of
more-than-human spaces
An interdisciplinary panel discussion
of

more-than-human spaces

An interdisciplinary panel discussion

Carnegie Mellon University
School of Architecture
In recent years, a ‘more-than-human’ turn in environmental humanities, social sciences and science studies has linked a range of concerns about anthropogenic climate change, sustainability, post-humanism, re-wilding, de-growth, and hybrids. The scope of these considerations is wide and interdisciplinary, and opens new questions for scholars and practitioners interested in the built environment — about non-humans as architectural subjects, nature/society boundaries, questions of instrumentality and the assembled nature of (design) agency — particularly in light of ecological crises and climate change.

This interdisciplinary panel brings scholars, designers and artists together to reflect on the historical roles (expected and unexpected) of non-human others in crafting urban and regional landscapes, and the politics, biopolitics and aesthetics of more-than-human interactions. Participants will foreground their work on, with, or alongside non-humans in blurred ‘nature-culture borderlands’, to rethink the messy politics of expertise, the assemblage of agency, and explore the unforeseen spaces that design and planning entail.
This event was held at the Center for Sustainable Landscapes, Phipps Conservatory and Botanical Gardens, Pittsburgh, PA on April 30, 2017.

Financial support for this event and publication was provided by the Ann Kalla endowment at the School of Architecture, Carnegie Mellon University.

Organized by Nida Rehman

Student assistant Atefeh Mahdavi

Event documentation (photography and video) Hugh “Smokey” Dyar

Communication and marketing Meredith Marsh

Book design Atefeh Mahdavi and Nida Rehman

Cover image Rachel Strickland. Video still from "... For the Birds" (2012)

Special thanks to David Koltas, Diana Martin, Kristen Frambes, Brian Staley, Steven Lee, Mary-Lou Arscott, and Daniel Cardoso Llach.
WELCOME AND OPENING REMARKS 6
JOYCE HWANG Living Among Pests 8
JOHN SOLURI Birthplaces and Biosecurity in Patagonia 12
RACHEL STRICKLAND The Social Lives of Urban Trees 16
ROMITA RAY Spatializing the Tree Plant 20
DISCUSSION 24
Hello everyone. I am delighted to welcome all of you here to the Center for Sustainable Landscapes this lovely Sunday afternoon. I want to thank Joyce, Rachel, John, and Romita, who have taken time from their busy schedules to share their work today and have this conversation. I am really grateful for the financial support of the Ann Kalla professorship, which made it possible to organize this.

Spring is a good time to be talking about more-than-human spaces. As someone who works on mosquitoes and public health, my google alerts have been very active as mosquito-abatement campaigns are kicking into gear all over the world. And of course, here in our suddenly-lush western Pennsylvania landscape, our own interactions with non-humans are heightened, as we take time to smell the lilacs, and welcome the bees — but also to moth-proof our closets and pollen-proof our nasal cavities.

But of course, ideas about multispecies or more-than-human encounters are also very much in the air (so to speak) in various scholarly practices, and that’s how the idea for this event came about.

The longstanding conceptual boundary between nature and culture is something that scholars have challenged for quite some time. This idea, that nature is outside of human culture and society — out there, in the wild, and which can be passively molded through human technological and intellectual prowess — is a dangerous one. For one, it promotes an instrumentalist approach to non-human life. It also delineates who and what is considered properly human and properly civilized — discourses about non-human animals as “others” easily slip into the othering of humans particularly across lines of race and class. And challenging this dichotomy has become particularly relevant given the ecological and ethical concerns around anthropogenic climate change.
This dichotomy is particularly evident in thinking about cities. In 1998, in an article entitled “Zoopolis”, Berkeley planning professor Jennifer Wolch, critiqued the lack of attention to non-human animals within contemporary urban theory and planning practice (Wolch, 1998). Since then, there has been an increasing interest in rethinking the scope of planning and architectural practices to consider non-humans as subjects and active participants within built environments.

