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Contemporary Urban Heterotopias: From Fiction to Reality

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On the Spectrum of Topias and the Need for the Alternative

From the seminal 1805 prose poem *Le Dernier Homme* by Jean-Baptiste Cousin de Grainville, to contemporary cult classics such as the 2014 post-apocalyptic motion picture *Snowpiercer* by Bong Joon-ho, creative works about the end of the world are a pop culture staple. Climate apathy, narcissistic leaders, hostile invaders, pandemics... In each instance, a different method for world destruction is portrayed, amplifying and distorting slivers of contemporary realities. These works of fiction have one thing in common: they are all dystopias, a word created from the Greek prefix *dys* (bad, difficult) and the root *tópos* (place). Dystopias are places characterised by human misery. Places, for example, in which one's freedom is compromised, or where the environment is no longer able to

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sustain life. Most importantly, they act as a conduit to reflect upon, and ultimately shape, society. In this way, dystopias encourage us to make active choices about the kind of futures we want, or act as a warning to face the consequences of our inaction—sometime, someplace, in an uncertain future.

On the other end of the spectrum are utopias, a play on the Greek prefix *eu* (good), the particle *ou* (no, not) and the root *tópos* (place). The word simultaneously means 'good place' and 'no place', implying that utopias are essentially flawless yet do not exist. First referenced in the socio-political satire *Utopia* (More, 1516/2007), the term describes an ideal place where a community or society possesses a perfect socio-political structure—the notion of perfection obviously being subjective to the author's personal views and limitations. Utopia is used ubiquitously to describe both actual communities that attempt to create an ideal society and fictional societies portrayed in films, books, or the collective consciousness. The former, however, is a misnomer, as these communities ipso facto cease to be utopian upon leaving the fictional world and entering reality.

Neither a dystopia nor a utopia, heterotopias are something different altogether. Originally coined by French philosopher Michel Foucault, heterotopias are places that do exist, and that critique the core nature of society. Etymologically, the word is derived from the Greek *héteros* (other, another, different) and *tópos* (place); and Foucault defines them as counter-sites: "a kind of effectively enacted utopia in which the real sites, all the other real sites that can be found within the culture, are simultaneously represented, contested, and inverted" (Foucault & Miskowiec, 1986). As opposed to utopias, however, which aim to present society in its purest form—and which, by definition, do not exist—heterotopias are anchored in reality yet are defined by their otherness.

In his 1967 lecture *Des Espaces Autres*, Foucault defines four types of heterotopias: heterotopias of crisis, deviation, illusion, and compensation—the latter being places that create a space that is other: "another real space, as perfect, as meticulous, as well arranged as the real world is messy, ill constructed, and jumbled" (Foucault & Miskowiec, 1986). Heterotopias of compensation are the ones I will focus on in this chapter. As for anyone attentive to the development of contemporary societies

and urban environments, experimentation about the alternative has never felt more critical.

It only takes little research indeed to realise that humanity must change and adapt to the current realities of the world or face the consequences of our reckless ways of living. In his book *A New Design Philosophy: An Introduction to Defuturing*, design theorist and philosopher Tony Fry provides a relevant perspective on how the world we live in has been made unsustainable by our economic, societal, and technological choices (Fry, 1999). Climate change, biodiversity loss, waste accumulation, food insecurity, social inequality, geopolitical instability... We are now living through unprecedented times where the compounded impact of our individual attitudes and behaviours is becoming increasingly visible.

In architecture and urban design alone, "buildings and infrastructures are responsible for at least 40 percent of all greenhouse gas emissions", writes Ursula von der Leyen, President of the European Commission (2020). And with recent projections showing that global population growth combined with mass-urbanisation could add another 2.5 billion people to urban areas by 2050 (United Nations, 2018), the following questions beg to be asked: What will our cities of tomorrow look and feel like? How will they function? And how will they succeed?

Speculative practices in architecture and urban design are well suited to address these questions (Babkin, 2017; Dobraszczyk, 2019). Instead of providing a response that fits squarely within the boundaries of existing systems of thinking, they help investigate alternative scenarios for our cities. It is through this attention to the alternative that we can conceive of a speculative ethos tied up with the discussion of topias in this chapter. In what follows, I aim to examine such an ethos with a specific examination of alternatives, staged through architecture and urban design.

