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City and Utopia in the Late 19th and Early 20th Centuries.“

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A MATTER OF SIZE

CITY AND UTOPIA IN THE LATE 19TH AND
EARLY 20TH CENTURIES



TO MY FATHER, WHO NEVER MADE IT TO NEW YORK [OR SUSHI].

THANK YOU!

PETER EIGNER - for the encouragement, the interesting discussions and for sharing the enthusiasm (for the topic and Batman).

MY MOTHER - for the support.

ERIK - for "HOME".

THE CAT.

THE DOG.

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INTRODUCTION

Ever since mankind started to accumulate in a way that shows specific characteristics such as density, a certain degree of anonymity and the existence - or at least the necessity - of a variety of infrastructures, *cities* have served as main sites of utopian thought.

This may to some extent result from the fact that the perception of cities has always been of controversial nature: throughout history, cities have been idealised as well as demonised, they have been held responsible for innovation, progress and cultural achievements as well as for depravity and decay of morals and historical heritage.

Urban discourse of such kind has been a highly significant issue on a global scale - wherever urban change took place rapidly - around the turn from the 19th to the 20th century. And indeed: with regards to the pace and intensity of change - triggered by developments following industrialisation like immense population growth combined with technological progress - this period can be regarded as unprecedented in modern urban evolution.

Analysing this timeframe therefore not only allows to gain insights into urban development history, but it also offers the opportunity to trace back the discursive threads around utopian thinking, planning and constructing in (and about) cities - which is one of the primary aims of this paper.

A lot of research has been undertaken from several scientific perspectives - architects, urbanists, political scientists, economists, sociologists, artists and historians have illuminated different facets of the topic. It is with this prospect in mind that I try to address an aspect that has yet not been subjected to extensive scientific attention and that involves both the historical background (including social, political and technological developments) and the utopian potential that can be derived from it: the focus of this thesis shall be placed on questions surrounding the factor 'size'. In the wider sense, they concern the limits of expansion in various contexts and represent a recurring motif in utopian urban thinking. More specifically, such questions can for instance target issues like the number of inhabitants the perfect city can accommodate in order to ensure social peace, the extent of density that is required for a city to be liveable or the significance of inventions such as the elevator and how they enabled the realisation of formerly utopian visions.

Besides that, this paper shall illuminate the personalities - ambitious, obstinate and visionary characters - behind the utopian proposals and how their respective backgrounds shaped their ideas.

Those two focal points shall find reflection in my two core theses: firstly, I shall argue that size is not an absolute, but a relational category. The "good" size can't be quantified, it can only be a ratio. And yes, it matters. Secondly, I shall claim that in the given time frame it is individuals (not groups or institutions) who brought forth virtually all visions, models or proposals of utopian cities. This always happened as a reaction to the direct living conditions and influenced by the own experiences with cities in the past.

My personal reasons for believing that those topics are worth an examination is that history has shown that the boundaries between what is utopian and what is feasible have constantly blurred over time (as they do today). Utopia is a historical constant, although one that has never been undisputed whether in its entirety as a concept or in its shape of appearance, and definitely one that has been declared dead quite a number of times.

Just imagine how contemporary observers must have felt when in 1783 the first montgolfier soared into the sky, when the first electric light bulb illuminated a room or when for the first time it was possible to talk to someone being at the other end of the city via a bizarre looking device! Utopia is everywhere, it is timeless and immortal.

My generation is the first to be in the privileged position of having experienced one of the oldest utopian motifs turn into reality: the opportunity of gaining access to a plethora of global information from a variety of sources within the blink of an eye – an achievement that fifty years ago most people would have considered a figment of a lunatic's imagination.

This whole world (or rather: tangled thicket) thus opening up today allows to approach global history in the most original sense – focusing on intertwining lines, repercussions and parallels.

