

A STEAMPUNK CITY REIMAGINED: EXPLORING CHINA'S ECOLOGICAL CIVILIZATION, HUMAN-NATURE RELATIONS AND THE FUTURE OF URBAN SUSTAINABILITY

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RESUMO: Neste ensaio são apresentadas breves reflexões sobre cidades, sustentabilidade e civilização. Tomando o exemplo da cidade de Chongqing, no sudoeste da China, que tem sido o ponto de partida para muitas visões steampunk de um futuro urbano distópico dominado pela tecnologia, defendo que, sob a visão do país para a Construção de uma Civilização Ecológica, como a próxima etapa do desenvolvimento sob o socialismo chinês, a cidade apresenta um conjunto de exemplos para reavaliar as relações homem-natureza que, ao mesmo tempo que fazem referência às raízes filosóficas e culturais, permitem repensar as relações rural-urbanas que estão presentes na estratégia de desenvolvimento da cidade e que vão muito além o território urbano. Pretendo mostrar como será necessária uma nova compreensão da nossa relação com a tecnologia e os ecossistemas para alcançar tal mudança de paradigma.

Palavras-chave: Desenvolvimento urbano, relações homem-natureza, cyberpunk.

ABSTRACT: In this essay, brief reflections about cities, sustainability and civilization are presented. Taking the example of the Southwestern Chinese city of Chongqing that has been the starting point for many steampunk visions of a dystopian urban future that is dominated by technology, I argue that under the country's vision for the Construction of an Ecological Civilization, as the next stage of development under Chinese socialism, the city presents an array of examples to reassess human-nature relations that, while making reference to philosophical and cultural roots, allow a rethinking of rural-urban relations that are present in the city's development strategy that go far beyond the urban territory. I intend to show how a new understanding of our relation with technology and ecosystems will be necessary to achieve such a paradigm shift. Keywords: Urban development, human-nature relations, cyberpunk.

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INTRODUCTION

Envisioning a desirable future is a necessary exercise in times of unprecedented global crises. Such visions, however, seem to be more easily conveyed when thinking about the "other," be it in geopolitical or cultural terms and they are carrying over into many different fields of study. This essay takes the ongoing de-Westernization of sociology (ROULLEAU-BERGER et al., 2023), and more specifically environmental sociology (CHEN, 2018; WEINS et al., 2023; ZINDA et al., 2018), as a starting point to reflect about sustainability visions in a fascinating case study that has a deep relationship with sinofuturism and the cyberpunk movement. Thinking about the future has become an issue that is more intricately connected to the environment than even before. The growing centrality of climate issues in an increasingly urbanizing world makes it necessary to discuss the direction urban development is headed for and I would like to suggest here that Chongqing invites us to such a reflection like few other places.

In this article, I explore some of the main issues pertaining human-nature relations, as well as technological and scientific exaltation about hopes for progress in the rural and the urban sphere of Chongqing, in Southwestern China. These are connected to the ideas presented in the leadership's vision for the "Construction of an Ecological Civilization" as a next stage of development to overcome industrial civilization. In connecting sinofuturism with social science literature on the environment, I hope to catch the readers' imagination and critical reflection on the examples presented here and engage in a dialogue about the potentials that these future visions can bring to a sustainability debate that desperately needs new ideas and dialogues across disciplines.

SUSTAINABILITY VISIONS IN SINOFUTURISM

In her reflection about the action role-playing video game Cyberpunk 2077 (赛博朋克2077), Ji Ziying (**汲子**樱, 2021) presents some reflections on the aesthetics of sinofuturist visions that are presented in popular culture. The essay, entitled "anti-modern ecological cry"

(fan xiandaixing de shengtai nahan 反现代性的生态呐喊) presents a critique of the usually quite desperate scenarios of fully urbanized spaces with high rise buildings that do not leave even a trace of "the natural." Sustainability seems to only rarely be an issue in sinofuturism, and if it is, it is mostly in a grim Malthusian perspective of scarcity.

