This Must Be The Place: Critical Design and Urban Futurity

—— Tobias Revell & Georgina Voss

I.

By 2050, half the world's population will live in cities
— Ancient Proverb

You have, surely, seen or heard the above statement before—in newspaper articles, possibly, or government documents; perhaps as wall-text at an art exhibition; perhaps whispered into your ear by an anonymous commuter.

Words summon action. Describing a near-future in which half of the global populace will inevitably—definitely!—live in cities is not a value-neutral offering but an invocation to act. This proverb drives policy development for the United Nations, forms the opening gambit of a great many foresight reports and acts as the backbone of the property development industry. It is a compelling pitch for businesses and governments looking to shore up certainty in an age of instability and volatility, framing half the world's population as a captive audience for policy, surveillance and sales.

Positioning the city as the nexus of mass human experience for the foreseeable future sets up a land-grab for who gets to define what these cities will look like. And what is being imagined often seems to be terribly similar, both in terms of what these cities look like, how they are controlled and what forms of technological systems will thread through them.

It is these apparently inescapable future-metropolitan visions that critical approaches to design, architecture and urbanism seek to challenge. Where are the alternatives to these Stepford Wife[1] renderings of the coming urban environment? Why isn't the inevitability or the homogeneity of these visions being questioned? Is this truly what citizens want? The city has always been a site of command and control, a space where ardent ideology can be materialized and tested. Speculative and critical perspectives, therefore, seek to shatter and pluralize these visions, introducing alternatives that broaden the possibility space of what the city is, and challenge the hegemony of dominant stifling, seemingly inevitable imaginaries.

[1] Following Ira Levin's cult novel, *The Stepford Wives* (Random House, 1972) and two subsequent film adaptations in 1975 and 2004, the term 'Stepford Wife' is often used to describe someone or something servile, complicit and identikit.

II.

Cities, like dreams, are made of desires and fears, even if the thread of their discourse is secret, their rules are absurd, their perspectives deceitful, and everything conceals something else.

— Italo Calvino, *Invisible Cities*

Speculative and critical design (SCD) is a practice which challenges and disrupts the dominant and unquestioned values, narratives and trajectories embedded into designed artefacts and systems. Such critical approaches to design and urbanity have a long history. In the late 1960s, displeased with the role of design and architecture in an unquestioningly scaffolding globalization, a group of Italian architects and designers— later called the 'Italian Radicals'—founded a series of practices which drew on satire and provocation to challenge the seemingly inevitable future of neo-liberalism emerging in Western Europe.

Superstudio's *Continuous Monument* (1969) is perhaps the most notable of these projects. A huge glass structure resembling a skyscraper encircles the Earth. It smashes through cities, erasing any heritage or identity, unifying the world under a single bland and faceless structure. Citizens live in the grid system of the monument, each permitted a certain, quantified volume of cuboid space. The criticism used powerful and compelling photomontage to reach its audiences; the images, still striking today, are hyper-real but based in a reality we recognize, of the natural world and its old cities dominated by faceless glass towers.

Superstudio's work is influential to the point of cliché, taught in architecture and design studios across the world (it is probably a cliché citing it in this essay). But this mode of critical work, exemplified today by SCD, seeks to move the possibility space of the future, to widen and pluralize it with alternatives and challenges.

The practice of speculative and critical design predominantly occurs in studios and classrooms—a diffusion of approaches set up within Anthony Dunne and Fiona Raby's Design Interactions MA course at the Royal College of Art[2] as a way of challenging students to defy norms and work critically and reflexively through projects. These projects take place in the (comparative) safety of higher education institutes, where students are free from client constraints and expectations. The purpose of a critical education in design is that once in practice, the principles learned by the student carry on, impacting the way they work with clients and partners and creating a more critical field.

As Dunne and Raby describe it, SCD permits practitioners and audiences to "challenge narrow assumptions, preconceptions, and givens about the role products play in everyday life," widening the architectural focus of the earlier Italian movement. Though most cities themselves might not be considered products so much as emergent assemblages, the artefacts used to sell utopian visions of future cities are intensively designed objects, brought to life by architects, designers, film-makers, model-makers and illustrators,

[2] The Design Interactions MA at the RCA was founded by Tony Dunne and Fiona Raby in 2005, replacing the previous Interaction Design MA program.

materializing the embedded biases of the social conditions that gestated them. The city is also conceived of as a commodified space – broken down into a system of interlocking public and private services that, somehow, enhance quality of life.