Cities, more than any other spatial configurations, perfectly embody two universal concepts, the first being that of global development, the second being that of utopian ambitions. Considering that we find ourselves right in the middle of an urban era that is expected to approach a new peak within the next thirty years - carrying along a vast number of new infrastructural defiances -, it cannot be too wrong to take a retrospective look at the past challenges, how they were coped with and what conclusions can be drawn with one eye towards future undertakings, with the other towards the unlikely.

RESEARCH INTEREST

The initial interest behind this thesis lies in the depiction of the relations between city and utopia and the accompanying discourse within the period of the outgoing 19th century (approximately from 1890 onwards) until the 1930s.¹ This choice not only reflects the fact that the debates on urban development have been conducted with great intensity and controversy at that time, but it also allows taking into account the multitude of developments that have led to these controversies as well as the diversity of conceptions of 'utopia' itself.

In order to avoid losing focus in the abundance of elements that would be suitable for an examination, the factor 'size' as introduced above should serve as a golden thread throughout the paper – not as an arbitrary principle, but for two specific reasons: 1) Size as both an object of fascination and of deterrence perfectly represents the mood that has pervaded the debate on urbanism around the turn of the centuries. This mood – reaching from euphoria and atmosphere of departure to anxiety and withdrawal – was characteristic for the two main positions opposing each other, namely a progressive versus a rather traditional perception; and 2) Size, in one way or another, finds itself in most reflections on the ideal city – be it in the form of limitations in population or geographical extent, be it in the size or the height of buildings. Thus, I have broken these topics down to the following key questions that shall be approached through a critical analysis of the relevant scientific literature:

- Which events or developments have triggered utopian thoughts and actions in urban development within different contexts in the given time frame?
- Which personalities were involved and (how) did their ideas have an impact on urban development?
- How does the factor 'size' play a role in the respective contexts and for the people involved?

The outline of the paper is as follows: the first chapter 'URBAN SPACE AND UTOPIA' introduces general thoughts on cities and their spaces – as concrete spaces on one hand, as abstract concepts on the other hand. In this context, rather philosophical issues shall be illuminated, such as the fascination that cities seem to exert regarding utopian ideas or why cities have been at the heart of utopian research efforts in the 20th century. To put it briefly: this chapter aims at getting to the bottom of the relation between city and utopia. Therefore, questions on the 'genius loci' of the city or certain urban spaces and its relevance concerning urban utopias as well as questions on the elements of urbanity that stimulate utopian thinking shall be approached.

With the second chapter 'TOWARDS THE AGE OF THE METROPOLIS' I want to provide an understanding of the historical background that initiated both the urban age and the era of urban utopian thinking. I shall argue that these evolutions did not run parallel coincidentally, but as results to the same developments, namely industrialisation, population growth and technological progress encouraging euphoric but also gloomy visions of the future. Furthermore, the intense occupation with the future at that time, its pro- and anti-urbanist positions and curiosities (such as the veritable boom in future predictions) shall be illuminated.

¹ If, in specific cases, it is necessary for reasons of comprehensibility, I will allow myself to go beyond this time frame.

After those first two rather introductory chapters, the third - 'SEARCHING FOR SMALLER UNITS' - addresses the topics of decentralisation and dispersal as an approach for solving the urging problems of the great cities: overcrowding, poor housing and living conditions. Starting from a short digression on company towns - which in a broader sense can be understood as utopian field experiments - I am going to introduce Ebenezer Howard's Garden City Movement, Frank Lloyd Wright's Broadacre City and Tony Garnier's Cité Industrielle - three entirely different concepts and personalities that, however, share an aspiration for de-densification.

The fourth chapter 'AIMING HIGH' is dedicated to the history of the skyscraper and its consequences on cities - the requirements, the debates, the implications on utopian ideas. After briefly outlining the developments that made the construction of high-rise buildings possible in the first place, I shall present different versions of outlining the vertical city's future. After elaborating on the numerous graphic representations (and their originators) of the early 20th century, the works of Antonio Sant'Elia and Le Corbusier will be subjected to a closer examination.

