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THE SYNTHETIC WORLD OF OUR FUTURE: FANTASY, HYBRID OR (ANTI)UTOPIA?

Abstract

New modes of interaction have shaped and altered numerous levels of perception, creating a media-based spatial consciousness that multiplies personal identities. The images of our past, present and future, embedded in the contemporary architecture or scrambled in the urban space allow us to get a glimpse of 'tomorrow' - questionable, virtual(ized) and countless.

Are there limits to fantasy, ambiguity and space-time simplification? Does the latest technology enable openness and flexibility or impose a rigid frame of reference? What is a simulation and what is reality? These are just some of the questions that should be clarified before we define an ideal model for the world of our future.

Introduction

Today, under the influence of the contemporary technology, we have the impression that we already live in the future. The modern spatial envelopes, connections and interlinked realms certainly create a specific 'futuristic' environment, but its new relations and rules cause different reactions, expectations and feelings. The difference between reality and simulation has almost disappeared and our previous position and role gradually become modified.

The images of the future have always been a reaction to the actual condition of the society. Its problems, tensions and imperatives directed a utopian or anti-utopian character of various models, visions and scenarios, but the tools of their implementation remained

unspecified or forgotten behind ideological messages that these 'projections' had to transmit. Seemingly, nowadays we have the necessary equipment to materialize all our visions but the actual nature, power, advantages and disadvantages of these instruments are still debatable. Obviously, even though we are able to create and test every idealized environment that we conceive, this omnipotence makes our society more fragile and puzzled.

Balancing between real space and cyberspace we can also define basic elements of physical, functional and social structures that could eventually shape the world of our future. For example, some of the recent development projects offer the latest series of wannabe wonderlands, based on high technology, pre-determined/preferred social conditions and utopian role-models. At the same time, the 3D on-line world of Second Life builds its own complexity, structure and cyberspace rules, which are also used in other similar applications. Therefore, surreal landscapes, hybrid settings and a sense of virtuality could be identified in both 'realms', erasing the differences between real/material and virtual/immaterial architecture.

Space, place and technology

The interaction between technology and built environment has always been the crucial element of every environmental transformation. Today, the number of stimulations and simulations increases, technology becomes an important ingredient of the contemporary global culture while space remains a resource, a polygon of power, creativity and destruction - adding some new coordinates, layers and determinants. All these changes blur the boundaries between the physical and the digital universe and our highly urbanized world becomes overcrowded with new territories of material and immaterial flows and multidimensional topographies.

Following the main idea of all technological utopias that temporal acceleration could improve civilization and bring numerous benefits, we stimulate the temporal contraction and total mobilization, forgetting that our planet has its own ecological limits. Therefore, if we do not wake up to our environmental responsibility and overcome consequences of our choices, conformism and arrogance, our obvious technological power and progress will be shaken by drastic self-corrective natural processes.

The modern cities, as the main anchors and reference points of global systems and networks, still act as places where various influences and identities could be mixed, confronted and decoded, while their structure continues to reflect our society. However, the images of their future are based upon inherited 'forecast' models and patterns, producing an idealized vision, warning or expectation - generated from the present condition and our demands. Consequently, the city of our future should provide:

- overlapping of networks, scales and realms;
- virtual or real accessibility;
- absolute connectivity;
- dynamism;
- technological innovations.

Obviously, the relation between space/place and technology, as well as its influence on our spatio-temporal perception, should guide a reinvented/adjusted/modified logic of urban development and transformations. Unfortunately, their structure, rules and architecture might not only reflect the recent speculations, trends and environmental changes, but also deliberately or accidentally uncover our ego- and eco-frustrations, doubts and conflicts. Therefore, every 'futuristic' model - being utopian or anti-utopian - will inevitably mirror at least one of the urban emanations, acting as Dorian Grey or its picture.

Between reality and metaphor

Nowadays, it is often difficult to define the genuine nature of our society and, consequently, its urban space. Is it a result of architect's and planner's imagination or a simple effect of some design software? Are we looking at a computer simulation or a materialized building? Could our vision of the future offer something new and different, and what would be its ideal spatial model? What will be its limits and boundaries and will they endure all our experiments? Will it entangle and recombine well-known and unknown realms and dimensions, or rely on total simplification?

