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On The Human-Nature Interface

Interview *Asih Jenie and Narelle Yabuka* Portrait Photography *Feline Lim* Project Photography *Various*

What is the role of the landscape architect in the climate-change era?
What's the potential for the profession to shape cities and enhance the wellbeing of people? Ronnie Tan (SILA), Damian Tang (NParks) and Helen Smith-Yeo (STX Landscape Architects) share their views.

Opposite: Ronnie Tan (President of SILA and Lecturer at Temasek Polytechnic School of Design), Damian Tang (Senior Director of Design, NParks) and Helen Smith-Yeo (Principal at STX Landscape Architects) photographed at the Evolution Garden at the Singapore Botanic Gardens.



NY (Narelle Yabuka) Today it seems that landscape architects have more opportunity to work at the scale of the city or region – has that been your experience or observation?

Ronnie Tan (RT) Landscape architects have always been working at the city scale. It's just that maybe over recent years there's been a broader scope of project where our expertise is required.

Damian Tang (DT) It is partly thanks to the growing awareness of environmental issues like the urban heat island effect; the need to integrate greenery and biodiversity advancement into the first phase of urban planning; and architects promoting greenery in their projects.

RT I think we're being recognised more for our expertise in seeing things holistically and integrating them to create a human user-nature interface, which is traditionally not looked at by other professions at the level we operate on.

Helene Smith-Yeo (HSY) When I went to school in the US in the '80s/'90s, they were already teaching landscape at the planning interface level. You have people like Ian McHarg, founder of the landscape architecture program at the University of Pennsylvania, and his book *Design with Nature*, which looks at planning for cities and regions using natural systems. The idea of us working at a larger scale has been around for a while. So there's an expectation that you would have to be involved in larger-scale projects.

DT The scope differs from country to country and city to city. Some countries are still letting architecture and urban planning take the reign first before the landscape architect actually comes in. Whether the scope has changed over the years depends on the 'where'.

Singapore has evolved from a 'garden city' to a 'city in a garden', and that has given us the opportunity to really push ourselves as landscape architects. Now the questions are: what can we really do for a 'city in a garden' that is now moving towards a 'biophilic city in a garden'? How do we incorporate the benefits and value of landscape using more evidence-based and scientific-based approaches?

That has also expanded what landscape architects do for new developments. Jewel Changi Airport for example – who'd think of mixing landscape and airport? But there must be some benefits of pushing the boundary of what new spaces we can create in a 'normal' development. It's really looking at how much both the private and public sectors really want to do in terms of elevating this landscape standard to the next level.

HSY When I had just graduated and was starting out, I always heard: "The project is almost done now so can we just get somebody to shrub it up?" You don't hear that anymore, and for a long time now it's been,

"How early can we hire a landscape architect?" And now it's usually right after the architect or even at the same time.

RT The practice depends on the country and its context. If you talk about Australia and New Zealand, their practice is deeply rooted in their aboriginal culture. For us in Singapore, it's the lack of space, so there's this impetus for the integration of architecture and landscape. We always try ways and means to integrate our green spaces with the built environment. Case in point: our skyrise greenery projects – there is always this blurring of the inside and outside, of the human-made and the natural.

DT Landscape architecture is a very contextual field. Landscape architects in Indonesia may do agricultural planning, and deal with volcano eruptions and their aftermath – things that we don't do here. Being such a small and dense country, the next level for us is really bringing landscape to the people. That's why we talk about therapeutic gardens and how to bring communities together.

RT There's also this constant push for urban development and thus pressure on landscape architects to be the gatekeepers, to try to lessen the developmental impacts and be the voice for our natural capital – the wildlife out there. It's our duty.

Asih Jenie (AJ) How has big data fed into this expansion of scope for landscape architects?

RT Traditionally, the data sets we work with are analogue – snapshots in time. With digital technology today, we are able to rely on real-time, dynamic data to make more informed decisions for the design. So the big data is about planning with more accuracy. For example, how many people actually use the road for cycling? What network system should we provide for them?

HSY I think big data at its best is supposed to be like customisation of services tailored to the needs of people. But then how the data is actually deployed and used still depends on the human factor; it can be badly exploited so that it doesn't really do what it's supposed to do in the end.

With Google Maps now you can do your analysis on large plots quicker and easier than ever. From the planning standpoint, it has helped. From the data-collection standpoint, I think there is too much data, and I'm worried about things like George Orwell's *Nineteen Eighty-Four*. I am not a big fan as privacy is at risk.

DT Besides the planning, the data also helps in operations. For example, NParks has been collecting data on trees with trees.sg. We rely on some of the data to look at and keep track of their behaviour. We use the data not just for planning but also operations and even designing.

Opposite, top: The Western Adventure Loop of the Park Connector Network offers a 12-kilometre trail across six parks. Photo courtesy of NParks. Opposite, bottom: The Kingfisher Burrow Outdoor Classroom at the Marsh Station, Kranji Marshes (designed by Stephen Caffyn Landscape Design) provides information on the habitat. Photo courtesy of Stephen Caffyn Landscape Design.



