

Edenic Apocalypse: Singapore's End-of-Time Botanical Tourism

Natasha Myers



Singapore is synonymous with excess and artifice. An island city-state just south of the Malaysian peninsula, Singapore is a dense urban garden built on drained and reclaimed swampland. Since the 1950s, Singapore has positioned itself as a “Garden City” and a leader in “green” economic policies. Indeed, the island’s verdant vegetation has long been figured as a source of economic and aesthetic value to lure foreign investment. Here, lush canopies reach over roadways, and tree trunks are thick with epiphytic growth. Orchid blossoms even adorn airport baggage carousels. Now figured as a “City in a Garden,” Singapore’s extensive botanical gardens and numerous “green” tourist sites are major attractions for both locals and visitors. In place of its endemic swampland species, showy invasives are actively propagated. And, as more land is reclaimed from the sea to accommodate rapid developed, concrete now contours 87% of the island’s once-natural shoreline. Artifice is Singapore’s nature.

Fig. 01



Fig. 02 Nature is everywhere luxuriously simulated at “The Gardens By the Bay,” Singapore’s billion-dollar infrastructure for botanical tourism. Open to the public in 2012, this award-winning feat of environmental architecture sits on fifty-four hectares of reclaimed land on the south shores of the island. Clusters of vertical gardens, modeled on tree forms, punctuate the landscape. These “Supertrees,” some fifty meters tall, are integral elements of the Garden’s “sustainable” infrastructure: they gather solar energy and vent heat and gases from electricity-generating incinerators that burn the city’s waste biomass. Connected by aerial walkways, the largest Supertree houses an air-bound restaurant. The Gardens also feature two of the world’s largest climate-controlled conservatories, massive infrastructures whose soaring curves and smooth organic forms resemble apparitions from some science-fiction fantasy. These engineered climates make possible the imperialist impulse to collect up and host diverse worldly natures here in Singapore’s searing heat.

Fig. 03 Singapore’s extreme neoliberal vision for unfettered economic growth is barely tamed by discourses of sustainability. Dreams of “green” development are propelling many cities massive infrastructure projects. Indeed, where some might hope to amplify the inherent contradiction between economic growth and sustainability, in Singapore this distinction is erased. Here more sustainability means more growth; and this manifests as a kind of growth with unsustainable effects.



Fig. 03



Fig. 04 I enter The Cloud Forest, an ecological simulation of epic proportions. Moist, cooling air licks at my skin, which is still radiating heat from the sun on this 34°C day. A forty-two meter mountain covered in lush vegetation sweeps my gaze upward. The spectacle is overwhelming. I can barely take it all in. That is until my eyes lock in on a body tethered to a long rope and swinging through the mist. A man reaches out and pulls himself across this lush wall, plucking errant leaves and shoots and stuffing them into a sack. His brown skin marks him as one of the many migrants whose intensive and precarious physical labours have built this very structure and daily keep this lush garden flourishing. This is a living infrastructure that itself thrives on the energetic, material, and affective labours of marginalized people. I paid S\$28 for entry, a fee waived for local residents with the correct identity cards. Many others live and work in this city without such ready access.



Fig. 05

This is a city fully under construction. It is being built up on the backs of a massive migrant labour force from Bangladesh, Sri Lanka, India and surrounding regions. Singapore's "total foreign workforce," including construction workers and domestic labourers totaled over 1.3 million at the end of 2013, approximately 24% of the city-state's total population. The "unskilled" laborers who work in construction make up nearly a quarter of all foreign workers in Singapore. Life is precarious for those who risk life and limb on construction sites with high injury and fatality rates. Their low wages prevent them from participating in the life of this city of affluence and opulence, which caters predominantly to foreign "talent" and investors. This is a city in which it costs S\$90,000 for a 10-year permit to drive a car.



Fig. 06 On any given Sunday evening in Singapore's "Little India," throngs of South Asian men flood into the streets to savour their limited time off work. There they gather in groups on street corners or patches of grass. Some wander through the streets hand-in-hand. Tensions have been flaring of late. A riot took over Little India's streets in December 2013. Singapore's government was quick to dismiss this event as the escalation of a minor dispute. Critical news outlets around the world took this opportunity to publish exposés on exploitation, condemning labourers' poor working and living conditions and reading the riot as an expression of profound discontent.