In her essay, Ji Ziying calls for the importance of upholding a dialectical perspective in the development of a kind of organic Marxist concept of Ecological Civilization, a slogan and umbrella concept that has been guiding the Communist Party of China's (CPC) rhetoric in response to the environmental crisis since 2007, when the country became the biggest net emitter of CO2. The presented "Eco-Civilization" has been termed in the literature as a "Chinese concept of sustainability" (GORON, 2018) but also as a socio-technical imaginary of a sustainable eco-socialist future under the leadership of the CPC (HANSEN et al., 2018). It is understood in the Chinese Marxist debate as a successor to capitalism (GARE, 2012) and a new stage of development following agricultural and industrial civilization (PAN, 2016; WEINS et al., 2023). It does not, however, mean green industrial civilization, as which it is often misinterpreted as (ZHANG, Y., 2021).

What better object to reflect on Chinese sustainability visions than a civilizational aspiration for the current ecological crisis? Let us draw on some of the ideas from Lawrence Lek's (SINOFUTURISM 中华未来主义 (1839 - 2046 AD), 2018) video essay on Sinofuturism to reflect on the kinds of sustainability visions presented in policy discourse in light of the country's recent efforts of establishing its own definitions of what future green cities will look like under its Eco-Civilization. Similar to its approach to large-scale urbanization (REN, 2011), the use of the term "construction" in Chinese discourse, political campaigns and scientific literature on the environment does not shy away from using mechanistic language for referring to the ecosystems, as becomes clear in the "construction" of campaign slogans.

This is an idea that in a Western understanding often contradicts the very idea of nature, as a pristine place, untouched by humans but follows a clear tradition and a more holistic understanding of human-nature relations in the long run. Han (2015, p. 16–20) suggests that by zooming out, imagining an alien civilization's view on earth over the course of decades, they may judge our current stage of development of

humanity with very different eyes. While the changes that humans have caused since the colonial age show what many see as a rather parasitic relation to the Earth, recent signs of the recovery of vegetation cover, especially in China and India (CHEN et al., 2019), could be seen as an organic reaction of life reestablishing itself and its environment in the wake of increasingly harsher conditions and extreme climate events (BECK, 2016).

Following the "aggressive voluntary development efforts of the concerned local governments and communities" (CHANG, 2017, p. 36) the harsh effects and accumulated risks of air, water and soil contamination caused by China's rapid industrial development became too brutal to ignore. Several authors have argued that Eco-Civilization is a response to these issues (MARKS, 2017). But rather than shamefully taking on the problems, Eco-Civilization presents a proud and nationalistic vision for China's future (WEINS et al., 2023). As written into the CPC and national constitution, Chinese environmental governance aims to 'construct an Ecological Civilization' and 'build a beautiful China' (MARINELLI, 2018). The aspiration, as expressed through the rhetoric of Eco-Civilization, is to neither control nor to conquer nature, but to adhere to its rules and rhythms in order to realize shared prosperity (ZHANG, M., 2021). In this line of thought, the visions that are emerging through policy changes are transformations of the Chinese landscape that may eventually aim at a transformation at planetary scale.

Arguably the most fundamental (and certainly most visible) of those transformations started in the government's relation to forests. After the 1997 drought in the North and the 1998 Yangtze River floods, the country's biggest program in ecological restoration was initiated: the Grain for Green Program (DELANG; YUAN, 2015). Despite its size though, it has received relatively little attention outside of scientific debates that do not have a direct connection with the country (BOUGHEN, 2021). Started in 1999 as an initiative to combat desertification and support flood control in the country's Western regions, it quickly evolved into a multi-phase mega project that spans 25 (mostly inland) provinces and has affected more than 120 million people in almost 2,000 rural counties. The interventions that make up the province-crossing projects of the Grain for Green program are referred to as "forest construction" (senlin jianshe 森林建设) or tree building/production (zaolin 造林).

Although linking these terms is uncommon in the West, the use of the terms 'building' or 'constructing' (jianshe 建设) when it comes to ecosystems is quite common in political discourse in China, not only for forests but for many other activities.