Crowd-Sourced Data

One of NPark’s initiatives is tree.sg, a website that collects data on trees in Singapore. “It’s interactive and allows people to contribute,” says Tang. “Anyone can register and log information on any tree in Singapore, even a simple comment such as, ‘Oh, I saw this tree flowering.’ That can help us keep track of them. We also collect the data for modelling – aspects like how a tree will grow and at what limit its branches will start to snap in the wind,” he explains.

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RT Landscape architecture is four-dimensional because time is a major component. We are working with plants and plants evolve and grow, so the design morphs and changes with time. With big data, we are able to monitor how the different species, the landscape and the environment change over time and adjust accordingly.

DT People data is easy to harness. The difficult one is the natural systems, which you need to monitor and update, and really see whether the numbers are the same two-to-three years later - has it grown, has it declined? Because here we are talking about enhancing biodiversity and linking ecosystems whenever we build a park, but how will we know what works? The challenge is really who is keeping this data updated and how are we monitoring it? And later, how are we using it?

HSY Again, it's only as good as the human interface. The data makes things easier. In the private sector, we frequent NParks’ database to see what new information is available to us, so it’s helpful. But whether it’s kept up to date, relevant – yes we need a human to keep track.

AJ To what extent can or have landscape architects been able to influence policy?

DT I think city and regional stakeholders haven’t actually seen the potential of what our profession can do in many areas. In building climate resilience, for example, we can use landscape as a natural protection system. When skyrise greenery started, everyone looked at how to create more green buildings. That is one way of influencing some of the planning policy. In Singapore, because of NParks’ successful Skyrise Greenery incentive, now the URA has its own landscape program: the Landscape Replacement Areas scheme.

HSY One of the biggest challenges we face in working professionally is that sometimes we’re invisible. If you show people a picture of a landscape in a project and ask them: “Who did this?” they will probably say “Architects.” Both professions create spaces, but we deal with spatial processes whereas I still think that architects primarily approach it as object making.

RT Traditionally, our policymakers have always relied on two professions: architects and engineers. But they know that making a city requires so many trans-disciplinary efforts. Over the last few years, I think the policymakers have recognised this and affected change. For public projects now, landscape architects actually come on board early to be part of the consulting team.

HSY Sometimes politics gets in the way. We were working with architects in the UK and India on a master plan for Amaravati, the new state capital of Andhra Pradesh. It was going fine and we

were starting to put together a blue-green infrastructure, but then the government in power at that time lost the election and the new government has put it on hold. For it to be initiated took individuals who realised its value, and it will only go forward if the same people are there.

AJ What are some key concerns about landscape practice, from a landscape architect’s perspective?

HSY I’m worried that landscape is becoming a commodity, treated at a superficial level and not given the time and space it needs to be holistic. I’m concerned that there is not enough respect for the idea that nature is a continuum of time and space, that it all goes in a loop and affects our lives in a fundamental manner.

NY Do you think that perspective of landscape as commodity is connected to the trend of seeking wellness?

HSY Commodity more in the sense of just applying landscape cosmetically and using it to hide something, rather than planning it to be sustainable from the start for real benefits to people.

RT Greenwashing.

HSY Yes. And also the concern that a lot of people just think, “Oh it's easy to do skyrise greenery, you just give it a little planter and it will grow.” But no, it needs good maintenance and unless that maintenance is crazy easy, you’re going to have problems. In the Oasia Downtown project with WOHA, we asked for access to be given to every single planter because we can’t just expect the plants to grow on their own and that’s it. We are about processes. You have to first understand the process before you can design anything else.

RT Often the misconception about landscape architects is that we are glorified gardeners. We don't just deal with the green but also the blue and the grey or brown. We design social spaces, playgrounds, ABC waterways, Environmental Impact Analysis, master planning, and so much more.

DT Sometimes we need some data from the public. My key concern is: how do we get this information? Are the researchers talking to us? I always believe in an evidence-based approach because it’s easy to challenge an idea, to say “What makes you think that if you do this, our birds will come back?” We can say that it is based on a site study, vegetation and behaviour. This is evidence. But someone still has to go to the site to monitor if the birds are coming back.

AJ What are some of the approaches or policies you see shaping Singapore’s environment in the years ahead?

DT First it’s about getting all things linked up and integrated as a broad, holistic picture. We have the Park Connector Network, Round Island Route, Rail Corridor – all these link up key nodes to transport

Opposite: The facade of Oasia Downtown Hotel (architecture by WOHA, landscape by STX Landscape Architects) was built with access to each individual planter. Photo by Patrick Bingham-Hall.



“Landscape architecture is a very contextual field...
Being such a small and dense country, the next level
for us is really bringing landscape to people.”