One aspect of this critique, is the challenge to the traditional notions of expertise and agency within the fields of architecture, landscape, planning, and engineering — how bringing non-humans into our intellectual frameworks means considering more assembled, rather than top-down, conceptions of practice. I am particularly inspired by geographer Sarah Whatmore’s definition of agency as a “precarious achievement” (Whatmore, 2002). One of the questions driving my own work is how urban landscape is constituted through such multi-species engagements.

Thinking of spaces as always more-than-human, also helps reframe unexpected or unintended aspects of the built environment. What happens when we stop thinking about unintended effects as failures or gaps of planning — as the yet-to-come of technocratic intervention? In Donna Haraway’s words how do we “stay with the trouble” (Haraway, 2016)?

These are some of the things that I have been thinking about, and which prompted me to reach out to this great group of panelists. I am very excited to welcome all of you here, and am particularly happy about the cross disciplinary nature of the panel, as well as the audience, which I think is crucial to thinking through methodological questions around more-than-human interactions — through historical texts and oral histories, through close recorded cinematic observations of particular landscapes, and through scientifically informed understandings and architectural speculations about habitat and non-human behaviour.

Nida Rehman
Ann Kalla Visiting Assistant Professor, School of Architecture, Carnegie Mellon University
PhD Candidate, Department of Geography, University of Cambridge
April 30, 2017
JOYCE HWANG

Living Among Pests

Joyce Hwang, AIA, NCARB, is the Director of Ants of the Prairie, an office of architectural practice and research that focuses on confronting contemporary ecological conditions through creative means, and an Associate Professor of Architecture at the University at Buffalo SUNY. She is a recipient of the Architectural League Emerging Voices Award (2014), the New York Foundation for the Arts (NYFA) Fellowship (2013), and the MacDowell Colony Fellowship (2016, 2011), among other awards. She is co-editor of Beyond Patronage: Reconsidering Models of Practice, published by Actar. Hwang received a M.Arch degree from Princeton University and a B.Arch degree from Cornell University.
Through my research and practice, I explore the often conflicted perceptions of urban wildlife, and notions of the urban “pest.” While city dwellers tend to enjoy seeing birds in backyards and parks, for example, the idea of sharing buildings with animals is not as commonly desired. Through architectural projects, I aim to draw awareness to urban animals, in efforts to advocate not only for architecture’s critical role in urban ecology, but also to promote the inclusion of new (nonhuman) subjectivities in the built environment. I discuss a series of architectural installation projects that are designed to accommodate wildlife habitat conditions while offering intensified visual and spatial experiences for the human participant. Bat Cloud, Bat Tower, Habitat Wall are sculptural structures that incorporate bat habitat conditions. No Crash Zone and Bower are art installations that are designed to prevent bird-glass collisions. I also discuss more expansive urban-scaled research, including Generative Zoning, a mapping project that defines possible zones in Buffalo for further habitat development, and a Habitat Mapping and Documentation project that explores relationships between animals and buildings in Chicago. Through these projects, I reflect on how fundamentally rethinking architectural structures and can suggest a more palpable, resonant environment that not only impacts species and habitats, but also human perception and experience. As such, architecture can serve as a medium for urban wildlife advocacy, by urging us to shift attitudes and public reception, encouraging us to challenge the status quo of building and construction, and asking us to reflect on our ethical positions toward nonhuman subjects.
Still image from video documentation for “Outside Design” Exhibition, Sullivan Galleries, School of the Art Institute of Chicago (curated by Jonathan Solomon)

J. Hwang/ Ants of the Prairie (2012) Bat Cloud.
John Soluri is Associate Professor and Director of Global Studies in the History Department at Carnegie Mellon University. His research focuses on commodity production, circulation and consumption in Latin America and beyond. His in-progress book manuscript, “Animal Keepers of Patagonia,” explores human-animal relationships in southern Argentina and Chile from the nineteenth century to the present with a particular emphasis on the spaces and technologies of reproduction. He is coeditor, along with Claudia Leal and José Augusto Pádua, of the forthcoming A Living Past: Environmental Histories of Latin America (Berghahn Books, 2018).
In this presentation, I draw on research focused on dynamic human-animal relationships in southern Patagonia (modern-day Argentina and Chile) to call attention to the significance of more-than-human birthplaces in shaping environments and processes of commodification. Historical relationships between profit-seeking people and animals (native and non-native) have been marked by the deployment of technologies to control animals’ reproductive processes. For example, nineteenth-century commercial fur seal hunters risked life and limb to reach the rocky shores and islets where South American fur seals “hauled out” to give birth and mate. These were spaces over which humans had little control, but by locating and temporarily occupying them at the right time, hunters could kill huge numbers of seals.