The numerous scenarios, as well as the most advanced examples of the contemporary planning and architectural practice, again display the logic of a classical utopia and/or anti-utopia, acting as a *u-topos* (non-place) or *eu-topos* (good place). Some of them tend to open a new chapter of energy transition, promote a concept of sustainability and reduce ecological footprints. Therefore, a well-adjusted mixture of nature and technology is created in order to re-edit the parasitical nature of modern urban nodes. Simultaneously, the latest generation of virtual worlds provides new modes of entertainment, reality up-grading and democratization, proliferating countless alter egos and settings. However, both of these conceptions are based upon similar tools and vocabulary, balancing between optimization, a copy/paste approach and - inevitably - commercial, ecological and ideological imperatives.

Modeling the illusion(s)

Through history, utopia, as well as anti-utopia, has reflected a critical attitude and expressed an idea of a radically different society. This counter-image of identified problems,

limitations and conflicts has been described and defined in several ways (Van Middelaar 2002):

- as an ideal society (Thomas More's 'Utopia', Ernst Callenbach's 'Ecotopia');
- a limited (small-scale) social experiment/commune (Charles Fournier's 'Phalanstère', Étienne Cabet's 'Icaria');
- a large-scale social experiment (ideas of Hitler and Stalin, or Orwell's Oceania - an intercontinental super-state described in 'Nineteen Eighty-Four');
- a yearning for justice, fulfillment or salvation.



Figure 1. Utopia, Thomas More (1516) - title page: visualization of an ideal state which has its ideal main city - Amaurot.

At the same time, utopia has always had its visualization - being placed onto distant places or a distant future, representing an idea/project of an ideal community or providing a hope for a revolutionary break (Gauchet/Van Middelaar 2002). The Utopia of the 20th century was actually a technotopia - a society subordinated to the speed, high dynamism and demands of the human and technological progress. Nowadays, we are more aware of the ecological limits of the planet, which makes our utopias (but not our reality) more ethically correct, flexible and tolerant. Consequently, the processes of globalization, temporal acceleration and spatial shrinking are opposed to various modes of social, environmental and peace activism, while a total control coexists, completely negates or competes with preferable democratization.

In spite of different historical, social and ideological contexts, the idea of a self-sufficient entity, as well as the symbolism which its spatial and functional exclusion/inclusion

has, could be recognized in numerous utopias and idealized visions of the future. For example, Thomas More's 'Utopia' (1516) represents an ideal state without limitations of tradition, placed on an island in the sea beyond the horizon. 'New Atlantis' by Frances Bacon (1627) is also a state-island, placed in the Pacific, while Alexander Bogdanov ('Red Star', 1908) used the similar idea (although in another system of reference), placing its vision of a state on the planet Mars. The theme of extra-terrestrial ideal(ized) societies/states/worlds has been exploited by numerous SF authors, but 'Islands in the net' (1989) by Bruce Sterling opened some new possibilities in a new, cyber territory.

The latest example of an island with an ideal urban community is placed in the virtual reality of Second Life. Based on a consumer ideology and contemporary egoism, it does not impose a 'perfect' social order and does not have a central idea. Therefore, Second Life represents a modern reminiscence of 'utopia' - an artificially created fantasy world, with simplified space and time relations, defined only by its technical infrastructure. Completely unlike other utopias it is chaotic, complex and uncontrolled, while the only perfect thing is Avatar - the cyber image of the user, 'shaped' according to its own preferences. However, there are some similarities with traditional models of utopia because Second Life also uses a limited and pre-defined vocabulary of uniform spatial elements simulating a 3D grid with low density (1 'sim' = area of 256 km²).

Is this the image of our preferred living environment?

Cyber reality?

The phenomenon of Second Life has added new dimensions to our perception of the future. Launched as a form of entertainment, this Metaverse has evolved into a serious medium for self-expression and representation and some countries have even opened their Embassies in its cyber realm. Providing a digital space without physical (and psychological) constraints this virtual world has generated the indefinite number of possibilities and choices representing a perfect surrounding for all kinds of architectural dreams and advanced interactions. Furthermore, in spite of all its immutability and orthogonal geometricisation, this environment enables teleporting and experiments with kinetic architecture i.e. its numerous mutations and dynamic reactions to the actions of users.

The virtual world of Second Life, as well as other imaginary worlds created in similar digital interactive applications and SF movies, introduces various degrees of virtualization and different categories of imaginary architecture. Mario Gerosa (2008) identifies three main groups of spaces - totally fictional, hybrid and places similar to real ones.