I. URBAN SPACE AND UTOPIA

I.I. (URBAN) SPACE IN SCIENCE

The exploration of space as a scientific category was traditionally reserved for physics and philosophical sciences, confined to questions on the corporal and ontological dimension of natural spaces. Basically, space was perceived as a given condition being (for instance in Kant's opinion) an indispensable prerequisite for the perception of objects.² Newton depicted space as a 'container' that as such is stationary and unalterable, an absolute parameter. It *can* be filled with certain meanings, attributes and events - space as a realm in which action might occur or not - but the prevalent condition does not affect space as such: space exists as a neutral background for occurrences whatsoever, but it equally exists in the void.³

However, in the second half of the 19th century – and in correlation with the implementation of sociology as an independent scholarly subject – the field of researching space was expanded by the human factor as an element of influence on one side and as an object of study on the other side. As the first to have approached such considerations, Alexander von Humboldt and Friedrich Ratzel are regarded as the founders of anthropogeography. Of substantial interest to anthropogeographers are obviously human beings (or overriding structures implemented by human beings) and how their actions or omissions change and shape space, but also questions on how given spatial parameters influence human behaviour. It is thus one of the chief tasks of Humanistic Geography to complement the objective, concrete fact of space with subjective angles of the experience with and the perception of those spaces.⁴

Or, to put it in the words of Georg Simmel: the *significance* of space (as the given fact as which it is beyond question) is revealed through its stimulation.⁵

Henri Lefebvre, who can be classed a philosopher among space scientists, went even further and defined space as a product - hence space science should be about unfolding the invisible structures behind physical spaces, thereby enabling a comparative analysis of social, technical and societal processes.⁶

Another noteworthy, society-oriented approach to analysing space stems from Dieter Läßle, a German urban researcher: he coined the concept of a 'matrix-space' basing on a relational understanding of space, thereby aiming at overcoming the strong focus on physical perceptions of space. This matrix can be understood as a framework that is a permanent process, shaping and thus modifying society at all levels - macro, meso and micro.

It is composed of the following elements or subsystems performing different functions: 1.) what Läßle calls the "*materiell-physisches Substrat*" [the material-physical substrate] - the form of appearance of space, involving man-made artefacts and (infra-)structures, serving as a cultural memory, 2.) structures of human actions and interactions forging mechanisms of cohabitation and exclusion, 3.) a normative, institutionalised regulation system functioning

² Lothar BERTHELS, Die dreiteilige Großstadt als Heimat. Ein Szenarium (Opladen 1997) 24.

³ Annette GARBE, Die partiell konventionale, partiell empirisch bestimmte Realität physikalischer Raumzeiten (Würzburg 2001) 4.

⁴ Stephan GÜNZEL, Raumwissenschaften (Frankfurt 2009) 144.

⁵ BERTHELS, Die dreiteilige Großstadt als Heimat, 25.

⁶ GÜNZEL, Raumwissenschaften, 11.

as a link between the first and the second and 4.) a sign system – symbols carried by artefacts with the purpose of ‘translating’ social functions of spaces.⁷

In the given context of city and utopia, questions concerning different conceptions of what (in particular: urban) space is and what functions it has to perform are of utmost relevance as the answers to those are most helpful for understanding the underlying motivations of those who attempted to change it. By tendency, it can be observed that persons who pursued such endeavours saw more in space than just a system of coordinates – envisioning a better city in the majority of cases meant envisioning a better life for the people living in this city.

This stands to reason because by their very nature, cities are spaces that only exist through human interference, embedded in a specific historical context that reflects all forms of preceding developments.

Tracing back the lines of evolution of contemplating on cities and on utopianism, it shows that they run parallel: not just space as such, but *the city* in particular – and utopian ideas on how life in the city could be optimized – have been object of philosophical observation since ancient times. Certainly one reason for that is that “*the city has been, and continues to be, an important crystallization of human civilization and its discontents.*”⁸

Besides Plato, who elaborated his famous concept of the ideal polis, ‘Politeia’, also Aristotle dwelled upon the question which specific features a city must exhibit in order to fulfill its “*common purpose*”, namely “*to create and promote eudaimonia, which is best translated as ‘human flourishing’*”.⁹

More than two millennia later, Camillo Sitte referred to Aristotle when declaring that the premise that a city must be designed in a way that yields happiness and safety for its inhabitants constitutes the fundamental principles of urban planning. The focal points of his considerations were ‘beauty’ in urban settings, its effects on public life and the composition rules that, in Sitte’s opinion, can be derived from it.

