

Liam Young

BRA NEW

UNDER TOMORROW'S SKY



WE

NOW

IS A FICTIONAL, FUTURE CITY.

10/03/2006

Under Tomorrow's Sky is a fictional future city. For the project, speculative architect **Liam Young** assembled a think-tank of scientists, technologists, futurists, illustrators and science-fiction authors to collectively develop this imaginary place, the landscapes that surround it and the stories it contains. The city forms a stage set for a collection of fictions, emerging infrastructures and design experiments. It is an imaginary landscape extrapolated from the wonders and possibilities of emerging biological and technological research. Here, speculative fiction provides a critical tool, which is visionary in its trajectory while provoking us to examine some of the most pertinent questions facing us today.

We wander through the city. It has been a long time since we have seen anyone else. Looking around I see a place I know but at the same time find utterly unfamiliar. She asks me where we are.

I reach down and pick up a small round badge from the rubble. I pin it to her coat. It reads 'I have seen the future'. It was a souvenir once given to visitors after their voyage through time on board the General Motors Futurama ride at the 1939 World's Fair. Sitting on an automated conveyor belt, visitors would travel through a model of the city of tomorrow, its skyscrapers, traffic lights and tangles of interchanges and expressways. Where once stood the imagined landscapes of what the 1960s might bring is now a dusty ruin, an archaeology of the social and technological ambitions of the time in which it was made. She tells me she has seen this place before, in vintage YouTube clips, tinged with the quaint nostalgia of retro futurism and archive footage.

We walk on, past the rusted hulks of an Archigram Walking City now propped up on blocks. Their massive metal bodies have been stripped down to their frames by futurist souvenir hunters and steel salvage yards. The dozers have moved in on what remains of the cruciform foundations of the Radiant City. Their concrete corners have been worn smooth from decades of skateboard grinds and graffiti-removal teams. We can make out the words 'LC was here 1967' amidst the scrawls and tags of an age of archi-tourists. The players of New Babylon have closed their show, packed their ladders and drawn the curtains. The endless grid of the Superstudio Supersurface that once stretched beyond the horizon has been pulled up and resurfaced. The blinding white has mildewed and tree roots have skewed and cracked the measured lines. The tiled landscape has been reclaimed and now paves the food courts of distant strip malls, soaking up spilt milkshakes.

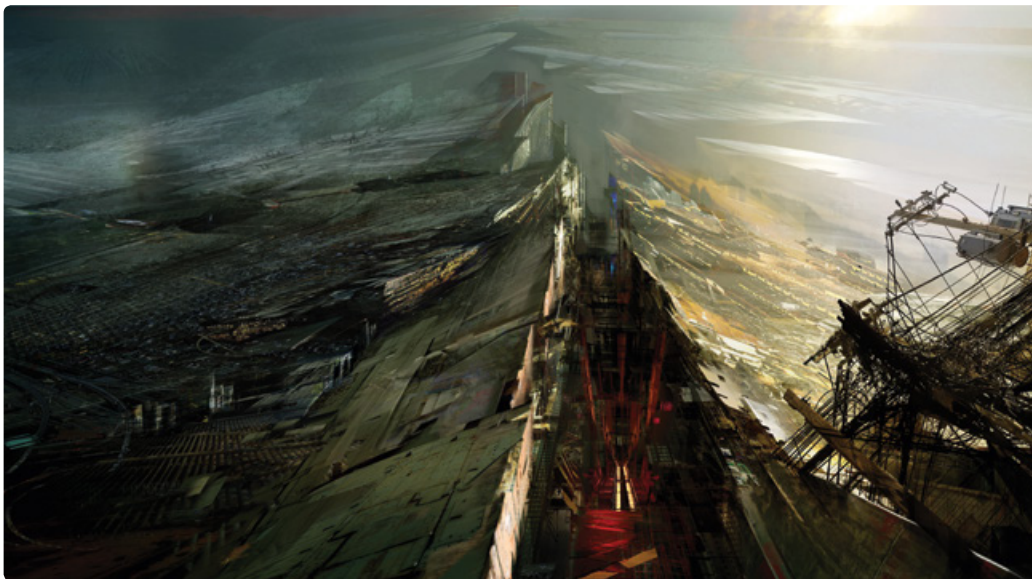


Liam Young, Under Tomorrow's Sky stage set model, 2012
Working with special-effects artists from such films as *Alien*, *Sunshine* and *Blade Runner*, Liam Young and the architects of Tomorrow's Thoughts Today have built a room-sized movie-miniature model of the fictional city.