Recent research is telling us, however, that the world is warming up faster than anticipated; and that the planet will breach the threshold of 1.5 °C above pre-industrial levels anytime between 2027 and 2042, significantly worsening the risks of drought, floods, extreme heat, and poverty for hundreds of millions of people (Hébert et al., 2021). Thus, my speculations are short-term—speculative presents or alternative nows, contemporary urban heterotopias rather than utopian future cities.

On Place and the Otherness of Heterotopian Cities

Undeniably, place is of critical importance in the investigation and understanding of societies and social constructs. At the dawn of the twentieth century, for example, sociologist Emile Durkheim (1912/2008) described the instrumentality of physical spaces in the articulation of First Nations peoples' consciousness and social relations. A few decades later, Foucault again (1975/2020) explored the power structure associated with specific designs and how buildings inherently fashion roles and ranks within society. Meanwhile, radical thinker and artist Guy Debord was advocating for the practice of psychogeography, that is, the creative and playful exploration of the urban environment to reveal the impact architecture and spaces exert on our attitudes and behaviours (Debord, 1955). A multitude of psychogeographic practices predate or follow Debord: Nick Papadimitriou's deep topography *the conscious walker* for instance, or Lauren Elkin's feminist derive *the flâneuse*; but what differentiates these terms beyond activities and intellectual idiosyncrasies is far less evident than what unifies them (Overall, 2015). Indeed, at its core, psychogeography raises the following question: how does place shape society?

In truth, place shapes society through speculation as much as it does through the physical world, and the re-experiencing or (re-)imagining of place as championed by psychogeography or speculative architecture and urban design practices is an overlapping characteristic of these disciplines. Through the rejection of conventions and society's dominant logics, they propose an alternative to the status quo, jolting the rest of society into self-awareness.

The heterotopian settlement of Penedo in Eastern Brazil, for instance, illustrates this thinking. Set up in 1929 in the aftermath of World War I, the collapse of the Russian empire, and the Finnish declaration of independence, this Finnish colony had the ambition to provide its citizens with a life free from the social and political turmoil that was plaguing Europe at the time. Penedo, in a sense, represents the materialisation of a social discontent as well as the physical removal from a situation that is

no longer acceptable; leaving the rest of society pondering the possibilities of what could be.

The early and mid-twentieth century was in fact rife with movements that explored ways of unleashing the subconscious imagination while critiquing cultural and political conservatism—the Dada and surrealist art movements, the Queer ball culture, and the US Beat Generation, to name a few. Counterculture and anti-establishment thinking synchronously permeated the fields of architecture and urban design. As an opposition to modernism (c. 1900–present), whose architecture emphasises function and attempts to provide for specific needs rather than connect with nature, many heterotopian cities of compensation were established across the world. I would like to discuss here below three case studies that I believe have historical relevance in the context of this chapter, that is, heterotopian cities that were designed, yet failed to address *at scale* the growing societal and/or environmental issues of our times.

Auroville—Inspired by the teachings of Indian philosopher and guru Sri Aurobindo and spiritual leader Mirra Alfassa—also known as the 'Mother'—a heterotopian city was established in 1968 near Pondicherry in southern India. Its mission: "to be a universal town where men and women of all countries are able to live in peace and progressive harmony above all creeds, all politics, and all nationalities" (Auroville, n.d.). Today, nearly 3000 people from over 100 countries and all the Indian states are calling Auroville home; forming a dynamic and continuously experimenting community that strives to live in accordance with its original mission. Eventually, the township may reach 50,000 residents, which the Mother considered an adequate number for this experiment to realise its full potential.

Auroville's humanistic vision came about as an opposition—or compensation—to capitalism and communism, the two dominating, yet opposing, ideologies of the time. In the words of the Mother, "there should be somewhere upon Earth a place that no nation could claim as its sole property (…), and where relations between human beings, usually based almost exclusively upon competition and strife, would be replaced by relations of emulation for doing better, for collaboration relations of real brotherhood". In many ways, this goal is still aspirational, but the impetus to move in that direction is still very much alive (Kapoor, 2007).