The results from the process of massive tree planting initiated more than two decades ago are starting to show and cause polemics about the definition of what "real" forests and "nature" are (CHEN et al., 2019). This is especially the case, as the "overwhelming" carbon mitigation potential of trees (BASTIN et al., 2019; CARRINGTON, 2019) has turned into a geopolitical issue about the definition of the degree to which nature is, or can be man-made. This kind of forestry obviously has little to do with (hegemonic) Western definitions of nature conservation, where real nature is understood as untouched ecosystems that have evolved over thousands of years, and in most cases, without any human occupation or intervention. Such views, despite their persistent dominance, are starting to crack, e.g. due to mounting evidence for the importance of human intervention in the creation of present day biodiversity in the Amazon (DENEVAN, 1992) and the studies that are contributing to the novel ecosystems debate (COLLIER, 2015). Based on the work by Zhu (2022), I would like to make this a hook for discussing precisely how future visions from China are challenging us, but maybe also helping to do some necessary rethinking of our role in nature in the face of climate catastrophe.

Lek (2018, n.p.) affirms in his video essay that "sinofuturism embraces clichés, many of which are reinforced by East and West," a dichotomy that is often misused for othering, especially when it comes to criticizing essential ideas. Without wanting to essentialize and reorientalize China's "environmental crisis" (LORD, 2018), I would like to point to some ideas that are put into practice in its policies that show the pragmatism in which human intervention in ecological systems and the use of technology (in its many dimensions) is practiced in China and how there can point us to some fundamental questions about our own relation with nature that Western thought has just gotten wrong over and over. This is suggested for instance in the writings of Hong Kong philosopher Yuk Hui in a recent piece on cybernetics (HUI, 2020). Taking these ideas for our exploration of redefining human-nature relations, we can join some of those ideas about cybernetics and Asian philosophical traditions. Hui's engagement with cybernetics intersects with various Asian philosophical concepts, to provide a better understanding of our

interconnectedness with nature. In the Daoist notion of non-action (wu wei 无为), the notion of harmony and balance with the natural world is emphasized, which resonates with the focus of cybernetics on maintaining equilibrium within systems. There is a deeper understanding about the alignment with the natural order, which mirrors cybernetics' principles of feedback and adaptation to achieve stability and sustainability. Moreover, the holistic worldview prevalent in many Asian traditions often encourages a more integrated approach to technology, recognizing that technological advancements must be in harmony with nature rather than dominating or exploiting it.

When reading the news about green urbanization in China, there is talk about linking the "city's urban fabric and ecological systems" (SOUTH CHINA MORNING POST, 2020) which connect to those ideas of bringing a lost balance back to the urban system. In his video essay, Lek radically affirms that "Sinofuturim absorbs everything, nothing is sacred" with the backdrop of images of stereotypical (one might even say kitsch) images of "sustainable" cityscapes. Again, taking a step back and thinking about these images in the broader context, sociologist Fei Xiaotong (2015, p. 201) affirms that Chinese culture has a "capacity to accept and absorb as a fundamental way of being [which] probably developed over the millennia in response to changing overall environments and the need for mutual exchanges of resources and then gradually evolved into a worldview based on "harmony and balance." Rodenbiker (2022) suggests that such historically and philosophically founded approaches to ecological and landscape engineering affirm the desire to achieve an "ecological sublime," he also reminds us that ecology has also made its way into the CPC's reason of being and that large-scale state interventions are part of a bigger system of what he coined as "Ecological State" (RODENBIKER, 2023).