In his book “*Der Städte-Bau nach seinen künstlerischen Grundsätzen*”¹⁰, which obviously met the *Zeitgeist* of the outgoing 19th century as it was internationally received with great interest, he criticized the tendency that modern city planning degenerated into a mere technical matter, whilst in its highest sense it was destined to be a matter of the arts, as it used to be in the Middle Ages, the Renaissance as well as in the ancient world.¹¹ The methodology he used indeed reflected his propensity to aesthetics, but it also brought along the not entirely unfounded reproaches of lack of objectivity, of selectivity and of nostalgia. His strategy was as follows: he visited cities that he considered beautiful and well-designed (predominantly in Italy), overlooked them from the highest observation tower (equipped with a map) and developed sketches relating to the city’s layout and structure. Based on the in that way obtained insights, he derived theoretical premises and “*parameters to satisfy certain ever-present, universal needs of communal living – social and aesthetic as well as functional.*”¹²

⁷ Dieter LÄPPLE, Gesellschaftszentriertes Raumkonzept. Zur Überwindung von physikalisch-mathematischen Raumfassungen in der Gesellschaftsanalyse, 8f. In: katnet e. V., <http://www.katastrophennetz.de/downloads/L%E4pple_Sylvia_Kruse.pdf> (02.01.2014).

⁸ Sharon M. MEAGHER (ed.), *Philosophy and the City. Classic to Contemporary Writings*. (Albany 2008) 4.

⁹ Ibid, 6.

¹⁰ Camillo SITTE, *Der Städte-Bau nach seinen künstlerischen Grundsätzen* (Wien 1889).

¹¹ Camillo SITTE, *Der Städte-Bau nach seinen künstlerischen Grundsätzen* (Basel/Boston/Berlin 1909). In: ETH Zürich, Prof. Dieter Eberle, <http://www.eberle.arch.ethz.ch/cms/uploads/files/pruefung/texte/Camillo_Sitte.pdf> (13.01.2014), 2.

¹² George R. COLLINS, Christiane Crasemann COLLINS, *Camillo Sitte: The Birth of Modern City Planning* (Mineola 2006) 16.

Even though Sitte was well aware that the patterns underlying historical cities could not be transferred to modern cities facing entirely new challenges - especially with regards to their higher complexity and larger dimensions -, he had to put up with mockers such as Le Corbusier who contemptuously referred to Sitte's preference for the picturesque and for winding shapes as the "*pack donkey's way*"¹³.

Despite the criticism, what certainly can be said about Sitte is that his endeavour of drawing attention to the aesthetic composition of urban public spaces was not to be understood as an end in itself, but rather in correlation with the emotional reactions such compositions evoke among the inhabitants and visitors¹⁴, re-introducing the human factor into the discussions on urban planning amidst an environment in which, as Sitte calls it, "*der Mensch förmlich selbst zur Maschine wird*"¹⁵ [man himself turns into a machine].

Apparently, throughout the history of utopian thinking there have been models of ideal cities that neglected the human factor - either explicitly or simply because it has not been deemed relevant -, schemes that did not aim at altering the way the respective society was structured, but primarily at meeting or implementing aesthetical and architectural standards.

It is thus necessary to distinguish between those two different versions of urban utopias as they vary in function and therefore require different modes of examination. If, however, one has a closer look at the younger history of urban utopian drafting and implementation, especially beginning with the 19th century, one will find that the undertakings stemming from these times almost exclusively reflect the ambitions of individuals to change the immediate conditions of society.