Arcosanti—Just a couple of years later in 1970 America, the Cosanti foundation began construction of Arcosanti, another heterotopian city of compensation located on the edge of the Sonoran Desert, about 100 km north of Phoenix, Arizona. The foundation and city's name come from the portmanteau composed of the Italian words *cosa* and *anti*, meaning 'against things'—a deliberate critique of the pervasive culture of consumerism that architect Paolo Soleri, founder of the Cosanti foundation, saw taking over the world.

In similar fashion to Auroville, Arcosanti is an experiment; an imaginative and provocative place exploring a built world working in balance with the environment and embodying a radically different aesthetic (Carter, 2019). As described in *Arcology: The City in the Image of Man*, Soleri designed Arcosanti for thousands of people but the city is seldom occupied by more than 100 people at any given time. Regardless, the city remains a pioneering vision for sustainable architecture, which seeks to work as an alternative to urban sprawl and the erosion of communities while enriching the lives of its residents (Soleri, 1970). In Soleri's words, which still resonate true today: "the problem I am confronting with is the present design of cities only a few stories high, stretching outward in unwieldy sprawl for miles. As a result, they literally transform the Earth, turning farms into parking lots, wasting enormous amounts of time and energy transporting people, goods, and services over their expanses" (Arcosanti, n.d.).

Masdar City—In more recent times—2006—a green tech city broke ground in the Emirati part of the Rub al Khali desert, just East of Abu Dhabi. Designed by British international architecture firm Foster + Partners, Masdar City is self-described as "a hub for research and development, spearheading the innovations to realise greener, more sustainable urban living" (Masdar City, n.d.). Notwithstanding critiques of the term 'sustainability' and its association with uncritical notions of modernity and progression, sustainability has been a key framing principle of the Masdar City concept. Claims for the zero-carbon, zero-waste city are realised thanks to the use of vernacular technologies, the provision of clean energy from renewable sources, minimising greenhouse gas emissions to the atmosphere—the city is car-free—and a comprehensive city waste recycling system. A 40,000-resident neighbourhood was also

included in the masterplan (Lee, 2016). The city, however, is yet to reach full capacity, with only a couple of thousand people currently living on site (Cipolla, 2020).

Conceptualised as a speculative model for an oil-free future, Masdar City also classifies as a heterotopian city of compensation. In sharp contrast to the previous two examples, however, the city primarily focused on realising its vision through technology, with little consideration for the lived-in experience. In a way, this approach to city design empirically demonstrates the importance of the two-way relationship between place and people in societal formation; and provides a critique against techno-heterotopias by highlighting their limitations. Mainly, technocratic heterotopias do not consider the needs, aspirations, and cultural aspects of a given population in their designs (Vanolo, 2016; Bina et al., 2020; Cotsaftis, 2020).

Despite these differences, one trait unifies these three cities with most heterotopian cities that have been built across the world. They somehow inevitably fail; or fail to scale up. Why? From my perspective as a designer, I would like to suggest three main reasons for this:

1. First, heterotopian cities suffer from a lack of popular appeal. As we've discussed above, heterotopian cities typically emerge within counter-culture movements, as an opposition to the establishment and to certain type of social, political, and economic ideologies. They also emerge as technocratic speculations that are disconnected from social needs and aspirations. Either way, they do not appeal to mainstream society. Their difference is daunting, and their lack of history and culture is far from the cosmopolitan appeal provided by stalwart cities such as Paris, Cairo, or Tokyo. In addition, their laser-focused vision, purpose, and values further limit their mass appeal, especially in today's pluriversal context where minorities and socio-cultural groups are—rightly so—longing for cultural reckoning and for cities that reflect their identities (Qadeer, 2014).

2. Second, heterotopian cities can only thrive in collectivist societies. Collectivist societies emphasise the needs, wants, and goals of the group over those of individuals. In these cultures, social behaviours tend to be directed by the attitudes and preferences of the whole rather

than the parts. Meanwhile, research is showing that individualism increased by 12 per cent worldwide since 1960; and that the rise of individualism is linked to the adoption of Western socio-economic models (Santos et al., 2017). As a result, individuals within contemporary societies are more likely to develop stand-alone alternative modes of housings rather than set up heterotopian cities, which rely on the continuous drive and efforts of a peer-group to succeed.