The establishment of sheep ranching in the early twentieth century displaced indigenous people and native fauna in order to permit white settlers to establish enormous ranches or estancias, whose defining landscape feature were fences. Fences served to demarcate property and deter human and non-human interlopers, but they were most effective in enabling ranchers to control sheep, segregating them by sex and age. The rising influence of genetics, along with emerging markets for “pure bred” sheep, led to increased efforts to control sheep reproduction: fences remained critical, but so too, did artificial insemination, giving rise to new forms of reproductive intervention. Finally, the emergence of aquaculture in the late twentieth century created radically new forms of spaces in which fish, particularly salmon, were birthed and raised. In contrast to fur seals or introduced sheep, Atlantic salmon were unable to reproduce themselves in Patagonia’s waters, requiring the transportation of fish eggs from Norway and elsewhere to contained hatcheries where “biosecurity” measures reached new levels of intensity. Perhaps unsurprisingly then, the evolution of the more-than-human spaces in which people seek to profit from animals is intimately tied to birthplaces.
J. Soluri (2009) Salmon farm, Southern Chile.
A. Quintana (1943) Sheep entering shearing shed, Tierra del Fuego.
Rachel Strickland’s research and art practice have focused on cinematic dimensions of the sense of place, the animate and ephemeral dimensions of architectural space, and new paradigms for narrative construction in digital media. Strickland earned a Master of Architecture degree at Massachusetts Institute of Technology, with a concentration in cinéma vérité filmmaking. She has taught film production at MIT, SCIARC, and CCA, and pursued a vision of spontaneous cinema while employed as research videographer at Atari, Apple, and Interval Research Corporation. She has received awards from the NEA, Banff Centre for the Arts, and Rockefeller Foundation’s Program for Media Artists.
The Social Lives of Urban Trees is an experimental video project that merges environmental sensing with observational cinema techniques — inventing a cinéma vérité approach which takes cues from revelations that emerge from ongoing data capture. A series of autobiographical portraits of San Francisco street trees will explore the forms and qualities of public spaces created by individual trees, using small programmable cameras and sensory apparatus to register the trees’ own perspectives regarding their environments and various other inhabitants with whom they share the territory.

One thing unusual about this project is the coalescence of environmental monitoring technology with classic observational cinema technique, deploying cameras and sensing devices that will use software to “learn” when and what to film. The timeframe of a tree is exceedingly slow compared with our own. The disparity with cinematic time is even more extreme. Small solar-powered cameras and microphones mounted in the canopy of selected trees will use programmed intervals under wi-fi control, and timelapse recording, to capture the cycle of a year or more. Cued by the tree’s instrumentation, a human videographer will from time to time arrive with handheld camera and sound recording gear to observe what happens at ground level. We are interested in inventing and experimenting with a cinéma vérité technique that responds to patterns and developments revealed through continuous environmental monitoring and data capture for a prolonged time. We are also trying to figure out ways to record what the trees “listen to”, and what they may have to say, as well as to identify accessible vital signs that can reveal something about the tree’s internal state.
Romita Ray teaches art and architectural history at Syracuse University. She is the author of *Under the Banyan Tree: Relocating the Picturesque in British India* (Yale University Press, 2013), and has published several articles, book chapters, and essays for museum exhibition catalogues. She is currently working on her next book, which focuses on the visual cultures of tea consumption in colonial and modern India — a project for which Romita has received grants and fellowships from the National Endowment for the Humanities, the Yale Center for British Art, the Huntington Library, the Lewis Walpole Library, and Smith College. She occasionally blogs about various tea-related musings for Teabox.com.
A prized exotic import in eighteenth-century Britain, Chinese tea would influence political discourse, trigger economic anxiety, shape social rituals, foster botanical research, and leave deep impressions on the porcelain and silver industries. Within a century, it would also shape the landscapes of plantations in India where it flourished as one of Britain’s most successful plant products of the nineteenth century. My presentation looks at how the tea plant in particular, was spatialized within the realm of material culture and design, which in turn produced and bolstered specific cultural constructions of politeness and civility that sanctioned the beverage as a civilized drink. Such re-framings of the tea plant would be a far cry from the Indian wilderness out of which tea plantations were carved. For lush tropical jungle characterized all that was perceived as savage about India, yet it remained interwoven with plantations whose porous borders enabled an array of wildlife to move in and out of their landscapes. How then was the tea plant spatialized in these contrasting orbits of the civilized and the wild? And how did these orbits intersect, both on the ground and in pictorial fantasies that promoted tea as an exotic and desirable drink? These are some of the questions I explore in my presentation, which navigates the interiors of eighteenth-century drawing rooms and examines the surfaces of porcelain and silver tea utensils in which the tea plant was embedded, before analyzing plantations as landscapes that shaped unexpected encounters with the wilderness.
R. Ray (2016) Flowering bud and flowers, *Camellia sinensis* (tea), Darjeeling, India
DISCUSSION

