Future Visions of the Asian City: Scenario Art and the Utopian-Dystopian Spectrum

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Received September 01, 2016; Accepted October 19, 2016; Published October 22, 2016

Abstract

The futures of four different cities, from around Asia, are outlined via visual means using scenario art and interpretive written support. These four cities are: Dhaka (Bangladesh), Altay (Mongolia), Chongqing (China), and Bangalore (India). Their futures are presented in utopian terms, whereby each city aims to be something of an example of an 'ideal city' exhibiting widely-shared, socially-benevolent characteristics along with a marked degree of environmental welfare plus an abundant array of city-transforming mega-technology. In the vein of many previous utopian expressions, we offer some explanation about the way each of these four cities arrive at a utopian status (by the start of the 22nd Century) along with a description about the social, technological and economic background that may be present then and there. What emerges from this study are four versions of future Green cities that span the spectrum from 'ecotopia' to 'technotopia' and from 'utopia' to 'dystopia'. This process ends up outlining, via art and design, some of the choices that many future Asian cities may have to involve themselves with as they work to survive the global environmental crisis and become more livable and more sustainable.

Keywords: Eco-City, Smart-City, Future, Asia, Utopia, Sustainability

Introduction

Utopia is a term used to describe a real or imaginary place where the social setting is completely (or mostly) resplendent with all things good and harmonious, and in which the individuals are completely (or mostly) content and happy. Utopian visions for cities have appeared in non-fictional form (see examples recorded in Segal, 2012), in fictional form (see examples recorded in Carrey, 2002), and, so say some, even in reality (see examples recorded in Fishman, 1977). The overall emergence of 'social harmony' and 'individual happiness' in any utopian city is sometimes based on a single lone feature (the abolition of all human suffering, for instance, or the

achievement of full equality, for example) but it is more likely to be posited in a multidimensional manner involving many features. To chart the overall character of an archetypal utopia in an economical way, please allow me to list some common (though by no means universal) themes that have been explored in past narratives about utopian cities:

- social cohesion and tolerance melds together seamlessly with human aspirations and personal freedom,
- peace and love overcome war and hatred,
- religious unity (or acceptance of religious diversity and agnosticism) allows for personal growth and spiritual fulfilment,
- science and technology is used for benevolent purposes only, not for repression, domination, division, or conflict.
- material welfare is achieved for all without recourse to greed or exploitation,
- work, if it exists, is almost always enjoyable and human life is almost always satisfying.
- decision-making regarding specific modes of social organization is a shared and egalitarian activity.

These characteristics presented above we've distilled from various writers of various political hues such as Mumford (1964), Callenbach (1975), Levitas (1990), DeGeus (1999) Carrey (2000), Jameson (2005), Spanos (2008), Suvin (2010), Cleays (2011) and many others. Their listing here is meant to quickly convey the (now rather traditionalized) civic principles that utopian writers have sought to develop -- and the sort of civic principles that the following scenarios aspire or allude to.

Utopia is a five centuries old concept. The English statesman Thomas More coined the term in 1516 as he used it as the title of a book and the island paradise described within (More, 1516). This makes the year 2016 the 500th anniversary of Utopia. Thomas More was being intentionally ambiguous as he used the word 'Utopia' though, since in the process of bringing it from the Greek language into an English form, it could refer to either a "good land" or a "nowhere land" (or, indeed, both).

To design a utopian future often means to be at once imaginative and optimistic, and also critical and subversive. Thomas More carved out the template to this enduring pattern when he painted his optimistic account of an idealistic Utopia for a fantasy island in the Atlantic ocean somewhere within which was embedded a subtle and subversive critique of Henry Tudor's England (Marius, 1999, Halpin, 2011). Since then, when utopian thinkers have set out to design or discover the best possible world for tomorrow, it is usually believed they are probably being critical, even cynical, about some aspect of their own present day society; cloaking their prognosis or master-planning in either seductive hope or biting satire (Levitas, 1990; Claes, 2011; Segal, 2012). This is the same impulse that flows through the utopian scenarios presented here below, with regards to the social role and mythic potentials and promises of both technology and ecology, as we seek to imagine utopian cities for approximately one hundred years into the future

Attitudes toward the utopian impulse in art and academia have shifted around (as explained by almost all the authors referenced above). Sometimes utopianism is regarded as being unproductive fantasy -- dangerous because it takes focus away from social reality. Others see utopian idealism as a practical step toward potential change; if only through raising awareness of problems and deficiencies. Our conclusion on this point, after this small study, is that utopian experiments, in the hands of scholars and students that take them seriously, are practical ways to

engage the mind of any person who has lived in an urban environment and might have ideas about how they can improve it.