I tell her we are walking through a city of failed utopias and constructed dreams. It is a city of nowheres, a city of follies, a city of our hopes and dreams, our most intimate desires and our collective fears. As I tell her about the city I once knew, I can tell she is listening but does not really believe everything I tell her. She has stopped trying to recognise the cities I am describing. 'There is melancholy and relief as we give up any thought of knowing and understanding them.'¹ They were not built for that purpose. They were not designed to be constructed, just to be explored, discussed, loved and hated, fought over or wished for. The cities of what is to come do not just anticipate, but actively shape technological futures through their effects on the collective imagination. Only in these accounts of the future are we able to discern 'through the walls and towers destined to crumble, the dreams to remain unfulfilled, the tracery of patterns that we can follow through the unmappable'.² Beyond the dig sites of obsessive paleo-futurists, the speculative city has been abandoned for some time now. 'It is a desperate moment when we discover that this empire, which had seemed to us the sum of all wonders, is an endless, formless ruin.'³

We walk on and come to the edge of a new territory. We look out across an evolving fragment, in endless construction. There the traditional infrastructure of roads, buildings

and public squares is giving way to ephemeral digital networks, biotechnologies and cloud computing connections. The physical city we know is destroying itself. She asks: 'Is our city still a city anymore?' At the very least the architect of this city is being redefined. Architects once speculated on the impacts of industrialisation and then mass production. Walking through this history of futures suggests to us alternative forms of spatial practice whereby architects can again play a critical role in speculating on the implications and consequences of emerging technologies. As the economy collapses and the city is reshaped, the future is beginning to become a project again. We have come to this part of the city at the beginning of its life. We begin a short walk through the landscapes of this brave new now. It is not clear to her what is fact and what is fiction; the two intertwine.



Daniel Dociu, *Urban Tectonics*, Under Tomorrow's Sky concept art, 2012
above and previous spread: Game concept artist Daniel Dociu was invited to join the Under Tomorrow's Sky think-tank and contributed digital paintings that developed with the design discussions.

Hovig Alahaidoyan, *Coastline*, Under Tomorrow's Sky concept art, 2012
above top: Hovig Alahaidoyan, a concept artist for film and games, worked with the Under Tomorrow's Sky think-tank to develop a collection of narrative vignettes set in the future city.

She whispers while we listen to the whistle of computer cooling, and the bleeps of mirrored beasts living their luminous lives. The fish were biting and below the ocean the blinking lights of the coastal supercomputer brain gives the water a curious glow. Where we once pumped mountains of sand into terraformed worlds lost under the weight of mirrored towers and air-conditioned oases is now the site of this new construction. 'The new city is standing out in the tidal currents of the Persian Gulf, flanked by dusty oil-drilling ghost towns and the wreckage of the Iranian Trucial States.'⁴ She stumbles across the uneven ground; it is faceted and abstracted, a computed geology, part rock pool, part sedimentary construction site, glistening with moisture, bathed in light from street-lamp stars. The buildings seem to grow, and decay, and grow again from the fertile grounds of cities past. 'It is a system generating its own soil, creeping out into the sea and expanding its own volume through the metabolism of its ecologies.'⁵

'All this industry is biotech, quiet, subtle, done at room temperature, a vast urban swallowing. Rippling tubes feed spasming streams of mud through kidney-like membranes and filters. Electrical power comes from long, flexing, tidal tentacles, nervous strands like huge jellyfish tethers.'⁶ Through it we glimpse the clouds beyond, thick with seeds of bacteria. There is a materiality to the weather here. She brushes the spores from her hair. Years before we had visited the blue cities of India. The subcontinent superpower has gone global and now influences the markings and urban patterns of this new city. Buildings tessellate down the landscape, an inhabited geology of crevice rooms and public valleys. They told us the colour-washed walls were believed to keep down the infrastructural insects that swarm across the city's pharmaceutical gardens.