Romita Ray: Let’s think about intra-activity, how these landscapes, or structures like the bat cloud…what happens within those? So instead of just thinking about engaging outside of themselves, but (also) within. I think that came up a lot in Rachel’s presentation especially, with looking inside the tree, right? The sensory engagements of the tree itself, instead of just thinking of them as outside borders, to really think about thresholds from within. So, I am wondering if we could talk a little bit about that.

And also, the idea of technologies, because that’s so critical to architecture as well — materials that you would use — and also other types of interventions, through guns and cameras, and certainly also with fences as you talked about, John. So, perhaps we can think about all of these different types of technologies that help shape environments, and which make us also look at the environments from inside-out versus just outside-in. So, perhaps you could just start with some of those. I have got lots of others, but I think we should open-up the discussion.

Joyce Hwang: I have to say I was really struck by Rachel’s film, the kind of implementing of technology on the trees. It kind of created this sense of empathy with the tree. I don’t think I have ever felt truly empathetic with a tree, but if you were actually able to sense something as if you were tree; even hearing the fire and ambulance siren was so distracting. So I don’t know. That is the role of empathy and understanding the space of the other, and that’s fascinating to me.

Mary-Lou Arscott: The corollary of that is how we permit ourselves to torture. The shape-giving device, which is so-called natural, giving us a sense of an environment that includes nature, in fact is utterly abused. And so, beginning to change our cultural perspective is a very hard act, to redefine the
prioritizing of human life over all life. Redefining that is difficult.

Nida Rehman: There were two recurring concepts in the presentations. The first is the point of view question, which is central in your (Rachel) work, but keeps coming up: Where you look from? And that intersects with this question of care, which to me was an underlying thought. How do you build care? Or shift from relationships of anxiety and tension with species — or even within ourselves — to thinking of these landscapes as landscapes of care, or producing relationships of care?

Mo Dawley: It’s so overwhelming. I am so glad that I came here to this. It’s just amazing the way you have all approached these different ways. I have been an urban environment researcher for many years. The thing that I have always tried to grapple with is, living beings as having the propensity and need to self-organize. I think Vandana Shiva has said this. So, where do we let things self-organize? Why are we so much in control? How can we get out of the control mode? Into the care mode, the empathy mode? I think all you have done that in number of ways. So, I am so very honored to have heard all of your talks. We’re always in commodity mode, we’re selling. Even the art that we make, or whatever that we do, because it’s based in capitalism and
money. And Wangari Maathai, who was in the green movement, also said, ‘if you could sell it you could forget about protecting it’. I don’t know if you have any comments. You have already commented wonderfully in your talks, but just bring that up. It’s an impossible issue and it’s so overwhelming.