Since the realization of the environmental crisis in the 1960s and 1970s (Freidmann, 2010), utopian ideas in the West have also tried to add ideas of ecological harmony to those of social harmony and this type of utopia has been coined ‘ecotopia’ (for example, see Callenbach, 1975; Levitas, 2013). Many an ecotopian thinker would probably accept the basic principles listed above but they would say that ecological principles must also be valued and adhered to. Thus, personal freedoms and material welfare should be enjoyed without harming the natural environment (or depleting resources for future generations) and religions should expand their horizon to value non-human members of creation. In an ecotopia, the relationship of society to nature is changed so that humans act to fundamentally preserve or defend either the entire biosphere or some facet of the natural world.

According to this line of thought, because the world is in a global environmental crisis (Friedman, 2008) any posited utopia may only be sustainable if the well-being of the world’s ecology is of prime concern; so we here below posit varying utopian futures of four particular cities across Asia which have all become robustly sustainable from an ecological point of view. Each one of the scenarios contains a description of what the city’s future consists of, and also some explanation of how they may transform from what they are today to how they are envisioned at the start of the next century (including the way that technology may influence this process of urban change).

The future of the chosen cities is presented in a form of ‘scenario art’. Lederwasch (2012) recently announced ‘scenario art’ to be a new and developing methodology for Future Studies. For her, this is a formalized way to get decision-makers to explore alternative future plans at a small or large-scale. We take note of this way of imagining, debating, and communicating decisions, but acknowledge that art -- in theory and in practice -- has often revealed in intense reflection and speculation over and above any practical factors.

Dhaka in the 22nd Century

Dhaka, the seventeen million strong megacity of Bangladesh, has severe problems with the silting-up of its harbor and waterways. Transportation and the marine environment are both so grossly degraded by this silting that they are each being brought to the point of dysfunction (Luck, 2008). The silting is a natural process, the rivers bring many tons of soil to the coastal waters every year, but it is made exponentially worse through illegal dumping of garbage, deforestation, sea-level rise, and human-created soil erosion (Church, J.A. *et al*, 2001; Karakiewicz, 2005; and Fuchs, 2010).

In this scenario, Dhaka in the late 21st century attempts to deal with these issues together. Dredging machines will dig-up and concentrate silt from Dhaka’s harbor and build them into mounds upon which new mini-cities can be built via mega-scale earthen-engineering (for contemporary examples of mega-engineering, see: Olds, 2002 and Brunn, ed, 2011).

How could this to be financed? Partially via government investment, partially by private investment, and partially by compensation provided by signatory nations of Climate Treaties who become legally obliged to reimburse those poorer nations adversely affected from climate change (see Bossink, 2012 for contemporary examples in other geographical sites). Mostly, though, these mini-cities are built by Dhaka people themselves; the urban poor predominantly, since these are

the people actively looking for a home and they take the opportunity to start building on new islands as soon as they emerge from the water.

Fig. 1. 22nd Century Dhaka, graphic by the authors.

Currently, the slum communities of modern Dhaka are often criticized nowadays for clogging up the waterways with houses built on wooden stilts within them. These are said to exacerbate flooding but the success of these communities in colonizing silted up areas, with few resources, and the way they solve their own problems should impress those in local government. In the future, these communities are given permits to construct a 'mini-city' on a 'test island'. They're given no funds, no resources, no technical help, only the legal indemnity against prosecution for occupying newly emerged land.

By the start of the 22nd century, a whole series of reclaimed island cities are colonized in the same way. The sustainability of each mini-city will always be a prime concern to the residents since the physical limits of each will discourage accumulation of physical assets. Instead, everybody on the new islands agree that any profit will be re-invested into shared civic projects like eco-fishing, wave energy systems, and environmental education; thus allowing the mini-cities to develop richer communities via non-materialistic lifestyles.

Altay in the 22nd Century

The Altay people are the peoples surrounding the Altay Mountains; a high range that marks the border between four nations of Central Asia: Mongolia, Russia, Kazakhstan and China. They've inhabited this area for over one-thousand years since their ancestors moved from the other areas in Western Asia. Today, in 2016, there are four cities with the name 'Altay' located within four provinces of the same name; one in Mongolia, one in Russia, one in Kazakhstan, and one in China. In each separate Altay province, the Altay people have been pressured, regulated, assimilated, and outnumbered by the dominant Mongols, Russians, Kazakhs, and Han Chinese

populations. Altay ethnic nationalism in turn has been suppressed in a number of ways by the authorities of these states, for example:

- a) by denying they have a common heritage,
- b) by dividing them from each other, and
- c) by disallowing their Burkhanist religion (Rossabi, 2004; Mackerras, 2013; Mikahilove, 2013)

The Altay have also suffered from environmental injustices, their homelands being pitted with polluting mines, military testing sites, and dirty factories (Li *et al*, eds, 2015; Mackerras, 2013; Mikahilove, 2013).