It is not without reason that Pierre Bourdieu, Henri Lefebvre and Georg Simmel perceived the importance of space unambiguously linked to its social meaning: as a "*system of relations*"¹⁶, as "*simultaneously a product of social practices and their facilitator [...] both produced and productive*"¹⁷ or as a "*crucial dimension of social interaction and also of cultural formations*"¹⁸.

Since every existing city is necessarily inhabited by real people, it seems reasonable that urban research targeting at investigating *real* urban challenges must place those people if not at the centre of interest than at least at a prior position.¹⁹

It is, for one thing, due to the predefined temporal and contextual determination that the urban utopian ideas mentioned in this paper are amongst those that in one way or the other (and to a greater or lesser extent) revolve around societal concerns, but it is first and foremost owed to the fact that I entirely agree with the British zoologist Desmond Morris who said: "*The city is not a concrete jungle, it is a human zoo.*"²⁰

¹³ Eeva-Liisa PELKONEN, Donald ALBRECHT, Eero Saarinen: *Shaping the Future* (Helsinki, 2006) 312.

¹⁴ Klaus SEMSROTH, Michael MÖNNIGER, Christiane CRASEMANN COLLINS (ed.), *Camillo Sitte Gesamtausgabe Schriften und Projekte*, Bd. 3 (*Der Städtebau nach seinen künstlerischen Grundsätzen* 1889) (Wien/Köln/Weimar 2003) 26.

¹⁵ *Ibid.*, 113.

¹⁶ Pierre BOURDIEU, *Social Space and Symbolic Power*. In: *Sociological Theory*, Vol. 7, No. 1 (Spring 1989) 16.

¹⁷ Lukasz STANEK, *Henri Lefebvre on Space: Architecture, Urban Research and the Production of Theory* (Minneapolis 2011) 141.

¹⁸ David FRISBY, Mike FEATHERSTONE, *Simmel on Culture: Selected Writings* (London/Thousand Oaks/New Delhi 1997) 11.

¹⁹ In this respect, it is worth highlighting a prominent subject of discussion within utopian research, namely the question whether utopia has to be grounded in reality in order to go beyond mere philosophical value.

²⁰ Desmond MORRIS, *The Human Zoo* (London 2009) vii.

I.II. CITIES AND EMOTIONS

*"The city has always been a place of excitement; it is theatre, a stage upon which citizens can display themselves and see others. It has magic, or should have, and that depends on a certain sensuous, hedonistic mood, on signs, on night lights, on fantasy, color, and other imagery."*²¹

Within the category of space, cities have always held a special status throughout their histories – their significance certainly exceeds that of cities as *"purely physical facts"*²². For Lewis Mumford, one of the most outstanding urban historians of the 20th century, the social organization of a city must be given priority over physical structures (including infrastructures) and institutions. It is exactly this social factor - which by its very nature is a human factor - that, in his opinion, is at the essence of relevance of cities as opposed to rural areas.

*"The essential physical means of a city's existence are the fixed site, the durable shelter, the permanent facilities for assembly, interchange, and storage; the essential social means are the social division of labor, which serves not merely the economic life but the cultural processes. The city in its complete sense, then, is a geographic plexus, an economic organization, an institutional process, a theater of social action, and an aesthetic symbol of collective unity. The city fosters art and is art; the city creates the theater and is the theater. It is in the city, the city as theater, that man's more purposive activities are focused, and work out, through conflicting and cooperating personalities, events, groups, into more significant culminations. Without the social drama that comes into existence through the focusing and intensification of group activity there is not a single function performed in the city that could not be performed – in the open country."*²³

From this standpoint it seems reasonable that within the scope of spaces it is precisely the city that exerts an exceptional fascination and emotionality that is outstandingly likely to encourage utopian ideas. Another explanation given for the interconnection between cities as 'extraordinary' spaces, utopian potential and fascination is of rather pragmatic and evident nature: due to the mere existence of a larger number, diversity and concentration of people, the occurrence of intersections, conflict and stimulation – to put it briefly: any form of social interaction - is much more frequent than in rural areas.