The first category (totally fictional places) usually has no references to examples already known. These spaces use only few elements and apply architecture of sensation

which communicates mostly on a psychological level. Therefore, it could include some archetypal typologies, simulate movement and cause disturbing reactions. Hybrid places represent a mixture of fantasy and real life, with a defined structure and added variations, while places similar to real ones could also apply a specific architectural rhetoric which uses figures of speech like: oxymoron (contrasting terms), hyperbole, paradox and metaphor.

Gerosa also distinguishes several styles of virtualization and makes a parallel with real-life architectural styles.

Styles of virtualization (Gerosa, 2008)

- 1. Esoteric steampunk** - VR: Myst, Riven, Uru, Schizm/ R: Gothic style
- 2. Classic steampunk** - VR: Project Nomads/ R: Neo-Classic
- 3. Ludic Surrealism** - VR: American McGee Alice/ R: German expressionistic architecture (Mendelsohn, Hugo Häring, Bruno Taut)
- 4. Post-atomic functionalism** - VR: Duke Nukem, Half-Life, Doom, Quake, Marathon/ R: Contemporary avant-garde architecture (Will Alsop, Nox, Zaha Hadid, Frank Gehry..)
- 5. Neodramatic** - VR: Silent Hill, Resident Evil, Project Zero, Haunting Ground, Forbidden Siren/ R: Victorian Style, Edwardian Style
- 6. Fantasy** - VR: Lineage, World of Warcraft, Guild Wars, EverQuest/ R: Theme Parks, medieval cities, Jerde
- 7. Post Déco** - VR: City of Heroes, City of Villains/ R: Las Vegas
- 8. Ludic Virtual Surrealism** - VR: Second Life, The Sims Online, Sociolotron, There/ R: Antoni Gaudi, Hundertwasser, Blob architecture
- 9. Future glam** - VR: Entropia Universe, Anarchy Online/ R: Novosibirsk, Buddha Bar
- 10. Abstract Deco** - VR: Habbo Hotel/ R: Richard Meier, Toio Ito, Mendini, Legoland
- 11. Techno-dynamic landscapes** - VR: Need for Speed, Sim City, Grand Theft Auto/ R: Shanghai, Dubai, OMA

Obviously, virtual spaces with their landscapes cannot escape from already existing patterns, but their digital nature generates various approaches, which shape and/or influence new architectural envelopes - in virtual as well as in real life. For example, in 2007 Second Life organized the first Architecture and Design Competition in order to discover and identify 'the second life of architecture' and its new/possible models, meanings and rules. Consequently, the main criteria of the jury were: style, innovation, scripting, spatial concept and story, integrated media, cross media potential and imaginative power. Out of the 126

entries four winners were chosen and almost all of them used the logic of 3D interfaces, providing a new insight into our reality and awareness of space.

'Living Cloud' (Meystenstein) uses new laws of Second Life related to gravity, biology, locomotion, economy - redefining interaction and perception, as well as the role of home and privacy. Therefore, it presents a virtual house which protects, but simultaneously reacts to outer stimuli. 'White Noise' (Max Mooswitzer), as a specific changeable agglomeration structured with so-called 'freebies', represents an ongoing, experimental project for non-human users. According to the author, the name, the 'style' and the white color of its elements (magnified everyday objects) should be a reference to random patterns and "Bildrauschen", even though the overall appearance also reminds us of classical antiquity. The third winning project, 'Full Immersion Hyperformalism' (DC Spensley), is actually a flexible, modular and almost invisible building which acts as an interface used for exhibitions, while 'Seventeen Unsung Songs' (Adam Nash) represents a specific artwork - interactive, simultaneously real and virtual - which generates different sounds on contact.