Fig.2. 22nd Century Altay, graphic by the authors.

Maybe, in the coming century, the disparate Altay people in each of the four nations will keep dealing with this as best they can. Or maybe, as they detect domestic discord that weakens Mongolian, Russian, Kazak or Chinese management of the area, they will band together to mark out an independent 'unified' Altay territory.

In this scenario pictured here, the Altay people organize together to push into the mountains near the border between the four countries. Here they begin to build a new Altay settlement. This new settlement is so deep in impenetrable mountains, and so shrouded in snow and an ever-present mist, it's invisible from the air and inaccessible by vehicle. If any one of the four controlling nations send in an military or police brigade, the Altay people know they can walk a few thousand yards to escape over the border to the next nation. They also know it's extremely unlikely that all of Mongolia, Russia, Kazakhstan, and China could cooperate and agree to advance on the new Altay City at the same time.

The Altay mountain range may seem like a far too challenging a place to found a new city but the Altay mountains are one of the few areas of the world acknowledged as being unaffected by climate change (Wiegandt, 2008). Whilst the Mongolian, Kazak and Russian grasslands shrivel for lack of water, and China's super-monsoons flood Chinese land with too much water, the Altay peoples will live peacefully together in a predictable natural environment they can call home.

Chongqing in the 22nd Century

Fig. 3. 22nd Century Chongqing, graphic by the authors.

Chongqing in modern day china is a 'mountain city' but one which is being radically disturbed. Long ago Chongqing was the home of the Qiang ethnic people (Rossabi, 2004). In many places, they planted white stones around their granite homes to honor their mountain god, whilst farming beachwheat as their staple food near streams and rivers. Hundreds of years ago, though, Chongqing was invaded and overtaken by the Chinese Han (Rossabi, 2004; Mackerras, 2013).

Chongqing nowadays is a city of more than eight million set among a hundred hills and mountains near various rivers and lakes. Chongqing is in the midst of expansion; transforming into a megacity on the scale of Shanghai. However, the manner by which Chongqing is mega-sizing is grossly anti-ecological. Hundreds of mountains around the city are being blown-up or bulldozed and their rocky remains used to fill in the valleys. Some geologists have expressed their worries over this enterprise; pointing to risks of landslides, sinkholes, floods, and massive

pollution of both the water and land. But the mountain-clearing goes on regardless (Koebler, 2014).

By the mid-21st Century, it is probable there will be massive pollution events and huge land collapses (Brunn, 2010; Koebler, 2014) which alter the topography and hydrology of the landscape. Parts of Chongqing may suffer near total destruction. Many Chongqing residents will be forced to leave their place of domicile because they will have no homes left or no jobs left, only an unstable pock-marked city.

By the start of the 22nd century though, things may have settled down. Some mountains have survived, though carved into bizarre shapes, and maybe they are stable enough to live upon. With the Chinese leaving for other places, the Qiang people return, from all around China, and they set about rebuilding their homes and planting their buckwheat. They also replace the sacred white stones to honor the mountains that have survived.

Bangalore in the 22nd Century

Fig 4: 22nd century Bangalore, graphic by authors.

Bangalore is one of the largest cities in India, and is generally known as 'India's Silicon Valley' for all its various information technology industries. Bangalore's densely-packed overflowing chaotic form means the city authorities cannot really keep tabs on how many people there are within it but ten million is a good guess—with an extra five hundred people arriving every day by rail, by bus or by walking.

To say Bangalore is a city of contrasts is an understatement. As well as high-tech companies and wealthy technopreneurs, there are millions of people living in slums and tens of thousands of people living in some form of slavery, either as indentured laborers or illegally trafficked-immigrants. In some areas, glamorous high-rise towers dominate the scenery, whilst other areas comprise squalid shanty towns. Despite all the poverty and squalor (or maybe in an attempt to

hide it away) the current Indian government is on a drive to make a number of brand new shiny 'smart cities' or 'infotech hubs' around the nation, including some within and around the city of Bangalore (Townsend, 2014).

Fast-forward to the future scenario depicted here: Bangalore in the 22nd century, where a 'City Within a City' has emerged. This a designated zone of IT excellence within Bangalore and within India where InfoTech is cultivated, researched, developed, and then rolled-out across each town and city of the entire nation. This 'City Within a City' will go by many monikers, none of them very original: *The City of the Future*, *India's Smartest City*, or as Bangalore's 22nd Century InfoTech class like to call it: *Itopia*.