CASE STUDY: AN ECO-CIVILIZED VISION FOR CHONGQING

When it comes to futuristic cities, China has many instigating examples that represent different local and national aspirations to showcase a certain type of "Chinese style" development. Shanghai for instance, has been a melting pot of ideas from abroad and as the founding place of the CPC continues to have an intricate role in the modernization of the direction of national development paradigms. When it increasingly took on the role as China's financial hub in the early 2000s, its way to modernization through the leadership of the party showed continued malleability, but always maintaining its avant-gardism (DYNON, 2011). To the joy of tech-savvy observers (and certainly the frustration of many engineers in Germany where the project never left the pilot phase), the city's Pudong airport is connected by the world's first maglev train and today has the world's biggest metro system. Another example is the "Silicon Valley of hardware" that has emerged in Shenzhen in concerted (and successful) attempts in creating a national innovation system that would depend less and less on foreign technology (DU, 2020). Having developed in less than 40 years, after becoming the country's first special economic zone that aided in reintegrating Chinese with the world economy, its planning allowed it to start fresh and experiment with new planning ideas for the 21st century. In collaboration with the United Nations World Conservation Monitoring Centre, Shenzhen has committed to giving nature a central space in its urban planning and in complying with goals set at the international level while integrating harmony with nature and new technologies (UNWCMC, 2021). Shenzhen, as a city drawn up in just a few decades, however, lacks the central characteristics that make up Eco-Civilization's historical components and the combination of the new and the old in constructing a sustainable sinofuturist city.

Tsinghua scholar Cui Zhiyan (2011, p. 647) suggested that "if Shenzhen was a symbol of China in the 1980s, and Pudong (the new part of Shanghai) in the 1990s, then Chongqing embodies China in the first decade of the twenty-first century". Situated on the upper reaches of the Yangtze River, in the Sichuan basin, it has character and power of attraction throughout its history but certainly the vivid dynamism it embodied at the beginning of the century is its strongest charme. With over 30 million inhabitants, it is technically the most populous municipality in the world - albeit, at roughly the size of Austria, this definition may be disputable. Due to its strategic and well-guarded inland

position, Chongqing had a short period as wartime capital when the Japanese invaded the East coast in World War 2. From this area, not only lots of its heavy industry sector carries over some weight to this day (BAO et al., 2019) but also some cultural productions and a particular film culture that tried to brand its own identity challenging an emerging global Hollywood standard (BAO, 2009).

In China, Chongqing is probably most famous for its role in the construction of the Three Gorges Dam, the world's largest hydropower dam that contributed to it gaining the special status of a city-province, elevating it to the same political ranks as Beijing, Shanghai and Tianjin. Following a period of strong political decentralization, the city's rapid urbanization and break-neck economic growth in the 2000-2010s were driven by an approach of particularly state-driven policies during an era where marketization was the leading ideology. Under its "Chongqing Model" period, which ended up not only revealing itself as an ideological but also as a political and personal battlefield (CHENG, 2013; DOWNIE, 2014; LANTING, 2016; LIM; HORESH, 2017). The Chongqing Model complementing to the national "Chinese Dream" (Zhongguo meng 中国梦), tried to tackle the great contradictions (Li Xiguang even speaks of a "dual personality") in the promise for development for all with the realities of the hukou system (LI, 2010). In a "territorial urbanization" very specific to Chongqing, the local government tried to harmonize dynamic land use change from rural to urban and, through close state coordination (HIDALGO MARTINEZ; CARTIER, 2017) - a feature that Chongqing's experience as a sinofuturist vision certainly revolves around.

Chongqing's relatively unique topography as a mega city in mountainous terrain, adds to the imaginary of alternative use of space, such as elevators between streets, as well as many types of bridges and cable cars to connect and level life in the city. From a sustainability standpoint, the city's many small spaces that are unsuitable for many other uses, such as walls that exist due to the differences in level, offer huge potential for interacting with and making use of biodiversity (CHEN, Chundi et al., 2020). Also in terms of mobility, Chongqing's topography challenges road and rail systems to come up with more creative and innovative ways (JIANG et al., 2018) - again, trying to guarantee livability with close state coordination. One such example is the monorail station inside of a building at Liziba station (李子坝站) which was designed by Chongqing University's architect Ye Tianyi (叶天义). These have created spectacular urban feats - a hallmark of sinofuturism -

but have also contributed to urban sprawl, especially in the city's Western region. In his thesis, Asa Roast (2019, p. 59) explored the configuration of peripheral modernities in Chongqing and the "ways in which housing marketing projected an image of 'Sino-futurism'" in new housing projects. He notes (2019, p. 11) how "in many representations Chongqing symbolises [...] the future of the urban" which often remains unattainable to informal farmers on the outskirts of the city. Here, the promises of modernity, or the Chinese Dream, have not yet arrived. The reality on the ground stands in stark contrast to the shiny images of real estate (even if with social housing purposes) when they meet traditional local farmer patches in and around these neighborhoods.

