

13

CONVERSATION WITH KATE ORFF

Could you outline your definition of ecology in relation to your teaching?

The Columbia Urban Design (MSAUD) Program brings students from all parts of the world together, under one roof, for an intensive course of study. One year we will have students from Peru, Taiwan, New Zealand, China, and the next Jordan, Vietnam, India and Brazil. Although most students have an architecture background, there's a diversity of experience that we try to build on in the Program. Ecology in the broadest sense of the word – the study of relationships between things: organisms, people, the immediate environment – versus the things themselves, becomes useful, particularly in the studio. It helps us challenge linear thinking and move towards systems thinking. It helps us move away from conceptualising a design project as a “solution”, and more towards understanding the scalar effects of an intervention over time in ways that might be disproportionate to the cause. We also ask students to draw relationships, say the geography of an object, or trying to trace water on a site, or to look at migrations of people and animals. Even though the context is exploring and embracing the complexity of the urban, we use ecological tools and concepts to draw. So, ecology informs the teaching in both a broad framing context, and specific, material and practical ways. I started teaching in an urban design programme instead of a landscape architecture programme for now because we have commitment to practices rather than disciplinary expertise. We think about urbanism, landscape, forms of social life, and integrate science and economics all together, rather than designing this park or that park.

How would you describe your teaching and research practice?

I'll focus here on the Columbia Urban Design Program and its work, not the SCAPE Landscape Architecture office. As Program Director, I see my job as setting a direction, developing a culture of inquiry and creativity, fostering a collegial environment, bringing diverse perspectives together, amplifying

patterns in the coursework and working as a multiplier and connector between faculty and students. This is an interpretation of ecology that you will not find in an environmental science textbook. But I do feel it is a mode of leadership based in an ecological ethos, and that you cannot separate ways of working from ways of knowing and designing. The practice itself emerges from an ecological ethos and stance of connection building. This also characterises how I lead the SCAPE office.

At Columbia I've set into motion a number of research and teaching initiatives that aim to loosely gather the interests and expertise of our faculty. The core contradiction in academia is that to progress, you have to advance a specialised research agenda, but to have impact in the world at large we all need to work together in larger collectives. So, the initiatives are a way to try to push these contradictory things forward, to foster an environment that many people can plug into and bring out the best in everyone. The initiatives also build a movement over time. For example, we started the Hudson Valley Initiative to cultivate on-site work, commitment and trust with small cities and towns in the mid-Hudson over many years, building a database of collaborators and a trust base with the river and people at the centre.

The Global Cities and Climate Change studio under the frame of "Water Urbanism" has evolved a sustained focus on issues over many years to form a compelling research agenda (13 water and global cities studios). It has also created a mesh network of cities facing many different challenges, a forum for sharing practices and ideas, and a comparative context where cities learn from each other. The Water Urbanism sequence of studios I have coordinated over many years now with some outstanding friends and colleagues, has been a source of joy and inspiration. I have so valued teaching alongside Dilip Da Cunha and Geeta Mehta, among many others, over the past years, and exploring the world and this pedagogy together. Dilip brings a piercing philosophical viewpoint of the lived experience of water's oppression by land, connecting the containment, confinement and control of water to colonialism, and power and control in society. Geeta has marshalled social capital towards urban transformation in the form of social capital credits, or "SoCCs", that incentivise community members to participate in shaping their environment. Both in different ways offer a sharp critique of capital-driven urban development, and I suppose with me, focusing on spatial design, we make a powerful team that is an ecology of insight, shared purpose and complementary perspectives.

So, it is an ongoing exploration on how water creates space for imagination. It explores the very direct ways control of water continues to marginalise the poorest of the poor. And it explores concepts that can halt and reverse that trend – we are looking at water and ecosystems as both a material, and as an imaginative and political framework. Most recently we explored how three cities along the Rift Valley – Tel Aviv-Yafo, Israel, Addis Ababa, Ethiopia and Beira, Mozambique – might forge systems and spaces to span this divide amid rapid urbanisation, and while grappling with the unique impacts of the climate crisis.

The studio's design strategies proposed new forms of urban living that embrace the complexity of water; this is critical to maintaining life along the Rift that fosters social interactions through local stewardship and empowerment models. Student design projects imagine creative alternatives to address interrelated risks faced by vulnerable populations. These include extreme heat in Tel Aviv, flash flooding due to river floodplain development in Addis Ababa and coastal inundation and offering alternatives to standard capital-driven disaster recovery practice in Beira, which was struck by Cyclone Idai in 2019.