Romita Ray: This is really interesting in terms of the market economy of plants, when I mentioned the Assam variety being seen more as ‘jungly’ variety. This is how company administrators would describe it, and naturalists in the nineteenth century described it as well, because tribal communities would be consuming it and it was found in forests, the Assam species of tea itself. So, when it’s in natural state it’s not considered of high value, but the moment it’s controlled and sold as a particular product, which would be the China variety, then it’s considered superior.

Which actually goes back to a question that I have for everybody, which is: how are each of our projects impacting indigenous form of knowledge; what layers of indigenous forms of knowledge are actually disappearing or being revived? Are you working with anyone who works with bats from indigenous point of view?

Joyce Hwang: No, but I was thinking about your (Mo) question a little bit. So, I think obviously if you let things evolve and let life forms self-organize, and organisms do what they do, I think one of the things that is interesting to me, as I mentioned in urban situations, if you leave things to do whatever they do, the perception is it’s this lack of maintenance and a kind of de-valuing of that by people. I think there is an idea that care has to be kind of instated into the landscape or into the urban fabric in order for any sort of value to be given to it. So, there is this human perspective on that, which I think is pretty interesting. On the street that I used to live on, there was a vacant house that everyone called the Hyatt for Raccoons, because there were so many Raccoons living in this vacant house. That’s basically what happens. So all these raccoons are taking over and people don’t want to be near it. So, there has to be a balance between letting things do what they want, and then management, but not for the sake of just managing from the top but also managing and caring to think about how one can benefit the environment in general. I also think about animals like cats and birds and all these things. Where does one step in to this whole situation of cats killing birds, and we actually love cats too? So it is a question.

John Soluri: I think it is also profoundly spatial. One speaks broadly about promoting biodiversity, but then you find yourself living next door to the house
with all the raccoons. Or, another example from Patagonia: a camelid called a guanaco. Ecologists would say that from a global perspective the geographical range of guanacos has shrunk. But, if you live in the place where I was two months ago in Argentina, anyone who owns a car and goes on the highway, views guanacos the way people in this area view deer: kind of cute and part of the landscape, yet also kind of a pain because they browse too close to highways, they cross the street, they are big animals that can cause a major accident. So, its deeply spatial, because as long as you are living with the animal, trying to coexist, it’s often very different than if you are thinking about it at a much more distanced view ... or what the geographers call the view from nowhere. But when one is viewing from a particular place, interacting with animals, it may produce ambivalent meanings.

Another thing that I wrestle with a lot as a historian concerns the limits of narrative; as writers we are so impoverished in how we can represent animals or the other-than-human. But, there is also risk in producing “the spectacular.” For example, take Phipps. On one hand, I love to come into Phipps because it is “nature as spectacle” and they know how to do it up, right? But it’s also to me profoundly and fundamentally not really ecological. It’s classic nineteenth century thinking, mixing up plants with disregard to their origins and histories. There is an economic botany section that I love sending my students to, but it is also a disaster. How can you use this space for education? Shouldn’t we be learning about imperialism, colonialism, and taxonomy? Nevertheless I love the place ... I come here all the time; it makes me feel good. Anyway, there is ambivalence. And maybe — of course, I’m not a filmmaker — there is a temporal dimension, the agency dimension, the narrative, but also some notion of the spectacle. I was trying to imagine what would it be if a tree were to be envisioned in a more biochemical way? I was thinking about how other critters use sensory things that are not necessarily visual cues. So then, where does that leave us when trying to produce something about other-than-humans, if our tools are largely narrative, or serve to produce a visual spectacle? I am not saying there aren’t other ways to do this, but I’m wondering what they are or what they may be?

Nida Rehman: One of the big mosquito hunters of the earlier twentieth century used to say that you have to learn how to think or see like a mosquito in order to be able to get to them, and kill them. And mosquitoes are always bad. You can never be empathetic.

Kai Gutschow: Aren’t they good for bats?
Joyce Hwang: Bats eat other insects too! So it’s okay!