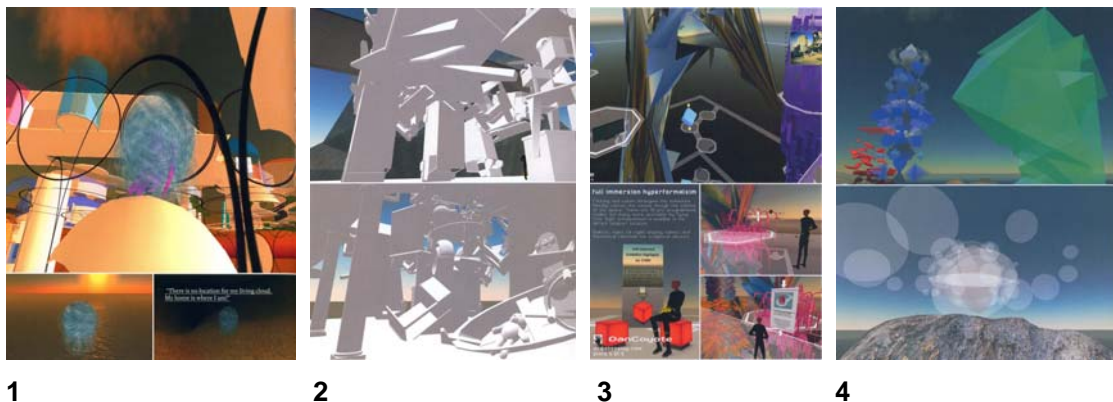


Figure 2. The winners of the first Architecture and Design Competition in Second Life (2007): 'Living Cloud' (1), 'White Noise' (2), 'Full Immersion Hyperformalism' (3), 'Seventeen Unsung Songs' (4).

The architecture and a specific social and visual communication of Second Life will certainly have an impact on our reality, especially when technology totally interconnects people and multiplying metaverses. Then, our bodies and personalities, already virtualized and extended through electronic accounts, avatars and portable media, could achieve an even higher level of 'democratic' participation or - total control.

Evidently, technology can stimulate openness and flexibility of our real and virtual worlds, providing a further environmental upgrading, numerous combinations and dynamic ever-changing conditions. However, we should not forget that it could also impose a rigid frame of reference which might enable self-expression, creativity and constant

transformation. After all, its ambiguity is already easily recognizable. Therefore, it is not surprising that the Second life logo combines Le Corbusier's open hand with the eye, as a symbol of omniscience and all-seeing divinity (i.e. control), while Google Earth, often emphasized as a democratized view from cosmos, could easily become a tool of harmful manipulation.

Images for the future

Considering contemporary trends in architecture and real/virtual life, it becomes evident that our future world could be gradually transformed into a number of artificial and often isolated environments. These (anti)utopias or heterotopias (according to Foucault) could have a limited communication and interaction between 'inner' and 'outer' entities which would insure their safety, sustainability and accepted/preferred social and spatial order. On the other hand, the future world could consist of several interactive layers, networks and nodes or it could be shaped according to the demands of gravity (or lack of it), various energy-use criteria and specific weather conditions.

Two recent examples - projects for Dongtan eco-city (China) and Masdar city (UAE), have opened a new chapter of utopian/idealized ideas, but their materialization seems to be more realistic than ever. Imagined and planned like well-balanced and sustainable urban nodes, both projects underline the importance of advanced technology and environmental considerations. Consequently, according to its authors (Arup) and investors (Shanghai Industrial Investment Corporation - SIIC), Dongtan, planned on an alluvial island near Shanghai, will use green technologies and smart design in order to achieve:

- environmental, social, economic and cultural sustainability;
- carbon emission close to zero;
- high quality of life for its 400.000 residents.

The city should produce and utilize its own wind and solar energy, as well as bio-fuel and recycled city waste. Additionally, the surrounding farmland should use organic farming methods providing food for the new urban area.

However, in spite of its elaborated 'clean' and environmentally friendly ideas, this project, like many other 'utopian' and/or 'idealized' urban concepts, was actually inspired and driven by local and global political motives, which should have strengthened the cooperation between Great Britain and China. Unfortunately, the problems that occurred on the local level caused a delay of the project implementation putting the Dongtan experiment on hold. Simultaneously, the costs of construction have increased, possible social and functional problems have been detected and numerous debates among professionals have started.

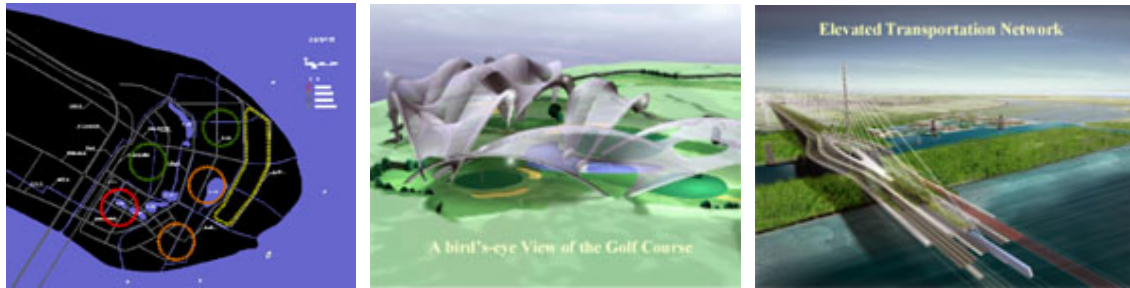


Figure 3. Dongtan Eco-city (China). Urban zoning and futuristic techno-visions of the new urban settlement: utopia or reality?