3. Third, and possibly most importantly, heterotopian cities are typically not well designed. By design, I do not speak of aesthetic or function alone; but design in its broader sense, where the desirability, feasibility, viability, and even materiality of a system should be realised to its maximum relevance and effectiveness. Unfortunately, and to the best of my knowledge, this outcome has not been achieved yet in heterotopian cities.

Towards Building Contemporary Urban Heterotopias

In October 2020, the European Union launched its *New European Bauhaus*, an ambitious environmental, economic, and cultural project with the goal of making Europe the first climate-neutral continent by 2050 (von der Leyen, 2020). More recently, we also saw celebrities such as Robert Downey Jr deciding to finance this bold new world (Giles, 2021). What such investment and incentivisation often fail to address, however, is that technology was never an issue (Cotsaftis, 2021a; Hill & Conway, 2021). We must remind ourselves that we already have a wide range of design and fabrication solutions to address issues of sustainability, yet the limited distribution and utilisation of this knowledge are slowing down our collective journey towards equitable and regenerative futures.

The opportunity for design remains extraordinary. But no matter how aspirational, "delivery must not become utopian, distant, and siloed" (Hill & Conway, 2021, n.p.). This is not design as usual—for example:

1. We must decentre the human from the design process. Due to the impact of the climate crisis and our manic consumption behaviour, it is becoming increasingly important to look beyond human needs and consider the roles and perspectives of nonhuman species to both regenerate the environment and protect biodiversity. As such, decentring the human from the design process to benefit *all* living species needs to become a core skill of every design practice (Cotsaftis, 2019).
2. Design must also become carbon-neutral, or, even better, carbon-negative, as well as circular or zero-waste. In that regard, biomimicry, biophilia, and biodesign are contemporary, yet underutilised, approaches to design and fabrication with significant potential to regenerate our wounded planet. But whereas the former—biomimetic and biophilic design—refer to the production of materials, objects, and systems either inspired or better connected with nature, biodesign provides a more elegant and relevant answer by using biomaterials and living organisms as core components of the finished work (Cotsaftis, 2021a, b).
3. Finally, design must become pluriversal to ensure equitable futures for all; that is, design must exist outside of dominant Western design cultures. Thus, designing with communities must go beyond tokenistic consultations and become a key focus of contemporary design work. Going back to the words of Dan Hill and Rowan Conway: "creating genuinely participatory practices might reveal that questions of technology, built environment, product, material, and service design are not unrelated to those of culture, identity, and governance; but rather they are symbiotically linked: each unlocks the other" (Hill & Conway, 2021: n.p.).

Putting theory into practice, I designed *The Other Place*—a contemporary urban heterotopia that works as a response to today's environmental and societal challenges. We have today a much better idea of the kind of urban environments people like or find stimulating. For example, it is known that people respond positively to complex and intricate building facades but are negatively affected by the monotony of modern urban environments (BMW Guggenheim Lab, 2013). Another well-known point relates to urban greening. From native pause-points to micro-forests,

bringing back nature in the built environment has been found to benefit both human health and urban biodiversity (Kondo et al., 2018; Braun, 2020). Neuro-spatial studies even show that the "visual complexity of natural environments acts as a kind of mental balm" (Bond, 2017). Based on this knowledge, *The Other Place* is cladded with an intricate biophilic and parametric green skin designed to reconnect residents with nature in an all too often barren urban landscape (Figs. 3.1, 3.2, and 3.3). This green envelope also provides an ecological corridor to non human species and fosters interspecies cooperation towards protecting the environment. Luckily, this message seems to already have permeated governmental and other decision-making spheres as many such urban greening and rewilding projects are currently underway across the globe.