Chongqing has also been a starting point for many imaginaries of Steampunk cities. As a reader interested in Sinofuturism, you have most certainly already seen the city's skyline, whether modified for a future vision or just as an example of an already existing but rather unknown megacity somewhere in a far-away place in the imagination. Blogger Ajia (阿佳) calls it a "city with cyberpunk temperament and favorite city for all kinds of photographers" (AJIA (阿佳), 2022) and this becomes clear when looking at photo material (Figure 1) of the famous old town complex of Hongya Cave (Hongya dong 洪崖洞) at the shores of the Yangtze River. Attracting creative people mostly from within China that are interested in Chongqing's mixture of historical Tang Dynasty heritage, industrial spaces from World War II and its more recent architectural avant-garde, it has been pioneering the integration of rural and urban, of the historical and the modern like few other places.



Figure 1. Night view of Hongya Cave in Chongqing. Source: Ajia, 2022.

In an analysis of a new type of sustainable development index that intends to overcome the nature-culture divide by providing both "origin" and "modernization" variables, Bian et al. (2018) affirm the unique combination of Chongqing's urban development. In the "origin" dimension, the authors understand the fusion of local natural aspects and traditional culture to express harmony between nature and culture, while "modernization" is defined within a triangle of economic, societal and intelligence/technology factors. Even if these factors only superficially touch on the materialization of Eco-Civilization, its consideration of important socio-historical and natural factors that are central

to Chinese culture, represents an important first step in a direction that a lot of Western sustainability science does not seem to go and which in Chongqing's urban planning practice find important consideration.

In China's national policy scenario however, the city's image is much less recognized as an avant-garde (certainly due to its controversial Chongqing Model, see e.g. Lanting, 2016) but rather in terms of its development potential for a new form of rural-urban relations, highlighted e.g. by Zhang et al. (2009). This topic is intriguingly related to real estate speculation and land values in the development zones on the fringes of Chongqing, a topic of much debate in economic studies on China, looking at developments in the real estate market (SZELENYI, 2011). Over the decades, there have been different types of development banks projects that proposed such experiments (ASIAN DEVELOPMENT BANK, 2022; WORLD BANK, 2010) and even a full-fledged transformation strategy for turing Chongqing into a global city by 2035 (WORLD BANK, 2019). The China-based Global Environmental Institute and the US-based Center for Climate Strategies formed the China-US Eco Partnership program to adapt methodologies and tools originally conceived for US state climate action plans, to the subnational and municipal context of China. The initiative worked with the Chinese Academy of Governance and the Tianjin Academy of Governance and piloted the toolkit in Chongqing (YU et al., 2015) where experimentation with eco-compensations were started during the "Greening Chongqing" Campaign.

The norms proposed by these rather hegemonic consultancies reproduce global trends of compacting urbanization and overall carry a critical tone of strong state control, as is most prominently expressed in the calls for more marketization and the liberalization of labor migration. As a significant source of migrants to the coastal production hubs around Shanghai, Tianjin and Guangzhou, due to the hukou (\Box) regulation system, these migrants are now (especially after the pandemic) more inclined to go back to their regions of origin in the countryside (THÜNKEN, 2020) and following their roots to "the soil" (FEI, 1992).

In their research on one of the projects to tackle the expected ecological and poverty related migration of 350,000-500,000 people, Chongqing University researchers Luo and Tang (2020) study the village of Junyun (缙云村) to point out some of the central aspects of public space, from landscaping around fengshui thought to the social characteristics courtyard housing in the countryside that make a future vision for a Western Chinese village unique. Such tensions arise as the need for rapid urban and industrial development in the countryside clashes with the need for maintaining necessary amounts of well-functioning agricultural lands (CUI, 2011). Such tensions are very evident in "development frontier" regions such as Chongqing. While they challenge local populations and policy makers, they also provide space for imagining different social relations and visions of the future.