'The boundaries of the body are disintegrating and we are becoming one with the city.'⁷ Virtual interactions become a part of our physical selves and crowd-sourced computation becomes a new kind of magic. 'They lived within an urban computer. They never talked into mobiles or typed on keyboards. Instead, they gestured. They behaved like silent film actors, stagey and posed, playing to the cameras. To interact with their cityscape, they waved their arms, wiped, swiped, pointed, prodded, nodded and stared at things. This avatar of the city was a live architectural model, spatially identical to the genuine, physical city. The map of the city and the real territory of the city were entirely co-existent.'⁸ Here the interbreeding of biology and technology has exploded infrastructure into bits, to roam the earth in an architecture of everywhere. 'It is a walled city of invisible barriers patrolled by drone networks, mapped by satellites, a protected endemic ecology fringed by a bacterial quarantine zone.'⁹

She had her binoculars slung around her neck. 'The first laboratory birds we see as we step upon the rugged shores of the big city is a flock of Gaseous Canaries, and their joyful notes are the first to salute our ear. High above the rooftop vents drift the Green Throated Sentinel Canaries, bioengineered to be sensitive to increased levels of CO₂. The luminescent plumage of the Roseshift Canaries catches the sun as they fan their tails and sing sharply in the clouds of nutrients. Large patches of luminescent algae dapple the surface of this wild country; and the moisture in the air is so peculiarly penetrating that it brings to mind a fearful anxiety for the future. The song brings with it a thousand pleasing associations referring to the beloved nature I was told about in my youth, and soon inspires us to persevere in our curious enterprise.'¹⁰

It has been some time since we had left the city of faded futures. Above us the night air rumbles with a low hum. A flickering flock of pirate Internet drones scans across the skyline. As a mobile network infrastructure, the flock broadcasts its signal in a luminescent cloud, fading in and out over the city.

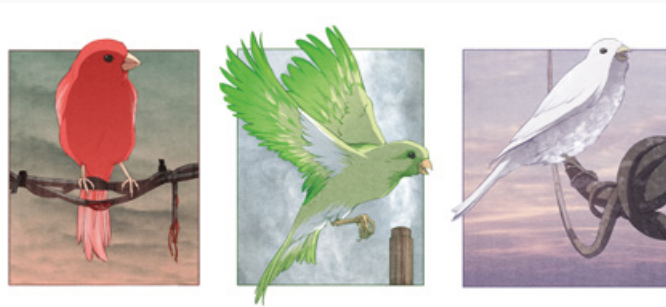
*High above the rooftop vents
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SINGING SENTINELS

Liam Young, Geoff Manaugh and Tim Maly (illustrations by Paul Duffield), *Singing Sentinels: A Birdwatcher's Companion*, 2012

This fictional guidebook describes a designed infrastructure of bioengineered birds that monitor the air quality of the near future.

In the bowels of the earth, coal miners once hammered rock to the twitter of canaries that lived beside them, their changing bird song a warning alarm for a dangerous gas leak. These animal sentinels watched over our energy industry and kept us safe. Over our post-carbon cities, the atmosphere is thick with the gaseous legacy of these years of fossil fuel use. Echoing across our near-future landscape, is designed a new infrastructure of signing sentinels as bioengineered birds once again monitor the air for us. Altered bird songs ring out as a soundtrack to the anthropogenic spaces of tomorrow, an elegy for a changing planet.¹¹



ELECTRONIC COUNTERMEASURES

Liam Young with Superflux, Eleanor Saitta and Oliviu Lugoian-Ghenciu, *Electronic Countermeasures*, GLOW Festival, Eindhoven, the Netherlands, 2011