*"Should not we define a city as a place where the surprise of discoveries and encounters is the major potential, the main productive force? Micro- or macro-events in a city are not a side effect of urban life but the very substance of urbanity. That is why what can fascinate in the city is not only specific items of a city but the city itself, the city as the unplanned programme of unexpected experience."*²⁴

Or, in the words of Mumford:

²¹ Allan JACOBS, Donald APPLEYARD, Toward an Urban Design Manifesto. In: Townhouse Center Inc., <<http://townhousecenter.files.wordpress.com/2012/02/urban-design-manifesto-by-jacobs-1987.pdf>> (13.03.2014), 116.

²² Lewis MUMFORD, What is a City? In: Contemporary Urban Anthropology, <http://www.contemporaryurbananthropology.com/pdfs/Mumford,%20What%20is%20a%20City_.pdf> (13.03.2014), 93.

²³ Ibid, 94.

²⁴ Jacques LÉVY, The City is Back (in Our Minds). In: Wolf-Dietrich SAHR, Heiko SCHMID, John URRY (ED.), Cities and Fascination: Beyond the Surplus of Meaning. (Surrey/Burlington 2011) 33.

*"It is not for nothing that men have dwelt so often on the beauty or the ugliness of cities: these attributes qualify men's social activities. [...] ...in its various and many-sided life, in its very opportunities for social disharmony and conflict, the city creates drama; the suburb lacks it."*²⁵

This 'urban drama' was perceived very ambivalently around the turn from the 19th to the 20th century – one that has expressed this ambivalence very well was Georg Simmel who concerned himself with the impacts of living in a metropolis on the dwellers' state of mind. In the essay "Die Großstädte und das Geistesleben", written in 1903, he stated that the sensory overload city inhabitants are exposed to – and in which he saw the basis of the evolution of specific metropolitan mind characteristics – result in an intensification of intellectuality as a protective mechanism against this overstimulation, but also in a rise of arrogance, mutual aversion and guardedness. Furthermore, Simmel identifies the anonymity of the city as the crucial prerequisite to greater individual freedom, but also as the central cause for its flip sides, loneliness and forlornness. By being the first to approach such questions in a systematic way²⁶, Simmel is considered the founding father of urban sociology (before him, in 1845, Friedrich Engels had already described what he perceived as the personality structure of the metropolitan, but this happened in a rather incidental way²⁷). Simmel, having held a professorship in Berlin, presumably had a formative influence on Robert Ezra Park, one of his students who should become one of the leading minds behind the Chicago School of Sociology. For Park, who pursued a less philosophic and more empiric target (he highlighted the potential of cities as sociological laboratories for the assessment of human behaviour), cities provided the settings for good and evil of human nature in their extremes, they offered opportunities for the abnormal and the extraordinary and for generating new varieties of human nature.²⁸

However, not everyone did come up with such great enthusiasm for cities as Mumford, with such benevolence as Parks or with such analytical sobriety as Simmel. At the other end of the scale there was a strong anti-urban movement that was prominently represented by greats like Friedrich Nietzsche, John Ruskin or Henry Ford who declared the city *"the most unlovely and artificial sight this planet affords [...] The ultimate solution is to abandon it."*²⁹ And it has to be admitted that there were good arguments for such assessments as shall be explained in more detail in the following chapter. For now shall be stated that in any case city evokes emotions which not only are the breeding grounds, but first and foremost the indispensable requirements for utopian thinking.

I.III. OH, UTOPIA!

The history of ideas is an important element within the history of utopian research as it - in its function as 'cultural memory', as Richard Saage calls it - displays the historical dimension and the continuity with which the utopian discourse was conducted throughout European history since ancient times.

²⁵ Lewis MUMFORD, What is a City? In: Contemporary Urban Anthropology, <http://www.contemporaryurbananthropology.com/pdfs/Mumford,%20What%20is%20a%20City_.pdf> (13.03.2014), 94.

²⁶ Hartmut HÄUSSERMANN, Walter SIEBEL, Stadtsoziologie. Eine Einführung (Frankfurt/Main 2004) 35.