Damian Tang



Above: Damian Tang has helmed NParks' Design division since 2014, spearheading creative solutions to develop Singapore into a biophilic city in a garden. Opposite, top: Helen Smith-Yeo is the founding principal of 30-strong studio STX Landscape Architects, whose portfolio includes prestigious landscape projects such as NUS University Town and Oasia Downtown Hotel. Opposite, bottom: Ronnie Tan (right) worked with Stephen Caffyn Landscape Design on Kranji Marshes and BKE EcoLink and is currently the President of SILA and a Lecturer at Temasek Polytechnic School of Design.

hubs and allow people to move from place to place, park to park, all seamlessly connected. Then the next thing will be finding out the value of these things. What is the effect on people, the ecosystem, wildlife and biodiversity? How is the green infrastructure linking up and integrating with the development?

RT The future holds an additional role for landscape architects, and that's to educate people on the different functions of landscape. We have to recognise that human beings are just one component in the system. Biophilic designs will be the default, but we have to raise the bar to also have our designs reveal and teach people about the different ecosystem services that nature provides us with. Only then will people's interaction with nature move from being mere superficial appreciation of aesthetics to one that helps to elevate and calls to action for more sustainable living.

HSY A well-designed landscape can be a symbol of culture, of what and where you are. It can also create design conversations and bridge different cultures. For example, when we did the French School (Lycée Français) in Singapore, some of the considerations were 'what makes it French' as opposed to being just another international school; how do you interpret their culture and adapt it to fit in this climate; and can it be something that reminds them of home – but transplanted and transformed? Hopefully, we can create more projects like this here.

AJ How do you think Singapore will arm itself for the effects of climate change?

DT First of all, we need to understand what it means when the climate changes. What does the rise in temperature do to the ecosystem, for example? Some of the wildlife may not be able to adapt. So what kind of microclimate are we creating through our landscape to help them survive? This can be very complex for the different species. The understanding of this and the provision of data and information are crucial for arming ourselves against climate change.

HSY Humankind has scrambled the biosphere. To me, the answer is simple: live life slowly, consume less, stop and think, and make meaningful social connections. And for this, you need great spaces. That's where we come in. It always goes back to the human interface.

NY You design landscapes within local systems, but these sit within bigger systems. At what scale should we really be thinking about landscape architecture? Should planetary stewardship be within the purview of the landscape architect?

RT Whatever projects we work on, we always think about the big picture – like how can you connect your site to the surrounding areas? How can the birds stop over at my site during migration? How can the stormwater discharge from my site affect other people's site?

DT I don't believe in just advocating to save the world. For me, it's down to actions – what you can do. What is in your capability,

your area and your scope? If I do my best in the right direction and everyone else does the same, that should work.

HSY Piece by piece – getting the basics right. Depends on who the actors are and whether or not they respect what you bring to the table. I've worked with architects who are very collaborative and who will listen and try – we figure things out in partnership on an equal basis and collaborate on how to solve the problem. This creates the best projects and hopefully, there'll be more people like that.

AJ Will landscape architects also become stewards for the wellness of people?

HSY If you provide uplifting spaces that cater to human needs and comfort, minimise energy waste in the process and encourage life cycles, I think wellness will follow. Because you are creating environments where people get less sick and less depressed, and you therefore lessen the burden on society as a whole. And then the project itself will have commercial value because it is beautiful, and not just skin deep superficial. I think it was Herbert [Dreiseitl] who said something like: "When things are beautiful, people respect them more and tend to take more care of them."

RT Why stop at the wellness of people and not also consider the wellness of all living species on a site? I've worked on ecological projects like the BKE EcoLink and Kranji Marshes, and those were not anthropocentric projects. We designed those projects for the birds and animals, for the wellness of the creatures that cannot speak for themselves.

DT Another layer of wellness for people is the development of children. Nature Playgarden at HortPark looks at how kids can develop through a connection with nature. The wellness concept there is broad, from emotional to intellectual development.

HSY This may sound counter-intuitive, but I'm not at all in agreement with the overriding mentality that everything must be so safe, which we're going through at the moment. It's like the saying goes: if you don't use it, you lose it. I think when you make things too safe, and you only talk about being safe above all, you handicap people's initiative and daring spirit, as people don't take risks anymore and eventually they won't know how to challenge themselves.

DT You're right, which is why the Nature Playgarden has a risk factor. Kids need to learn how to take risks while playing. It's moving away from artificial playgrounds and closer to nature, and curated such that it has both the safe aspect and the risky aspect, allowing for a more rounded development.

nparks.gov.sg
sila.org.sg
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Opposite, top: The landscape design of the NUS University Town by STX Landscape Architects was driven by tree conservation, a legacy of the original site that will be passed down to future generations. Photo by Helen Smith-Yeo, courtesy of STX Landscape Architects. Opposite, bottom: The Log Valley and The Secret Den, two of the nine features at Nature Playgarden at HortPark, encourage children to be adventurous and reconnect with nature. Photo courtesy of NParks.