Nida Rehman: There was also a lot of talk about shape and form, and I noticed that the trees were held up, because they are kind of being re-formed, just like the tea plant is being mutilated or re-formed; and other questions about how form can both act as a control mechanism, but can also create porosities and new entanglements. I’m also thinking about how they form us, these others, or these kinds of relationships. Romita talked very directly about how the tea plant, even if it mediated as an artistic object, becomes a way to inform human behavior. And on that level, I am wondering (Rachel) in your project, if you are going to start finding how the trees inform human life, because they directly do that, and so there is a kind of agency, but it is not anthropomorphic.

Rachel Strickland: I think I am going to find out a lot once I have this apparatus that can stay in a tree for a long time. But I am thinking about a philosopher, Michael Marder, who has written about plant intelligence from a phenomenological perspective. He can almost be tongue and cheek, considering the ways that plants are capable of sensing, remembering, learning, signaling, and communicating with one another. If these are processes that we equate...
with intelligence, well then plants are exercising it too, albeit without brains. It is through this logic that Marder proposes to overturn western philosophy, and put thinking people back in touch with our vegetal natures, or our vegetal intelligences, which have more to do with all the unconscious sensing experience — the somatic aspect of intelligence. I was curious to come across an article by Frederick Law Olmsted, the great nineteenth century landscape designer. Writing “Trees in Streets and in Parks” in 1882, Olmsted commented that, to address what you are saying (Mo), that society required an economic argument for the planting of trees in these public spaces, and the economic argument of the day was that people living in crowded population centers working in factories needed to go run outside and make themselves healthy, breathe fresh air. So trees could be regarded as decorative elements that would attract people outside to get their exercise. Olmsted poked fun at this argument, maintaining that in addition to the conscious pursuit of healthfulness there is an unconscious practice of healthfulness, such as when I go for a walk in the woods my mind changes, my body changes. I undergo a cognitive transformation that recruits the vegetal intelligence Michael Marder is talking about. Olmsted confessed that he was no scientist. Although he could not explain this phenomenon, he was confident that his readers shared similar outdoor experiences of becoming other, of improving our mental health.

Kai Gutschow: One interesting trend that all of you covered is economic ... different times, different countries, and so forth. For humans, ‘survival’ is perhaps a greater force than enrichment. And if economics perhaps lead to the sort of parsing of everything into human, non-human, more-than-human, natural, urban, and pest, and good, and so forth, perhaps survival is starting to help us sort of bring back together, and blend. So even this word ‘self-organizing’ ... that they over there, the natural things, should be allowed by us to self-organize is a kind of parsing rather than somehow, we all are learning to figure out that these are good. You know, they do sting ... but ... and trees, these castrated things we put our cities, that are sort of horribly non-natural, but we need to figure out how to blend them, and I think that’s what these papers all trying to ask again, even the fish nets, is that a real fish in the water in Chile now? They tell us I shouldn’t buy it in the grocery store because now it’s not a real animal, somehow it’s technology, that its wrong, but these sort of blended things. I think that’s really interesting. A lot of it comes to back this idea of the anthropocene and perhaps the end of nature, and end of human species. Bats, they intrude, and we are acting in part be out of sort of sense
of survival. It's not just an ethics or monetary thing, which, perhaps brings us back to some earlier state before that.

Mo Dawley: I wonder if it, to talk about perception, I wonder if we knew we are a tree in a way. I mean we are a tree in many ways; we are cloud; rain. We do integrate that way. And this whole idea of care, maybe we go beyond care and if we actually become the beings; we actually experience and know through our education that we are these living beings as well. Maybe that would help, I don’t know.

Daniel Cardoso Llach: I was very interested in this question that I think John started to formulate about the different methodological templates that are at play in this conversation. On the one hand the historical perspective, on the other this visual cinematic form of accounting for these different agencies and these different forms of life, but also the architectural one. And I think this is a question perhaps more for Joyce. For me it’s very interesting to think of the architectural objects that you are creating. This speculative, almost sculptural, but also inhabited artifacts, as ways, another way of recording this multi-species history that we are looking at. I want to hear more from you. How do you see these architectural artifacts in this light, next to environmental histories, as well as a cinematographic forms of research?