We've also been working in India over many years and taken a deep look at the Ganges system from the Himalayas to the Bay of Bengal. We have focused on the city of Varanasi and its relationship to the Ganges, also at the cascading tank system of Madurai, the crisis in Pune happening now with concrete channelisation of the Mula Mutha, and the mangroves of the Sundarbans and their protective benefit for Kolkata. In all these studios, we've learned to focus on culture. I've learned so much from this endeavour and working alongside my incredible co-teachers, Geeta Mehta, Dilip Da Cunha, Thaddeus Pawlowski, Julia Watson and others. We've travelled to Amman and Aqaba in Jordan, Rio de Janeiro and São Paulo in Brazil, Can Tho in Vietnam and four cities in India – Kolkata, Madurai, Varanasi and Pune, among others. It has been a virtual PhD for me.

From our collaborators and students, I've learned that excellence emerges in the space between people – in open dialogue, hard work and collaboration among people with diverse and international backgrounds who have a shared purpose. A few years back, I hosted a panel on “Water and Social Life in India” at the ASLA Conference with Geeta, Dilip and Alpa Nawre. This session captured some of the big lessons for me. Over the years, we have learned water is not an abstract “issue” to be solved. To embrace a water-resilient future we have to learn from past practices, learn from small communities managing and communicating with each other. Designing with water is not just about adapting to changing conditions – it is crucially also about fostering forms of social life, maintenance and care.

What are you currently working on? Could you also discuss how your research and pedagogical focus has changed over the years?

I suppose my research and pedagogical focus over the years has just become more radical, since with each city or site in the world where we do a deep dive, there is a form of ecocide in the making that we bear witness to. In Can Tho, we learned on the ground, and saw first-hand, the effects of a massive dam building project, upstream on the Mekong in China and Laos. It's an ecocide in the making, and it sets the stage to shift from a millennium of the river nourishing civilisation to a future millennium (or not!) of political power and control based on water. So, we've gotten more recently into the basic fundamental questions on human habitation and power.

But, alongside power, control and oppression, water also opens up space to contemplate a politics of the free, and what this means for water. It also encourages

bold thinking about Earth's next 100 years of habitability, and a sense that time is running out.

Your work emphasises the need to consider the act of design as occurring across social, political and environmental domains. In your article “What is Design Now? Unmaking the Landscape”, you discuss the incredible amount of work required through policy, regulation and community to “unmake”. What methods and techniques do you use to allow students to engage with these dimensions and different skillsets?

The mindset of “I’m the designer, here’s my design and you all figure out the rest” is discouraged from the outset. I’ve always promulgated the notion that design can influence policy, not just react to it. In the studio every year we do an “Implementation Workshop” which foregrounds how to build coalitions and align stakeholders to the physical proposal. I think the concept of unmaking also requires a different lens – and this is where the “ecology” mindset leads to alternative design outcomes – rather than design as a constant additive process, the challenges ahead to link up fragmented water bodies, to stitch forest fragments together and to liberate rivers will require ripping out, jackhammering, exploding, protesting and many other forms of action that seem off the table now or as “not design”.

Your practice is firmly embedded in the core of the landscape architecture discipline. Could you discuss what influences you draw on and how they come together in your work?

My influences came mostly from the periphery of landscape architecture. I suppose much of the task for me has been pulling these influences more to the core. As a teenager I worked as a gardener – rooting, selling and taking care of plants. It taught me a lot, and to this day I don’t think you can practice landscape without a lived understanding of the hard work and labour that goes into every line, sketch and gesture we make on the page. I also initially wanted to be an artist, literally making “the thing” myself. Eventually I felt bereft that landscape architects are not “making the thing”. We are making drawings that direct low bidding contractors to do the fun stuff – scoop, sculpt, pile up, etc. The book *Toward an Urban Ecology* (Monacelli, 2016) speaks to this – in response I’ve tried to recast landscape in light of broad participatory frameworks, stewardship and the transformative power of making landscapes together – not just gazing at them at a distance. I’ve tried to put forward a model of building living landscapes as a form of building community, not a “high art” that needs to be preserved like a piece of sculpture.