Masdar city, a new clean-tech science and research cluster close to Abu Dhabi, also represents a model of a modern utopia. Initiated in 2006 by the Government of Abu Dhabi and designed by Foster and Partners, its development is driven by the Mubadala Development Company and the Abu Dhabi Future Energy Company. The new urban node, whose master-plan combines the traditional Arabic urban planning and leading-edge technologies, should occupy 6 km² and provide a sustainable and high-quality living environment for 50.000 citizens. According to the main ideas of global efficiency and connectivity, its external networking will be supported by Abu Dhabi airport, a new railway and road system, while its internal networking should be compact, car free and pedestrian friendly, with modern public transportation (LRT) and innovative personal rapid transport system.



Figure 4. Masdar (UAE) - a city of the techno-future or just a new exercise of financial power?

The general objectives of the project are:

- to position Abu Dhabi as a world-class research and development hub for new energy technologies;
- to drive the commercialization and adoption of advanced technologies in sustainable energy, carbon management and water conservation.

However, the real efficiency and sustainability of this spectacularly announced role-model still has to be confirmed. Creating a carbon neutral city remains a utopia - in spite of

all our efforts and expectations. In the meantime, clean technology and total sustainability are used as attractive labels that should stimulate further investments, increase our environmental consciousness and tackle numerous sensitive issues related to our future in an over-urbanized world.

Finally, some interesting examples of 'futuristic' urban visions were also designed by the students of the Faculty of Architecture in Belgrade, who made an architectural experiment in order to transform a large empty area of the Belgrade Metropolitan region. In planning and creating a new society, activities and spaces for the third part of the Belgrade conurbation, they focused their attention on the technological aspects of the living environment and the result was a new, idealized urban node - Technopolis.

During the design process (analyzes, development scenarios, elaboration of the main transformation concept and project finalization) students were asked to apply radical or moderate approach in order to:

- define preferred social, political and economic context;
- create a new spatial/urban identity;
- use advanced technology in various ways;
- achieve high urban efficiency and environmental sustainability.

In general, all projects emphasize the importance of dynamism, flexibility and total integration of spaces and activities. Most of them use various types of grid and development matrixes, apply new materials and structures and stimulate introduction of new modes of transportation and communication. Furthermore, some of the projects combine elements of so-called 'soft' architecture and 3D interfaces, but, without exception, all of them create environment(s) that represent monumental and dramatic scenery - opening unexpected vistas and blurring a division between open and closed, private and public, material and immaterial (for details see the movie [IFZ09_stupar_technopolis.wmv](#)).

Obviously, the city of the future always has to impress, surprise and puzzle future users and a highly artificial and perfectly ordered surrounding usually represents the best 'recipe' for that effect. However, it is difficult to avoid a totalitarian tone in every 'utopian' model. Therefore, all these projects - elaborated by architects, politicians or activists, usually remain on the 'virtual' side even though some of their elements could be used, transposed or recycled in less ambitious visions, plans and fantasies.

Conclusion

Analyzing the future and its possible images is usually a never-ending process. All presented examples assure us that visions and ideals, at least in this moment, promote elements of high connectivity, accessibility, flexibility and mobility which are generated from

our current comprehension of space and time relations. However, whether our future will bring astonishing innovations, cataclysmic perspectives or just recycle and transpose already used ideas from the past is still difficult to predict. At the same time, it becomes questionable what scenario will indeed provide efficient, sustainable, user/environmentally-friendly surrounding adjusted to our 'reinvented' perception of reality and its virtual counterpart.

In any case, it is clear that the world of our future will definitely consist of various techno-spatial formations. Spaces in transit (like I-pods, laptops, cell phones), metaverses and digital alter-egos represent just one step in our latest technological upgrading, while our everyday life has already become 'framed' by surreal landscapes, hybrid settings and an omnipresent sense of virtuality. Obviously, the multiplication of realms, flows and dimensions, as well as their intensified merging, overlapping and alterations enable various speculations. Daring visions are about to become a reality, tangible structures are de-contextualized and transposed into virtual worlds, and a new game has definitely started.

Are we testing the first level *in vivo*?

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