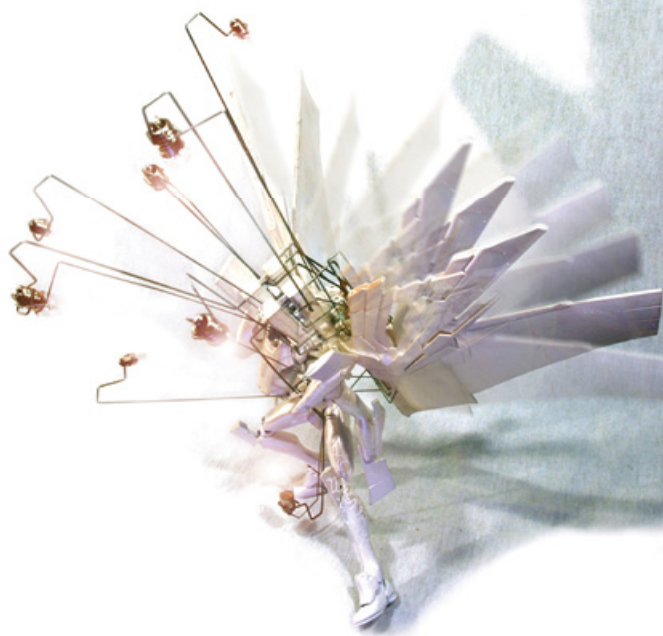
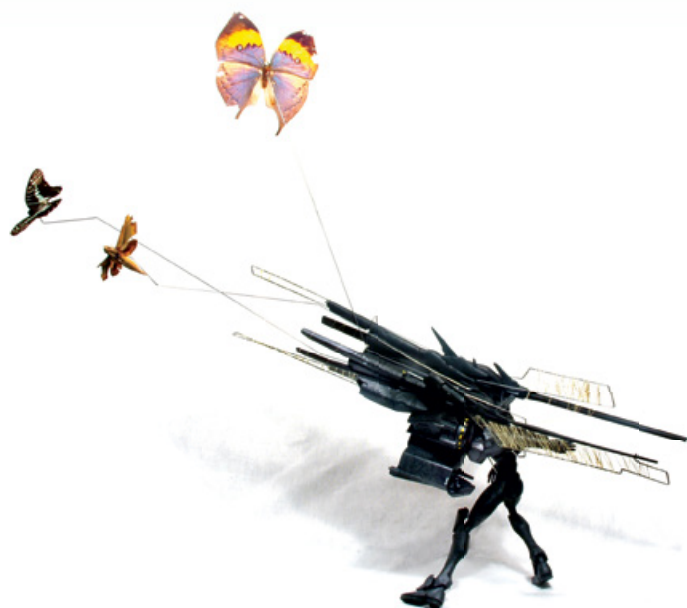
Drifting through the city is Liam Young's flock of GPS-enabled quadcopter drones. In response to the network shutdown that occurred during the Arab Spring, the drones broadcast their own Wi-Fi web forming a nomadic pirate file-sharing infrastructure.

Fabricated from repurposed components that were originally intended for aerial reconnaissance and police surveillance, a flock of GPS-enabled quadcopter drones broadcast their own Wi-Fi network as a flying pirate file-sharing infrastructure. They swarm into formation, broadcasting their pirate network, and then disperse, escaping detection, only to reform elsewhere. The flock becomes a highly site-specific means to create peer-to-peer communication. It is a nomadic architecture, 'a roaming infrastructure built from digital broadcast rather than steel, a drifting island of information'.¹²



SPECIMENS OF UNNATURAL HISTORY

Catalogued as a collection of still lifes, stuffed and mounted taxidermy robots, curios, trophies and exotica, Specimens of Unnatural History is a near-future bestiary of designed and engineered biotechnical creatures, architectural beasts, robotic infrastructures and hacked military devices. Throughout history we have always invented monsters and myths as our way of coming to terms with phenomena we do not quite understand. The bestiary plays on the possibilities of the emerging field of synthetic biology and presents new hybrid creations as a way of coming to terms with our strange new world.¹³



Liam Young, *Electric Aurora*, *Migrating Forest*, *Nomadic Silk Factory* and *Augmented Ferret*, *Specimens of Unnatural History*, 2011
Catalogued as a collection of stuffed and mounted taxidermy trophies, *Specimens of Unnatural History* is a near-future bestiary of designed and engineered biotechnical infrastructures.