One such technique that Chongqing has been nationally famous for is the transfer of land development rights (CHEN, Chun et al., 2020). While land exchange markets (tudi jiaoyichang 土地交易所) are nothing new in the literature and practice of urban development geography. The idea of "dynamically linking urban and rural development land use changes" (STATE COUNCIL OF THE PEOPLE'S REPUBLIC OF CHINA, 2004) through land certificates (dipiao 地票) was to increase the actual use of rural non-agricultural land and convert it back to cultivation. In this way, the government intended to "achieve equilibrium in the supply of land in China by balancing increases in urban construction land (driven by urbanization) with decreases in rural construction land (facilitated by out-migration)" (LONG et al., 2012, p. 14). This made possible that rural collectives or individual peasants reclaim cultivated land through the consolidation and change of functions of developed rural land, which included land occupied by houses, village enterprises, public rural facilities or welfare undertakings (CHEN, Chun et al., 2020: p. 104877).

These ideas draw on the ideal of "rural revitalization," organized around a movement for "rural reconstruction" (mainly at Renmin University) which eventually found its way into the 11th Five-Year Plan as a campaign for the "New Socialist Countryside Construction". Ecological Civilization is central in this endeavor as local approaches to farming, the use of traditional knowledge and community building are reemerging (WEN et al., 2012) - especially in the wake of the pandemic. Reconnecting with nature and emphasizing the importance of

agriculture may be one of the Chongqing Model's outcomes. Now branded in the official Communist Party media as "Chongqing urban renewal" (Chongqing chengshi gengxin 重庆城市更新), the city's approach to urban policy places ecological aspects on a pedestal. The People's Daily (2022) points to the three main trends that make up Chongqing's urban renewal strategy, the first of which is to "implement organic renewal that focuses on preservation and protection, and implements both "retention, reform, demolition and addition" to "further strengthen the inheritance and protection of history and culture and the emphasis on ecology." (author's translation). The state media outlet further emphasizes, in principle 3 how social capital and resources should be attracted through enterprises that work on renewal and innovate financial products and (trend 5) how "cultural empowerment" should be activated through urban culture and a "combination of protection, revitalization and utilization to promote the protection and repair of historical and cultural blocks" while retaining roots and memories for the city. For now, city marketing does not go beyond the rather devoid slogan "A Gain in Vision, A Land of Natural Beauty, A City with Cultural Appeal." What these policy tendencies mean in concrete terms for the future image of Chongqing is not made clear in official local government communiqués and has a clearly rhetoric character (CHEN, 2022).

One promising area where Chongqing may stand out is in the application of Nature based Solution (NbS). While the definition of NbS at this point is still debated, especially in China, it opens up a variety of ways to redefine and reinterpret such solutions for instance in facing the challenges of climate change (ZHU et al., submitted manuscript). In the Ministry of Natural Resources's national strategy, Chongqing's urban renewal is featured among the 10 reference NbS cases. Not only due to its challenging geophysical characteristics but also its rapid urbanization, the use and recovery of green infrastructure (such as the "sponge" logic of wetlands) has been shown to have above average potential to mitigate natural hazards (XIANG et al., 2017).



Figure 2. Phase I of Guangyang Island Ecological Restoration Project Comprehensive Demonstration Site, part of Chongqing's Urban Renewal plan.

Source: Zhang (2021).

Once one of the country's most polluted cities, according to one of the city's news outlets, Chongqing is now on a path to an Ecological Revolution, in part thanks to the efforts made of putting Eco-Civilization into practice at Guangyang Island (广阳岛, figure 2) (ICHONGQING, 2022). While this is certainly exaggerated, the project is an interesting object to reflect about the ideals presented about the priorities of urban (re)development and possible scenarios of a different kind of human-nature relations. Presented as one of Chongqing's "business cards" when it comes to landscape restoration, it lies close to the urban core and represents important objectives in local and national conservation policies and provides imaginaries for a Chinese vision of a sustainable future (THE PAPER 澎湃新闻, 2022). It is pointed out as one of the birthplaces of fishing and hunting civilization of the Bashu (巴蜀) people that form the bases of Chinese culture on the Yangtze River.