Moving on to the need for design to become carbon neutral or negative as well as circular, the building's core feeds a meshed network of biosystems with organic waste. This biodesigned, zero-waste approach to city living generates renewable energy and fresh water, as well as biodegradable organic materials for the on-demand production of everyday objects and construction materials. Meanwhile, a biomimetic and responsive natural ventilation system limits the building's energy demand for

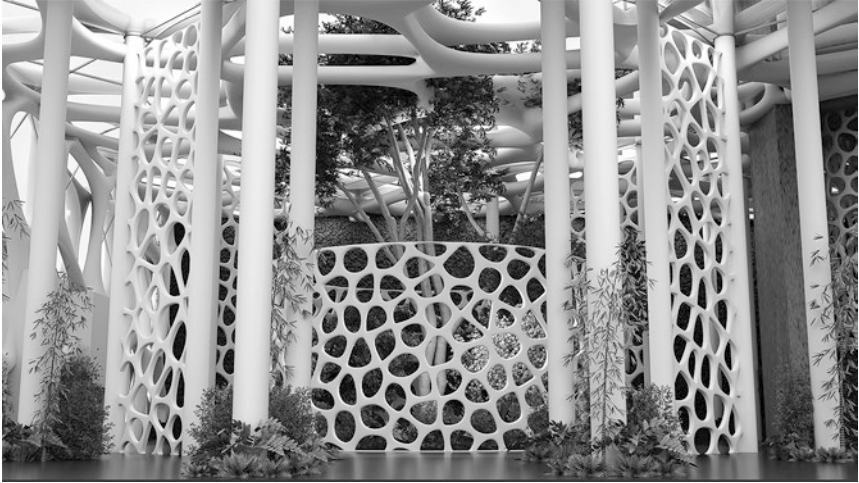**Fig. 3.1** The other place, Night View (Parametric series II.3) by Olivier Cotsaftis (2021)

Fig. 3.2 The other place, The Other Square (Parametric series II.3) by Olivier Cotsaftis (2021)

Fig. 3.3 The other place, Aeropark (Parametric series II.3) by Olivier Cotsaftis (2021)

cooling and warming. Technologies enabling *The Other Place* to work already exist but are yet to be prototyped at scale or used in combination in contemporary architecture and urban design (e.g., anaerobic digestion, production of bio-based materials from organic waste, passive

cooling, etc.). At the time of writing, coincidently, the world's first triple net-zero development across waste, energy, and water in Albany, New York, United States, has just been announced (Thukral, 2021). These carbon neutral/negative, circular, and triple-zero design strategies must become the norm for our future cities if we are serious about tackling the human-made climate emergency we are currently living in.

The Other place also touches on the need for architecture and urban design to become pluriversal and meaningfully address human and societal needs. According to the London-based Centre for Urban Design and Mental Health, contemporary urban living is linked to a 39 per cent increase in mood disorder and a 21 per cent increase in anxiety (UD/MH, n.d.)—the main trigger appearing to be the lack of social cohesion in neighbourhoods (Bond, 2017). Intuitively, we all know that good design alone will not solve urban loneliness, but researchers in the field of speculative and neuro-architecture are nonetheless looking to address this last point. Montgomery, who co-led the BMW research cited above, writes: "as suburban retailers begin to colonise cities, block after block of bric-a-brac and mom-and-pop-scale buildings and shops are being replaced by blank, cold spaces that effectively bleach street edges of conviviality" (BMW Guggenheim Lab, 2013). This may seem like a rather tired insight, but the following is worth repeating. Big corporate chains are not that exciting in the urban landscape. As such, *The Other Place* offers resident-owned commercial floors, but the street-level real estate typically leased to commercial retailers is used instead to create a novel urban space. *The Other Square* is a large and covered public space promoting social engagements and respect for nature while connecting the building to the neighbourhood (Fig. 3.2). Together with the *Aeropark*—a semi-private and secluded elevated park (Fig. 3.3)—*The Other Square* offer citizens and residents new spaces to meet, as well as a respite from air pollution and our increasingly unstable climate.