Joyce Hwang: I’ve been thinking about architecture a lot as a potentially very powerful medium for communicating these ideas. So, I think going back to this idea of the spectacle that John mentioned, and I think one of the things about built artifacts for various different species is that, until very recently, you don’t see these things being very visible, they are not really spectacle, they are seen as very pragmatic. Not to generalize of course, there are lots of things like bird-houses, and things that are meant to intensify the notion of the spectacle, and almost to kind of anthropomorphize them — you see these miniature bird houses that are supposed to look like mini McMansions or something. There are ways to this production of empathy. There are mini dollhouses except you see birds going in them and then in the meanwhile there is bat houses that just look like these kinds of wooden boxes on walls where they are really made to just more or less blend to the environment, so as an artifact they are not drawing attention to themselves visually, but they are actually just trying to kind of disappear more or less. I think of this as a kind of aesthetics of invisibility. So, through my work — of course I am not the first person to be doing this by any means, there are so many others like Fritz Haeg, and different architects that have been thinking about these post-human issues and there are artists like Natalie Jeremijenko — but I think
bringing in a formal, spatial architectural logic that is itself a form spectacle to some degree, I think is important at least in terms of my skill set and what I can do. So, that’s the way that I have been thinking about it. I am very much interested in this idea of Umwelt too, Jakob von Uexküll’s Umwelt. It’s not just about making this form, but it’s also how you embody this notion of the expanded space of the animal within that spatial construct.

Romita Ray: So, I have a question for you and the others as well. Going back to what you had mentioned, Nida, in the beginning, this question of unintendedness; for instance, for your bat cloud projects, did other animals show up or are they specifically for bats?

Joyce Hwang: There are actually more other animals than bats. There are more birds. So, yeah, for sure. It’s not like bats or any other animals see something and they see it as good real estate or they think “this looks better or shinier, I’m going to go there!” It’s about creating more conditions in the world where they could potentially inhabit if they found it. Most buildings and most structures are completely sealed. There are so many examples of buildings where there are bats living in them, and they are keeping mosquitoes
away, and then building gets modernized and gets completely sealed and then suddenly there is this mosquito problem because they have air conditioning in the building, and there is no way for bats to get in, and so they are spraying pesticides around. There is so much of that going on.

**Kai Gutschow:** Where would bats have lived before we built things? I know that they live in all sorts of places, but are we augmenting the number of bats by putting more buildings with holes in them?

**Joyce Hwang:** Of course, they live in caves. They live in so many different places, in trees, any sort of under tree barks.

**Kai Gutschow:** Should you be planting trees rather than putting nests on the side of houses?

**Joyce Hwang:** One of the arguments that a biologist that I have been working with makes is that actually artificial habitats are very helpful for increasing the likelihood of habitation. So it’s not that bats will always inhabit an artificial habitat, but if you increase the number of artificial habitats it will increase the likelihood, because it takes so long for a tree to grow to that stage. It might take fifty years for a tree to get to this stage where a bat would live under live

---

*H. Dyar (2017)*
its bark but you could build something that essentially acts like a tree, and that has a bark-like conditions or something. So artificial habitats are being promoted in different places. I am actually doing a residency in Australia this summer where there is an area where all this urbanization is taking place and habitat loss is happening. So they are trying to introduce artificial habitats. The issue is, in my mind, is increasing the number of conditions, and whether bats or any other animal go there or not...

Rachel Strickland: It’s an experiment.

Joyce Hwang: Yeah, it is an experiment.

Romita Ray: And they are also making them more visible, which is part of advocacy’s initiative.

Joyce Hwang: Yeah! I think making something where somebody will go up to and stay in it and in a way, it’s like making films as well. If somebody will go up why would somebody spend any time making this? This must be something important rather than just slapping a box on a building.

Sarah Rafson: I had a question for you John. The little I know about Argentine history, the Mapuche people were autonomous around the time that you are looking at — because Romita brought up indigenous knowledge, how did that …?