²⁷ BERTELS, Die dreiteilige Großstadt als Heimat, 18.

²⁸ Rolf LINDNER, Walks on the Wild Side – Eine Geschichte der Stadtforschung (Frankfurt/New York 2004) 122f.

²⁹ LÉVY, The City is Back (in Our Minds). In: SAHR, SCHMID, URRY (ED.), Cities and Fascination, 35.

In the recent years of utopian research, the notion of utopian ideas as expressions of escapism was widely discarded.³⁰ This insight is important, because it alleviates one of the most popular accusations against utopian thinking – the one of futility.

Opinions differ sharply on the question whether utopian thinking must *achieve* something, whether it must produce outcome and if yes, of which kind this outcome shall be. One reason for that is probably the fact that utopian research can't deny a certain degree of sponginess. This firstly has to do with the diversity of research fields involved (literature, psychology, politics, sociology, history, arts, architecture...), which is a defining feature of all interdisciplinary subjects and by no means a disadvantage per se, and secondly with the question of terminological demarcation. As the range of definitions is very far-reaching, the word 'Utopia' degenerated into an auxiliary term that is used relatively randomly to describe things that are desirable, unattainable, unrealistic or that arise from a dream, a sci-fi or a fantasy world. If we stick to the etymology of the word, the meaning is very simple: *oû* [not] and *tópos* [place] - the place that is not. In fact, Sir Thomas More is said to be the first to have used the Greek term for naming the island that provides the setting of his fictional society, in 1516.

The linguistic (and therefore 'original') definition is not the worst choice, because in the proper sense it does not implicate an ethical judgment whatsoever – and can thereby be clearly delimited from its good and bad mutations: Eutopia and Dystopia.

With regards to urban planning, this distinction is of rather theoretical nature. It can be reasonably assumed that exceedingly few would see a purpose in drafting hell on earth just for the fun of it - utopian thinking in connection with urban environments almost exclusively meant envisioning an ideal (or at least a better) version of a city.

However, concerning the scientific discourse, the distinction is significant to some point, because concrete terminologies are leastwise necessary for maintaining a common basis for discussion. And indeed, the concept of Utopia has been disputed a lot – there are manifold examples of skeptics and thinkers that promoted anti-utopian arguments. The most popular representative of this line of thought was probably Sir Karl Popper. His principle point of criticism – which he shared with others, for instance with the sociologist Ralf Dahrendorf – was that utopian thinking would lead to totalitarian structures and concentration of powers – a concern that was boosted in the light of the cautionary tales of communism and fascism³¹, attaching a negative connotation to any form of utopian thinking in the 20th century.

Popper's aversion is even more comprehensible given that what he saw in Utopias were blueprints of allegedly perfect societies - static templates that are not to be altered and that necessarily require mechanisms of enforcement, most likely represented by a centralized government.³²

Certainly Popper did not stand alone with his definition of Utopia, but it is hardly shared by utopia-philic thinkers such as George Kateb, an American political theorist: "*Any serious utopian thinker will be made uncomfortable by the very idea of a blueprint, of detailed recommendations concerning all facets of life.*"³³ Popper's blueprint-approach was furthermore critically questioned by Lyman Tower Sargent, a political scientist who specialized in utopian research. He stated that

"very few utopias were written with the intent of implementing them in detail, and the history of political thought does not offer blueprints for building new societies. Constitutions rarely go beyond the basic governmental

³⁰ Richard SAAGE, *Utopieforschung: An der Schwelle des 21. Jahrhunderts* (Münster 2008) 43.

³¹ Lyman Tower SARGENT, *Authority & Utopia: Utopianism in Political Thought*. In: *Polity*, Vol. 14, No. 4 (Summer 1982) 565 – 584, here: 576.

³² *Ibid.*, 569.