From Fiction to Reality

Back in the 1950s, Debord and his psychogeography wanted to revolutionise the experience of place, making architecture and urban design less functional and more open to exploration so that people would feel some sense of control over it. Fast-forward to 2021 and this message is still relevant. In today's world, rationalist logic elevates economic and technological over cultural and ecological design; and as a result, the world has been made unsustainable by our design choices (Cotsaftis, 2021a). Designing the alternative, however, is a societal choice. With *The Other Place*, I aim to showcase what this alternative could be; but one question remains. Would such a design provide a blueprint for a successful heterotopian city? As such, let's revisit the reasons discussed above for *Auroville*, *Arcosanti*, and *Masdar City*'s lack of popular appeal.

Most, if not all, heterotopian cities have been built in remote places, physically removing themselves from the exact places they contest and oppose—their settlers hoping for a new beginning. This strategy not only requires more resources to start with but is also somewhat idealistic in contemporary societies considering the interconnectedness of our global supply chains and financial systems. Positioning *The Other Place* at the heart of an existing major city, on the contrary, increases the project visibility and likelihood of provoking reactions, promoting conversations, and gaining support. Being immersed in a global city also increases the chance of finding the boundary-pushing individuals and organisations that could spearhead such a project to success from a financial and leadership perspective; as well as the future residents that would collectively contribute to the project through shared values and collaboration.

Considering that *The Other Place* is designed accordingly to the equitable and regenerative principles detailed above; is not a technocratic utopia; and is speculatively located in a densely populated urban area, it is my belief that such a heterotopian city would have more chance to succeed where its predecessors have failed.

Design is not just a form-based or problem-solving practice. As the urgency to address global issues becomes pivotal, designers increasingly

move towards discursive design practices. Critical and speculative designers build worlds filled with new products, spaces, and services to explore the environmental, social, cultural, and political impact of design. These designs either provide a critique of the status quo or bring ideas to life to help us think through the futures we need—and are proposing.

References

Arcosanti. (n.d.). *Arcosanti*. https://www.arcosanti.org/

Auroville. (n.d.). *Auroville, the city of dawn*. https://auroville.org/

Babkin, S. (2017, June 1). What is speculative architecture? FAQ by Liam Young. *Strelka Magazine*. https://strelkamag.com/en/article/what-is-speculative-architecture

Bina, O., Inch, A., & Peirera, L. (2020). Beyond techno-utopia and its discontents: On the role of utopianism and speculative fiction in shaping alternatives to the smart city imaginary. *Futures, 115*, 102475. https://doi.org/10.1016/j.futures.2019.102475

BMW Guggenheim Lab. (2013). *A psychological study on city spaces and how they affect our bodies and minds*. http://cdn.bmwguggenheimlab.org/TESTING_TESTING_BMW_GUGGENHEIM_LAB_2013_2.pdf.

Bond, M. (2017, June 6). As more of us flock to urban living, city designers are rethinking buildings' influence on our moods in an era of "neuro-architecture". *BBC Future*. https://www.bbc.com/future/article/20170605-the-psychology-behind-your-citys-design

Braun, S. (2020, July 7). *Biodiversity blooms in cities when green spaces go wild*. DW. https://www.dw.com/en/green-spaces-flora-fauna-wild-native-wildflowers-insects-dublin-dessau-wilderness/a-53955388.

Carter, C. (Ed.). (2019). *Repositioning Paolo Soleri: The city is nature*. PS Studio/Scottsdale Museum of Contemporary Art.

Cipolla, A. (2020, July 26). Masdar City, the ecological city of the future that hardly anyone visits. *Latin American Post*. https://latinamericanpost.com/33769-masdar-city-the-ecological-city-of-the-future-that-hardly-anyone-visits

Cotsaftis, O. (2019, October 22). *Speculations on the future of design.* https://medium.com/this-is-hcd/speculations-on-the-future-of-design-1b1fed938943.

Cotsaftis, O. (2020, August 5). *Speculative BioCities.* https://medium.com/this-is-hcd/speculative-biocities-bf64e1302590.

Cotsaftis, O. (2021a). The politics of biodesign. *Biodesigned, 5.* https://www.biodesigned.org/ollie-cotsaftis/the-politics-of-biodesign

Cotsaftis, O. (2021b, March 30). *If silicon-based solar panels are so clean, why do they produce so much toxic waste?* https://futureensemble.medium.com/if-silicon-based-solar-panels-are-so-clean-why-do-they-produce-so-much-toxic-waste-6ee429b146fc

Debord, G. (1955). *Introduction to a critique of urban geography.* http://library.nothingness.org/articles/SI/en/display/2.