Urban spaces are becoming subject to insidious creep from technological structures and artefacts designed to surveil, capture, analysis and act – from Uber and autonomous vehicles, to the surveillance bins of London, to facial sentiment and footfall analysis software in shopping districts. This creep is being sold as desirable at best, inevitable at worst, and laced through with ideology throughout. Belief in 'big data' dominates, intimating that with enough data, everything can be modeled and thus predicted. Crime could be solved, sales optimized and the climate saved. The concept of the future city is, like all cities before it, built on a faith in ideas.

III.

We Built This City on Rock and Roll
— Starship
A City Built on Rock and Roll Would Be Structurally Unsound
— T-shirt slogan, Threadless

Urbanism and city planning have always centered on idealized futures in which social theories manifest in physical form. As Paul Graham Raven notes,[3] the earliest town planners in the United Kingdom weren't architects but idealists and reformers who were spurred to create new societies rather than new buildings. Tabula rasa was the material of choice—assuming that new worlds couldn't be spliced into the old architectural brickwork of the Victorian metropolis, town planners marked out the 'green belt' of wild and agricultural land as the blank slate on which to build the new social order.

These idealisms persisted into the 20th century. Urban planners characterized their utopian cityscapes by forenames, different person-alities atop a similar platform: Garden! Radiant! Broadacre! Whilst each purported to offer a new world, all contained the underlying seam of sameness—top-down master-planning, driven by fervent belief about how to transform social wrongs into civic rights through ruthless terraforming of space and place.

Master-planned cities are seen through the master's eyes—from above and very far away. The imaginaries of the planners found form through dioramas, illustrations, maps and diagrams. Materialized through the god's eye view, the cities are compelling, peppered with shapes and details; sequins on a jumper. Ebeneezer Howard's illustrations of the *Garden City of Tomorrow* (1898) are gorgeous and hypnotic, somewhere between astronom-ical star chart and occult symbology. The scale models of Le Corbusier's *Ville Radieuse* (1930) beg to be touched; lush tactile circuits punctuated by the ribbed crosses of the high-rise blocks. What is strict and crushingly mech-anistic from below is pleasingly symmetric from above, all messy realities cleaned up and simplified; all troublesome factors tidied away. This is what

Donna Haraway describes as the "god trick"[4]—the passive, all-knowing, observing eye viewing from above, from nowhere, from simplicity. At a high enough distance, everyone looks the same.

Just as socio-technical regimes adapt to and shape the worlds they inhabit as Paul Graham Raven notes, civic utopianism has warped and adjusted to the ideologies and technologies of the times. Technologies and infrastructures have always been a part of greater solutionist systems of urban control, as exemplified by Robert Moses' segregationist Cross Bronx Expressway which favoured highways over subways[5].

In the latter half of the twentieth century, however, digital and networked technologies became increasingly utilized to mop up the social mess of extant urban realities. Keller Easterling describes the "spatial software" of the Free Trade Zones[6] that cluster around airports and seaports, lauding the free movement of capital. "Smart cities" ambiguously emerged from the murk of networked systems—fully automated, algorithmically managed, a marketing ploy for global construction firms and logistics companies, finan-cial imaginaries. This is technological solutionism[7] at the granular level. And yet, as in all master-planned urban spaces, visual and material culture has been critical in making the hard sell for these conceptions—and in doing so, normalizing assumptions about what cities should be.

Cities are increasingly transforming into complex sets of interlocking software. Transport networks, social care, education, pollution sensors, air traffic routes and any other of the thousands of systems that comprise the fabric of urban space push and pull at each other in synchronicity to keep the urban machine moving. This system is vast, complex and multifaceted. And so, a problem arises: just how do you sell it? How do you hawk its data to marketing firms or its overpriced flats to property tycoons? Or its broken healthcare to foreign investors and its polluted air to commuters?

The answer takes us back to the future. You sell not what the city is, but what it *will* be.

IV.