Fig. 07 The Garden's conservatories masquerade as cooling stations for overheated tourists. And yet they also offer respite from Singapore's choking haze, smoke from forest fires that are rapidly consuming Borneo—that epicenter of earth's biodiversity that is now being terra-formed into a giant palm oil plantation. What visitors don't initially realize is that the Cloud Forest is actually a climate change demonstration site. Interspersed through the exuberant expanse of vegetation and vaulted beams, the themes of collapse and extinction are present but muted by awe-inspiring aerial walkways and simulated clouds. Visitors are guided to the "Lost World" at the top of the mountain. There a display mixes rare and endangered plants with Indigenous sculptures of animalized humans. The Lost World is where it becomes clear that the Garden's efforts to make life thrive here do nothing to mitigate the forces that are letting life die everywhere else.



Fig. 07



Fig. 08 It is on the lower levels of the Cloud Forest conservatories that the garden's pleasures are fractured and interrupted. There lush displays give way to dire scientific visualizations of a warming planet. The "exit through the gift shop" draws visitors through "Earth Check," a dramatic climate-change data-visualization room pulsing with animated graphic displays projected on black walls. From there, visitors pass into a massive theatre. It is here that they must confront simultaneously the beauty and allure of botanical spectacle and terrifying visions of total collapse. An immense double channel video projection loops incessantly, splashing light and colour across twenty meter screens on the rear wall and floor. The video charts in vivid images, voice-overs, and an urgent soundtrack the devastating year-by-year projections of the rise in global temperature.



Fig. 09

Reaching the end, the film suddenly spirals backward as a voice urges viewers to reconsider all they have just seen: “Yet this is only one possible future. If we act quickly we can prevent all this from happening. Adapt our technology. Adapt our farm practices. Adapt our policies. Adapt our lifestyles.”

Watch how each rise in temperature is likely to affect plants and animals in different parts of the world:

- “ + 0.7 Degrees: Hot, dry areas get hotter and dryer. There are more wildfires.
- +1.1 Degrees: Small mountain glaciers disappear. Threatening water supplies for 15 million people.
- +1.5 Degrees: Malnutrition, malaria, and other diseases continue to increase.
- +1.8 Degrees: All coral reefs are bleached.
- +2.7 Degrees: The last polar bear dies.
- +2.9 Degrees: Half of all species are doomed to extinction.
- +3.9 Degrees: 1 in every 5 plants is critically endangered or extinct.
- +4.3 Degrees: 50 % decrease in fresh water availability.
- +5.0 Degrees: And so we reach 2100, it is 5 degrees warmer, the earth is a dry rock dying in space.”



Fig. 10 And yet one cannot erase these images of colossal habitat and species extinction. Visitors shuffling out of the theatre leave with a not-so-subtle message: “It’s over folks.” The end-of-times are nigh. Indeed, we exit the theatre through an exhibit of an already extinct ecology, one populated by “relic plants” that just barely remember their prehistoric ancestors. It is here that visitors confront most palpably the death and extinction that underwrites all the life made to thrive in these gardens.

Fig. 11 Gardens by the Bay has engineered an ambivalent affective ecology, one that simultaneously elates with the allure of vital simulations, and throws visitors into what Donna Haraway calls the “slew of despond.” Indeed, the anxieties of the Anthropocene are better rendered as the affects of what Haraway is now calling the Capitalocene. It is in this simulation of an already lost world that we can see how capital continues to profit from the very extinctions that it drives, here in the guise of entertainment for climate-change education.



Fig. 11



Fig. 12 While touring this perfectly maintained space, I am drawn to one pane of glass that reveals what happens when this space is not so meticulously maintained by so many labouring hands. This grungy smear blocks the view of what should be such a photogenic landscape, one that includes not only the Garden's Supertrees, but also an imposing sweep of port-land cranes, such potent markers of Singapore's booming economy. It is at this moment that the massive and impressive edifices of the conservatories suddenly appear more like fragile, thin envelopes enclosing a precariously simulated Eden. At the same time it becomes clear that it is the very conception and construction of this Earth Ship—the excessive extraction of plant species, metals, and materials—that is accelerating the destruction. I realize then that this is not just a garden of leisure and spectacle. It is both a living memorial to an already vanishing world, and a thriving fantasy of the earth's immanent undoing. It is the very materialization of this fantasy that is bringing on the end-of-times. Perhaps the only response is to write against this dream: to conjure another possible future. The question then becomes how to work athwart the apocalyptic future that this garden dreams so furtively? What other fantasies can be conjured?