Dobraszczyk, P. (2019). *Future cities: Architecture and the imagination.* Reaktion Books.

Durkheim, E. (Ed.). (2008). *The elementary forms of religious life* (C. Cosman, Trans.) (Abridged ed.). Oxford University Press UK. (Original work published 1912)

Foucault, M. (2020). *Discipline and punish: The birth of the prison.* Penguin. (Original work published 1975).

Foucault, M., & Miskowiec, J. (1986). Of other spaces. *Diacritics, 16*(1), 22–27. https://doi.org/10.2307/464648

Fry, T. (1999). *A new design philosophy: An introduction to defuturing.* University of New South Wales Press.

Giles, M. (2021, January 27). Robert Downey Jr. unveils two venture capital funds at Davos to help clean up the Earth. *Forbes.* https://www.forbes.com/sites/martingiles/2021/01/27/robert-downey-jr-unveils-venture-capital-funds-at-davos/?sh=23e46f5f12d3

Hébert, R., Lovejoy, S., & Tremblay, B. (2021). An observation-based scaling model for climate sensitivity estimates and global projections to 2100. *Climate Dynamics, 56*, 1105–1129. https://doi.org/10.1007/s00382-020-05521-x

Hill, D., & Conway, R. (2021, January 22). *Can the New European Bauhaus reorient design to tackle the climate crisis?* https://medium.com/iipp-blog/can-the-new-european-bauhaus-reorient-design-to-tackle-the-climate-crisis-e99b045003a2

Kapoor, R. (2007). Auroville: A spiritual-social experiment in human unity and evolution. *Futures, 39*(5), 632–643. https://doi.org/10.1016/j.futures.2006.10.009

Kondo, M. C., Fluehr, J. M., McKeon, T., & Branas, C. C. (2018). Urban green space and its impact on human health. *International Journal of Environmental Research and Public Health, 15*(3), 445. https://doi.org/10.3390/ijerph15030445

Lee, S. (2016, September 19). Welcome to Masdar City: The ultimate experiment in sustainable urban living. *The Conversation.* https://theconversation.com/welcome-to-masdar-city-the-ultimate-experiment-in-sustainable-urban-living-65575

Masdar City. (n.d.). *Masdar City.* https://masdarcity.ae/

More, T. (2007). *Utopia.* Tark Classic Fiction. (Original work published 1516)

Overall, S. (2015). *The walking dead: Or why psychogeography matters.* https://repository.canterbury.ac.uk/download/ef7c739b64bd03fad9b7214c0b3498c447eaf88f4cb41f2dd00639865810d390/162992/13859.pdf

Qadeer, M. A. (2014). Viewpoint: The multicultural city. *Canadian Journal of Urban Research, 23*(1), 116–126. http://www.jstor.org/stable/26195271

Santos, H. C., Varnum, M. E. W., & Grossmann, I. (2017). Global increases in individualism. *Psychological Sciences, 28*(9), 1228–1239. https://doi.org/10.1177/0956797617700622

Soleri, P. (1970). *Arcology: The city in the image of man.* MIT Press.

Thukral, R. (2021, April 10). The world's first triple net-zero development is here to push the boundaries of sustainable architecture! *Yanko Design.* https://www.yankodesign.com/2021/04/10/the-worlds-first-triple-net-zero-development-is-here-to-push-the-boundaries-of-sustainable-architecture/

UD/MH. (n.d.). *Facts and Figures.* https://www.urbandesignmentalhealth.com/facts-and-figures.html

United Nations. (2018). *68% of the world population projected to live in urban areas by 2050.* https://www.un.org/development/desa/en/news/population/2018-revision-of-world-urbanization-prospects.html

Vanolo, A. (2016). Is there anybody out there? The place and role of citizens in tomorrow's smart cities. *Futures, 82*, 26–36. https://doi.org/10.1016/j.futures.2016.05.010

von der Leyen, U. (2020). *A New European Bauhaus.* https://ec.europa.eu/commission/presscorner/detail/en/AC_20_1916