Following the intensity of the electromagnetic spectrum, a swarm of cybernetic fireflies map the network strength across the sky. As we look up in wonder, our faces bright in the rolling glow of a Wi-Fi aurora, caught in the light is a companion swarm of moths tethered to a nomadic silk factory herd that is spinning its glistening web across a field in the valley below. Shepherds track the herd's GPS tags. Here the processes of silk production are taken out of the textile factories and returned to the landscape. Scurrying about underfoot forests of young trees rustle past us following the weather. The migrating forest chases climate change across the globe in the dimming light of a day yet to come.

It is comforting to know these beautiful unnatural specimens have made it here with us. After nature their songs still sound and the air smells sweet. What we realise is that there is no nature anymore, and perhaps never really was, at least in the sense that we culturally define it. We tried to think of a new word for it. We still have not found one. What we see is technology, engineered systems, augmented environments and invisible fields. On our walk through this history of futures we see how the imaginary city once, and now again, plays a role in developing new cultural relationships with the inevitable by-products of industry, a changing climate and the anthropocenic world.

Some of the people we meet on our walk through the brave new now are swept up in what the city could be, others are reserved and look on with caution. It is a place of wonder and of fear. We make friends, we hear their stories, and we share their lives. I have not walked these streets before. What things may come Under Tomorrow's Sky? ▴

Notes

1. Extract rewritten and adapted from Italo Calvino's *Invisible Cities*, Vintage Press (London), 1997.
2. Ibid.
3. Ibid.
4. Extract from 'My Pretty Alluvian Bride', a short story by Bruce Sterling for Under Tomorrow's Sky.
5. Rachel Armstrong, transcript from the Under Tomorrow's Sky public think-tank at the MU Foundation, Eindhoven, 2012.
6. Extract from 'My Pretty Alluvian Bride', op cit.
7. Rachel Armstrong, transcript from the Under Tomorrow's Sky public think-tank, op cit.
8. Extract from 'My Pretty Alluvian Bride', op cit.
9. Bruce Sterling, transcript from the Under Tomorrow's Sky public think-tank at the MU Foundation, Eindhoven, 2012.
10. Extract rewritten and adapted from John James Audubon's entry on the American Robin in *The Birds of America*, 1841.
11. *Singing Sentinels: A Birdwatcher's Companion*, fictional guidebook by Liam Young with Geoff Manaugh and Tim Maly (illustrations by Paul Duffield), Mediamatic Gallery, Amsterdam, 2012.
12. Electronic Countermeasures was originally developed for the GLOW Festival, Eindhoven, the Netherlands, 2011. It was created by Liam Young with Superflux, Eleanor Saitta and Oliviu Lugoian-Ghenciu.
13. Specimens of Unnatural History is an ever-growing collection of future taxidermy originally developed by Liam Young for 'Landscape Futures', curated by Geoff Manaugh at the Nevada Museum of Art, Reno, 2011.

Some of the people we meet on our walk through the brave new now are swept up in what the city could be, others are reserved and look on with caution. It is a place of wonder and of fear. We make friends, we hear their stories, and we share their lives.

Under Tomorrow's Sky was developed by Liam Young with the MU Foundation, Eindhoven, 2012. The Under Tomorrow's Sky think-tank included Bruce Sterling, Warren Ellis, Rachel Armstrong, ARC Magazine and Paul Duffield. Under Tomorrow's Sky is an ongoing project that will be further developed as Future Perfect, curated by Liam Young for the 2013 Lisbon Architecture Triennale.