John Soluri: Yeah. It’s very important I just elided it completely for the sake of time. The area where I am working is south of the historical Mapuche territory, but filled with other indigenous peoples, who definitely interacted with, and to a certain extent participated in, the hunting economies. And the real story, which is important, is their removal. Because there was a systematic removal of indigenous people. And so the guanaco, and other hunting-based economies were often seen as antithetical, or unable to coexist with settler sheep farms, and so indigenous hunting societies were not seen as, you know, progress, modernity and all those kinds of things. All of this, that is, the indigenous removals, took place in the framework of a nation-state, not an empire. Which in some ways makes it interesting, because in that sense it’s not the same story. It's what some people in Latin America call internal colonialism. I don’t know if the term is great or not. The history of Patagonia was very similar to what was going on in Australia and the U.S., the removal or consolidation of people who are more or less transient populations. And the whole issue of transience, lack of fixity, is very important. So yeah, it’s absolutely a huge part of the story and needs to be written in. And it becomes
tricky too, with issues of narrativity or presentation, because, when talking about animals, especially as an outsider, you don’t want to exclude a human story that is brutal, one of really brutal conquest.

And I would say just to connect up an idea related to tea plantations, that there is also a certain narrative of the planter or in the case of Argentina, the estanciero (sheep rancher). I visited with people who are trying to protect guanacos. At the same time, their family histories are wrapped up in the creation of sheep ranches, so on one hand they can enter into a discourse of “we need to protect and preserve” but, somehow, at least with an outsider, they never want to quite acknowledge the way in which their own family history and contributions to the reorganization of space is deeply, deeply implicated in the environmental problems that exist. I am not saying they should feel guilty or whatever; but the point is, at least in the case of Argentina — I am not going to speak for Indian tea plantations — there is a double discourse of: “yes! we need to conserve”, but somehow they are never quite willing to say, “gee, probably the fact that we introduced a quarter of a million sheep was the major factor in socio-environmental change.” They are quick to point to need to change “attitudes” of people toward nature, but they never quite hit the nail on the head that their family histories are linked to a classic story of accumulation through dispossession of people and animals. It definitely extends beyond the human — dispossession of territories and habitats to make a productive system.

And, I didn’t get into the consumption of the furs and stuff. This is more a question for design and fashion. I mean, the odd thing about fur seals — maybe it’s not so odd — is that the final garment is so heavily processed and dyed. So, what was the meaning of wearing a fur seal? Why were consumers drawn toward them? What was it about? Was it textural? In some cases, the value of the fur and fibers is attached to the animal’s natural color. But with fur seals, for example, it was totally the opposite. In the late 1880s they developed a process to dye them, and it would become what’s fashionable, what color fur seal is fashionable this season? And it’s super labor intensive. Another transformation. So, the fur becomes little more than raw material for an artisan or factory to transform.

The other thing I always wrestle with is the question of authenticity. On the one hand, we have to think about the historical roots of problems, but I almost think you’ve got to then move beyond it. So embrace hybridity, and go beyond contrasting the natural and the artificial. But, the authentic is often lurking in the narrative stories we tell about lots of things—and it’s fairly com-
mon I think with nature . . . for example the trope of “lost nature.”

Romita Ray: I found the similar narratives of displacement especially of labor, in terms of plantation histories as well. And massive communities — entire tribal communities were taken from one area of India to work on plantations elsewhere. In Assam and the Dooars, for instance, you see this quite frequently so people from these areas are not necessarily the ones harvesting the tea. People were brought in from a different part of India, who are seen as laborers, which gives rise to all these different social hierarchies of power and participation, so it’s very complex.

And going back to the idea of authenticity in the tea industry, there was this idea of the branding of Darjeeling tea and Assam tea. And we see Sri Lanka and China trying to brand types of tea as Darjeeling tea even though it’s not indigenous to those areas. So, then the Indian government gets involved to reclaim Darjeeling tea. Who owns these types of teas and the name itself? All this is part of the commoditization of natural resources which goes back to your idea that who is organizing, institutionalizing this product.

Nida Rehman: Great! On that, I want to thank everyone for coming today. This was really superb!