly invented in America by Paul Carus and D. T. Suzuki, a Japanese philosopher. Suzuki wrote key texts first in English. Because in part the kind of Zen he was teaching is very close to American Transcendentalism, with Ralph Waldo Emerson, Emily Dickinson or Henry David Thoreau, who appreciated nature as other, as resistant to human purposes. Obviously, when you think about China, there is this great tradition of Chinese Nationalism, China is the center of the universe, the middle (中), is that the word?

P: Yes exactly, means middle in Chinese.

JDP: That's what I mean. It's the media nation, the middle nation. The nation of mediation—perhaps that is China!

P: In the English Language is there a connection between middle and medium?

JDP: Yes. Definitely. Medium comes from the Latin word for Middle. Medius is a Latin adjective meaning middle. One Latin word for space is locus. So in Latin, if you say the middle space, you say medius locus, and Latin is the ancestor of French, and it turned into milieu in French, which is a classic architectural word. In milieu, you have the notion of media hidden in there. A Milieu is a Medium. The French philosopher Michel Serres is very interested in media and milieu, as kinds of spaces.

P: Just to conclude with the last question. Going back to the question of excursion, when we are doing research in architecture, it is impossible to read just within our discipline. Reading literature from other disciplines can be incredibly overwhelming. Your books are arching into so many different disciplines, such as environmental study, biology, astronomy, etc. What is your experience with interdisciplinary research?

JDP: In the introduction of the Marvelous Clouds, the metaphor I use is the sinkhole. A sinkhole is when people sucked up all the water out of the ground, and sometimes when you walk along the street will collapse beneath you. When I was writing this book, I felt that I had enough knowledge of astronomy, for example, and I started moving forward, the infra-structure always collapsed beneath me. At some level knowing anything is impossible. When are you ever going to know enough to say anything responsible? So I made my peace with pragmatic epistemology, that you can know enough to say something. This is an engineering point. The old saying is that the machine works at its maximum efficiency right before it crashes. When the bridge breaks and, the building falls over that's when we actually learn, that's where the knowledge comes from. Henry Petroski has written about this famously. Without disasters, there is no engineering. Finitude is our lot. We live in a world with amazing cognitive enhancements, and things like Google do make you a lot smarter. It helps us learn about other fields quickly. I think in our house you can learn enough to be at least corrected. To learn a lot about another field to be an expert, you need 10,000 hours, but one hour can get you started, so why not?

If there is a boundary between the known and the unknown, can we see the known knowledge as material, and the unknown as immaterial? Or the known as human condition, and the unknown as beyond human?
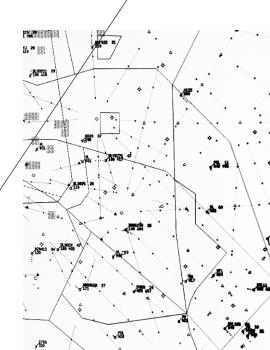
P: Maybe so. I like your term confidence. Because you will always get the feeling that you're a fraud, and you don't know enough. I like the example of Socrates, because his argument was that ignorance is an enabling strength. If you know that you are ignorant, that enables you to be thirsty for knowledge. Socrates invented the word philosophy, which means love of wisdom, not having it. It's like you are in love with this thing, but wisdom is not in love with you, so you can't have it. I feel that this attitude is very helpful. I think learning is going from the known to the unknown. And the only way you can do it is by taking the risk of being embarrassed. You generalize, you use metaphors, you use analogies, you do things that might feel utterly foolish. History of science, the history of learning is a history of failure, big marvelous fantastic failure. All we can do is fail better. That's Samuel Beckett isn't it? At least it was Beckett before the Silicon Valley marketers stole it from him!

1 This is the issue editor's (Jane Weng) personal memory from previous discussions with Keller, may not reflect her original words or meaning.

(bottom headline continuation) ...essential to us, but ... at the same time. ...In the architecture f... is embedded in the ...and is embodied thr...tation and construc...hand, Demarcation ...with certainty, on the ...constructs a world ...categorization that ...that are illegible. Thr...scholars across the ...explores how the wo...or obscured through ...demarcation and ho...ture, communicatio...nect to or depart fro... ...ield, demarcation ...process of design, ...rough represen-...tation. On the one ...endows the world ...e other hand, it ...occupied solely by ...relinquishes things ...ough the eyes of ...campus our issue ...orld is understood ...w nature, architec-...n and media con-...m each other.