Ordinary, said Aunt Lydia, is what you are used to. This may not seem ordinary to you now, but after a time it will. It will become ordinary.
— Margaret Atwood, *The Handmaid's Tale*

Rewind a little.

Personal computers—PCs—slide into public consciousness in the 1980s. Sinclair Research launched its ZX Series in 1980; the Commodore 64 came along in early 1982, the Amiga 1000 in 1985.

As 'The Computer' was named machine of the year by *Time* magazine in 1982, the doyens of those machines needed a way to explain these new black boxes to the consumers they were trying to reach. Advertisers were keen to open up the possibility space of the PC; the power it would grant its users; the creativity and opportunity. The Amiga 1000 was famously promoted through a tech demo of Andy Warhol painting Debbie Harry using ProPaint,

[3] Paul Graham Raven, "Imagining the Impossible: The Shifting Role of Utopian Thought in Civic Planning, Science Fiction, and Futures Studies," *Journal of Futures Studies* 20 (2015): 2.

[4] Donna Haraway, "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective," *Feminist Studies* 14 (Autumn 1988): 3.

[5] Hilary Ballon and Kenneth T Jackson, *Robert Moses and the Modern City* (W.W. Norton and Company, 2007).

[6] Keller Easterling, *Extrastatecraft* (Cambridge, MA: MIT Press, 2014).

[7] Technological solutionism describes the set of beliefs that all problems can be benignly and effi–ciently solved by technologies.

Amiga's painting software. The implications of glamour, freedom, expression and beauty were built into the demo.

Technology can be conceived of as a set of causally linked techniques that turn a desire into an outcome. At a time when consumer products were marketed according to strict single-use regimes, the personal computer was opaque, multipurpose. Fridges kept food cold; kettles heated water; blenders liquefied. By contrast, the PC purported to be able to do dozens of things. Rather than being told what it was, consumers were told what it would do.

Futurity was seized on as a way of opening up and clarifying the possibility space. Isaac Asimov, the science fiction author, features prominently in RadioShack's early campaigns, replete with mystery fog and neon lighting. This alien device sliding into the home was predicated on the possibility of creation and power rather than function or purpose, sold on the basis of avowedly limitless possibilities.

And so to smart cities. The vague promises of power, possibility and futurity pushed into the public conscious around the personal computer have been appropriated by another plastic box. The continual narrative between the two is easy to track. The smart city—a vague, ill-defined phenomena which battens together cityspace and technological structures—is a dream, a promise of better, more fulfilled and enriched lives; a way to sell top-down master-planning and surveillance of the urban environment.

Just as the PC dominated the future space of popular culture, the smart city squats in the future space of the urban environment. The goal of the smart city project is to dominate the possibility space—to saturate popular consensus with promises of power and "betterness" in order to push out any opportunity of the alternative. Echoing its ancestors, this is largely an aesthetic project pursued through visual culture—an ordered grid to build on, commodified, quantified.

There are distinct aesthetics to smart city imaginaries, drawn in from architectural renders, aerial photography, simplified diagrams and real-time data visualization. They appear on building site hoardings, glossy adverts and fat PowerPoint slide decks. Smart city diagrams often present a grey box with opportunities literally jumping out of it; lamp posts, cars, buildings with dotted lines connecting them to metaphysical clouds and servers. Speculative rendered images flesh out these worlds; rolling landscapes filled with gleaming spires and bountiful greenery. The people here are snipped out of other worlds and haphazardly pasted in. Everything is set in some ambient future.

Gillian Rose[8] has extensively unpacked these tropes, noting the similar markings under the skin—different personalities atop a basic platform. In the smart city, data flows easily, beamed through the air via always-on Wi-Fi network. Everything is in motion—transport glows and flows; maps move; animations transform (Rose dryly recommends that "if you're stuck having to film something that doesn't move, overlay some animated graphics onto it"). Avoid any intimation that the suburbs exist. If you must show children, make sure that they're proximate to women. If you must show women, try

[8] Gillian Rose, "Ten top tips for making a smart city promotional video," *Visual/Method/Culture*, September 19, 2016, https://visualmethodculture.wordpress.com/2016/09/19/ten-top-tips-for-making-a-smart-city-promotional-video/.

to get away with not naming them. View it from above. Rose advises opening with an aerial view—"of the planet or of a city, it doesn't matter; just make sure you start from on high and zoom in," before moving to photorealistic shots, drone-captured fly-bys, sweeping panoramas.