The project is supposed to reconnect urban dwellers to their natural environment, provide habitat for local species and function as an "ecological classroom" (shengtai da ketang 生态大课堂). In such a demonstrative space ideas of "soft" infrastructure are put into practice to demonstrate their benefits in opposition to "grey" infrastructure. These elements are indicative of important structural visions of what "futuristic" visions of a city should look like and how human-nature relations can be rethought in restored spaces.

Taking these ideas even one step further, such visions are very inviting to think of the city as a testing ground for Solarpunk ideas that more closely relate to Daoist ideas of retreat in the countryside than (often dystopian) visions of a fully urbanized future. Despite their often very idealistic and rhetorical style, such visions provide much needed hope and proof that another way of social and socioenvironmental relation is possible. As presented in the ChinaDialogue essay on solarpunk, Corneo-Seaman (2022) reinforces the message of the Solar Punk Community (n.d.) in rejection of the pessimism of cyberpunk and invites us to imagine a more optimistic future in which environmental and social crises have been overcome and traditional technologies are combined with greening of buildings.

DISCUSSION & CONCLUSIONS

With its over 80,000 km2 of rural territory certainly, with this short text I would like to invite the reader to reflect about Chongqing in new ways that part from the purely urban-centric images connected to it as of now. The city's immense rural sphere and a lot of the published research about its experiments in rural-urban integration lend themselves more to solarpunk than to cyberpunk, remembering that the concentrated urban space depicted in visions such as those Figure 3 are only one of the possible but very pessimistic futures.



Figure 3. Sci Fi City HD Wallpaper depicting a futuristic version of Chongqing. Source: (手指断了, 2018).

Of course, we are all fully aware that the rather romantic visions of harmonious life in the countryside are in stark contrast and contradiction with the realities of the development of capitalist ideals all over the world. So too, does Chongqing have its beacon of capitalism that obviously rather stimulates an imaginary of a tech-dominated world in which NbS do not have space. Opened in 2019, the iconic "Raffles City Chongqing" building by Singapore-based real estate investor CapitaLand was constructed on the iconic peninsula at the confluence of the Yangtze with the Jialing River (at the former site of the Three Gorges Hotel, demolished in 2012) in its aspiration to become the "global city" that World Bank reports call it to be.

The visions for what an Eco-Civilization looks like are certainly no perfect blueprints for sustainable urban development in all places of the world, especially when it comes to the role of digitalization and surveillance technologies that have become a natural part of so many Chinese urban development plans. While technological dimensions often represent still modernization and progress that are sought especially in the countryside (BIAN et al., 2018), the omnipresence of drones, surveillance cameras and information screens as in the like in Chongqing's Jiulongpo business district (figure 4), at least deserve some questioning about the directions and ideals of such a Civilization.



Figure 4. Renderings of the urban renewal project along Jingwei Avenue in Jiulongpo District. Source: Chongqing Housing & Urban-Rural Construction Committee, published in People's Daily, 2022.

While the construction of forests and man-made ecosystems will certainly have to become a more central issue in global debates of the environmental social sciences as we engage with the realities put forth by China's endeavors of Eco-Civilization (ZINDA et al., 2018), not all such interventions have to be consensus. While environmentalists certainly stand behind the closing of polluting enterprises in the sake of innovation (SIGURDSON; PALONKA, 2008), not all the resettlements for environmental reasons are as harmonious as those presented by Luo and Tang (2020). If large-scale interventions like those already present in the Grain for Green program that have transformed much of China's national territory, are to become the norm, visions of the urban need to understand that humans are part of nature, live in and from it

and will be part of the production of future biodiversity. However, the place of communication and energy technologies will then have to move much more into a direction that is suggested by solarpunk visions that make human needs the central aspect of technology and do not reproduce dystopian visions of humans living under full surveillance. Either way, with the ongoing multi-polarization of the world and the de-Westernization of social theories, we can be certain that many changes will come in the way we develop ideals about the futures we want to live in.

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