I wrote my undergraduate thesis at University of Virginia in 1993 on Ecofeminism and the power of combining social and environmental movements. I profiled Wangari Maathai, Vandana Shiva, Rachel Carson and others, and to this day these women working to connect the dots and push broader movements forward is a constant inspiration. My early writing and mapping of Jamaica Bay set a template for thinking about climate-changed landscapes through the lens of water and politics, and the role of activism and that has been explored in many ways since. Recently, I wrote a chapter in the new book *All We Can Save* (Penguin, 2020), and have been on Zoom calls – wine in hand! – with the

amazing chorus of poets, artists and scientists in that book. After interacting with them all I feel a surge of optimism and resolve.

I also had a lot of influences inside the profession! As a student at the Harvard Graduate School Of Design (GSD), I had Ken Smith, Walter Hood, Richard Forman and Anita Berrizbeita as teachers, among many others. I did a research thesis with Rem Koolhaas pre-*S,M,L,XL* that got me writing and drawing, and I feel like I learned a lot from him just as a mode of moving through the world, also with my work at Office of Metropolitan Architects & its research, publication and branding studio (OMA-AMO). After school, I worked at SWA Group and Hargreaves Associates, and learned a lot about professional practice, and hung out with Julie Bargmann, who I just dig as a person and as a collaborator. But the work with Rem and his obsession with bookmaking planted a seed of possibility that I could do a research and drawing book like *Petrochemical America*, not be too afraid to just start organising chapters. And of course, now Richard Misrach and his way of seeing has been a huge influence. Today, I'm influenced and supported by an incredible younger cohort Principal Team at SCAPE – Gena Wirth (Design Principal), Pippa Brashear (Planning Principal), John Donnelly (Technical Principal) and Alexis Landes (Managing Principal). I cherish them so much and have learned a lot with and from them. I'm sure there are more influences out there! The influences snowball over time.

In your article “What is Design Now? Unmaking the Landscape”, you wrote: “Moving forward, in light of increasing climate shocks and stressors, designing the social must be paired with new forms of architectural expression such as unmaking, undoing, subtracting, reversing, decarbonising, tearing out, ripping up, replanting, softening and connecting”. Could you please describe how unmaking is an agent in your policy, regulatory and consultative work?

We can think of ecological design not as traditional “restoration” but as an outcome of systems change, as the effects of the work, not the work itself. There is a formal language that SCAPE deploys, but I do not get caught up in making a formal statement. “Unmaking” is part of that – the design gesture may be to remove a dam, or rip out a roadway, carve down a bulkhead or breach a levee. Does it expand biodiversity, set in motion new and nourishing sediment patterns, sketch a framework for sustained public engagement, rebuild wetlands, create intertidal dynamics, connect people? *Oyster-tecture* (MoMA, 2009) prototyped a series of nested ecological and social regeneration strategies. Thinking about “studio ecologies” and the time it takes to evolve new ideas into a policy context – what was once only in the white walls of a museum is now under construction! We've carried that through into a constructed reef and science-based initiative being built in Raritan Bay, now in the form of *Living Breakwaters*. The project is physically and intellectually beautiful, but its impact (a revitalised shoreline, finfish habitat, hands-on citizen science programmes, etc.) will not conform to current landscape architecture aesthetics, which can sometimes seem like variations of the Adobe Illustrator palette and spline tools. A professional practice “take” on climate might be to incorporate so-called best practices in our

projects. But we have to move beyond doing less harm within the prescriptive bounds of a land-based, property-centric profession. We have to move towards our projects doing more good, working in more collective forms and on vast regional landscape ecosystems that are collapsing but that do not have “clients”.

What do you see as the future adaptations and extensions of current practice, research and teaching as a means of responding to the climate crisis?

I’ve been trying to just push broad-front initiatives. It is so hard to break out of the frame of the “project” in professional practice. That’s where the work at Columbia has been hugely important. There are missing links between the non-profit and NGO sector, federal and state governments, and private money. The piecemeal approach, the project-by-project basis, is wholly insufficient to address the systems collapse wrought by a century of carbon-driven development (itself driven by private developers), subsidised highway infrastructure, engineers controlling and killing water bodies, and planners responding to a market-based system. I can see universities, private practices and professional societies all aligning around larger efforts to hit the reset button on critically endangered regional places. That place may be the San Francisco Baylands, the New York Bight or the Mississippi River riverlands and deltas – the subject of my studio and research work now. Wherever the place, the sum of all of our actions has to add up to more good, more radical systems change.