Most of all, create a blank slate. Smart city visual culture presents a fixed future grounded in an absence of historical narrative, all the better to center technology as new, modern, better. History brings with it culture, politics, context, failure, unreliability; mess mess mess. A *tabula rasa* is critical for selling the smart urban imaginary.

V.

To fight monsters, we created monsters of our own
— Pacific Rim

Smart city aesthetics are not simply a playbook of rhetoric, visualities and subjectivities, but powerful toolkits for shaping expectations and summoning in the resources to change material realities. Expectations are performative. They bring together allies—investors, policymakers, industrial partners. They set agendas, providing a guiding vision to work towards. And they wipe the slate clean—the heartbreak of every failed project as soon as the next set of expectations arrive.

Critical approaches to visual and material culture, in the form of speculative and critical design (SCD), find their role in challenging these futures by seeing the means of their aesthetics. By creating a strong visceral relationship with the audience that builds on their own lived experience of the material and visual world, SCD projects can give the material experience of alternative futures and counter-narratives, enabling examination of the unquestioned atemporal trajectories on display in many urban and smart city imaginaries.

Tobias Revell's *New Mumbai* (2012), for instance, challenges the construction of the smart city at the behest of technology companies by speculating on a future seized through the criminal means of hijacked biotechnology. The tongue-in-cheek approach—giant mushrooms hover over the streets of Dharavi—draws the audience to challenge the white glass and neon hegemony of the 'smart city' through humour and absurdity, though is rooted in real scientific possibility and established community-driven initiatives such as mesh networks.

In Atelier Van Leishout's *Slave City* (2008), horror is the tool of engagement. The smart city on show here is based on a normalized and established approach to the body as machine. As in the film *Logan's Run*, humans are useful as machines for work and reproduction until such time as they are turned into energy in furnaces. The horrifying vision is offered up through simple architectural renderings and masterplans, satirizing the mechanistic and functionalist ideology underpinning the 'smart city' ideal.

Power of 8 (2008) by design studio Superflux inverts the masculinist God's Eye view of urban planning, whilst still considering how fantastical

technologies might save us from doom. Pulling together a team including a biotechnologist, a policy advisor and a permaculturalist, *Power of 8* acts as grassroots public engagement to imagine Acres Green, an alternate London suburb populated with technological interventions—synthetic bees, autonomous clouds—as radical and pervasive as anything found in a 'smart city,' but imagined from below.

Increasingly, SCD work finds its way back into the circles of the decision makers themselves. Drawing on SCD approaches, design studio Strange Telemetry has worked with the British Government on projects including *Senescence* (2015), on futures of ageing around work, travel and services; and *Future of Rail* (2016), exploring transport futures. This work shows an increasing awareness by policymakers of the need to both consider and materialize plural futures around long-term infrastructure planning.

These practices go beyond theoretical objections, utilizing the tools and objects of visual and material culture as a means of bringing alternatives to life. A dominant set of aesthetics are used to occupy the possibility space around urban futurity. In response, SCD practices harry and bother these aesthetics, spawning alternatives and using satire and horror as ways of challenging the hegemony of the 'smart city' vision.

This is not an equal battle. Glossy urban techno-futures are often supported by hefty chunks of capital, and targeted to particular ends—driving foreign investment, facilitating property sales and making a land-grab for a specific, bounded future. SCD work is less defined, often far less resourced operations which spill across different domains—student projects, public engagement, artwork, policy research, all and none of the above. What it offers, though, is the underside of the smart city's hard sell through material realism—both an interrogation of the unquestioned trajectories at play; and, crucially, interrogating the process by which these futures are designed, using their own tools to do so.

On the bright building-sized screen of the smart city imaginary, the future is fixed, inevitable, slick, apolitical. But all imaginaries are partial, temporary and unstable. Realities will always intrude. The 'god-trick' of seeing everything from nowhere can be undone by offering up a view from somewhere. The future may appear to have been taken hostage by the smart city, but resistance is always possible.