To build Itopia, India's InfoTech corporations work together in league with Bangalore's real estate moguls and construction companies, to clear away slums, drain wetlands, and build their ten square mile InfoTech paradise. It is then populated it with happy IT professionals that get to live and work in a clean and green tree-lined setting and who commute on uncrowded streets in futuristic self-driven solar-powered cars. Really, Bangalore 2121 is not much more than a pristine gated-community for techie-nerds but like other techno-vanity megaprojects around the nation, Itopia will be promoted as being for ALL India. Of course, Itopia will need some I-security features to keep out the poor of Bangalore, so the roads and infrastructure don't get all jammed-up, and so Itopians can work productively in peace and tranquility.

Building Itopia won't just happen because of a few ideas put forward by visionaries, though. It will be a massively expensive proposition for both public bodies and for the private companies involved. There will, however, be generous financial incentives offered to private companies to invest in Itopia, including tax-breaks, free state-built infrastructure, and favorable land laws. Apart from all the new inventions and commerce, another reason for the Indian state to offer support for Itopia will be because it will be Green. Not just any kind of Green, mind you, it will be *Smart Green*. For example:

-*smart windows* will open and close automatically depending upon the prevailing weather conditions. If it's too hot outside, the windows will close. If it's breezy outside, they will open. If the sun is shining brightly, the windows will detect this and become more opaque to keep the Itopians nice and cool inside.

-*smart fridges* connected to smart cookers will burn just the right amount of gas to make Itopians their favorite dish just the way they like it, though maybe with a bit more added Vitamin B if their smart toothbrush detected that it was lacking in their body this morning.

-*smart trash systems* suck domestic waste through underground chutes where it is automatically sorted and recycled, buried, or burned for fuel. These chutes are connected to all apartment buildings and offices. Consequently, there are no untidy street-corner trash cans or noisy garbage trucks needed.

-*smart toilets* in Itopia knows all about your toilet habits and it'll use the exact right amount of water, not a drop more, to flush it away.

-*smart sewers* will ensure waste-water in Itopia will hurtle through pipes to recycling plants at 100 miles per hour; faster than the average Indian train. The pipes will filter what passes through them, so as to divert recyclable elements back to a food production system. Initially, the smart sewers also send nitrates and phosphates off to fertilize pretty Itopian gardens but over time the infotechies decide they're not that interested in gardens so much and so they start building even more smart high-tech buildings on top of them.

-*smart eco-security* will monitor potential environmental transgressions and alert Bangalore's Green cops to take care of the perpetrators,

-*smart traffic lights* will monitor the city's self-driving cars and send them along the ideal route,

-*smart parking* deploys sensors around the city to monitor when spaces are opening up, and guides cars to the best spot along the most fuel-efficient route,

All of this is very utopian for those living *within* Itopia but for those *outside*, it's another story, since:

-many Bangalore slum-dwellers don't have any kind of toilet; let alone a smart one. They are often forced to defecate into a bag then fling it into the alleys—so called 'flying toilets'. (Boo, 2014).

-most Bangalore people don't have a car, let alone a self-driven one. They move around the city on foot or by bicycle, both far more ecofriendly than smart cars but nevertheless far more dangerous because of all the motorized traffic to contend with (Hardoy, J.E. *et al*, 2001),

-many Bangalore dwellers don't have regular access to electricity, nor plumbing, nor a sewage system, nor education or training. And for sure, none of these people could ever afford to live in Itopia. Once upon a time, they might have got unskilled jobs to do some cleaning or recycling for an InfoTech company but by the start of the 22nd century, Itopia is so *smart* that even these jobs are taken over by IT robots.

-when the Indian government in the past has decided to build any kind of new urban techno-project, it usually involves kicking the poor out of some place and knocking down their houses (Boo, 2014; Townsend, 2014). This same pattern will likely be the same fate of those that have to make way for Itopia.

All in all, Indian society is full of various social barriers between 'the haves' and 'the have-nots' and Itopia will make yet another. One good thing though, all this reliance and dependence on smart technology will eventually make Itopians so unable to think for themselves, so unused to making decisions (Townsend 2014) that they might easily be out-thought and over-whelmed by the millions of slum-dwellers and slave-workers of future Bangalore.

Conclusions

So are these four varying expressions of Green utopias meant to be earnest and serious or are they mere satire and speculation? Are they asking for us to identify a specific future for a specific city or are they just lampooning the techno-policies and social practices of today to warn us of where we are heading? Do they not confuse utopia with dystopia; and ecotopia with technotopia?

And, are they suggesting that, in Asia, there is some unfortunate abusive relationship between technology and social futures?

Or are they ambivalent and ambiguous about the supposed liberating effect of technology?

Or do they, in the end, grudgingly admit that technology is going to win the way for those who manage to gain control of it?

The answer is to ALL of these questions, though paradoxical, is probably: 'yes'.

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