³³ Ruth LEVITAS, *Utopia as Method: The Imaginary Reconstitution of Society* (Hampshire 2013) XVII.

structure, and seldom has the author of a proposed political system expected that his or her descriptions could be put into practice without modification.”³⁴

Another anti-utopian argument that repeatedly came up was the apprehension that the preoccupation with forging out plans and generating visions for the future would result in a neglect of real, current problems for the benefit of an abstract, glorious scenario that might never be. To put it in Popper’s words:

*“Do not allow your dreams of a beautiful world to lure you away from the claims of men who suffer here and now. Our fellow men have a claim to our help; no generation must be sacrificed for the sake of future generations, for the sake of an ideal of happiness that may never be realized. In brief, it is my thesis that human misery is the most urgent problem of a rational public policy and that happiness is not such a problem. The attainment of happiness should be left to our private endeavours.”*³⁵

A similar point was raised by Marx and Engels who distanced themselves from the early utopian socialist ideas of the late 18th and the early 19th century (which they later termed “utopian socialism”), specifically criticizing that those ideas were abstract, “*pure phantasies*” and “*foredoomed as Utopian*”³⁶ – “*To make a science of Socialism, it had first to be placed upon a real basis.*”³⁷

Countering this, the Marxist Ernst Bloch coined the term of “Concrete Utopia”³⁸. His aim, being a declared proponent of Utopianism (and certainly an optimist), was to highlight the diversity within utopian thinking and the prospects of realizing utopian ideas.

*“The world is in a constant state of process, of becoming. The future is 'not yet' and is a realm of possibility. Utopia reaches toward that future and anticipates it. And in so doing, it helps to effect the future. Human activity plays a central role here in choosing which possible future may become actual: 'the hinge in human history is its producer.’”*³⁹

In his opinion, diametrically opposed to Popper’s, Utopia offers a path leading away from totalitarianism by pointing out an abundance of alternative solutions and opportunities that can be chosen from – a thesis that can hardly be scientifically validated nor falsified.

Similarly elusive, Frederik Polak, one of the pioneers in the field of future studies, made the assertion that by having and promoting a specific image of the future, the future will be steered towards the direction the image indicates.⁴⁰ It would therefore be up to the people to simply choose utopia.

To sum up this pro-/anti-utopianism debate, it can be said that in the field of utopian research there are much more discussions than findings and that the disagreements start with basic ideological questions such as whether utopia leads directly into the abyss or into the land of milk and plenty.

*„Perhaps if we had better utopias, we would be able to produce a better world, say the utopians. The antiutopians answer that if it were not for utopias, we would not have the present mess.”*⁴¹

³⁴ SARGENT, *Authority & Utopia*, 570.

³⁵ Karl R. POPPER, *Conjectures and Refutations: The Growth of Scientific Knowledge* (Abingdon/New York 2002) 485.

³⁶ Friedrich ENGELS, *Socialism. Utopian and Scientific* (Chicago 1908) 58.

³⁷ *Ibid*, 75.

³⁸ Jamie Owen DANIEL, Tom MOYLAN (ed.), *Reconsidering Ernst Bloch* (London/New York 1997) 66.

³⁹ *Ibid*, 66.

⁴⁰ SARGENT, *Authority & Utopia*, 574.

⁴¹ *Ibid*, 566.

However, in the specific context of utopia and urban planning, it is not just about dogmatic issues – at least in cases in which the realisation of utopian ideas was endeavoured.

One has to bear in mind that such an undertaking definitely meant encountering very real, ‘un-utopian’ obstacles such as practical constraints or political restrictions. What furthermore has to be considered is that in every city and generally in every inhabited area there are fixed, preset physical characteristics that cannot be ignored or destroyed - for instance underground and overhead supply lines or existing infrastructures that set a certain unalterable frame around an urban setting.⁴²

On these grounds it is likely to object to the German historian Siegfried Grundmann who stated that each society creates a space structure adapted to its needs⁴³, because to some extent spatial structures are historically determined or underlie various other restrictions.

Contrary to popular belief, Utopia put into practice is not a ‘carte blanche’ and it cannot provide a panacea. Nevertheless, the role of utopia (in the broader sense) throughout the history of cities should not be underestimated as already Anatole France acknowledged:

*“Without the Utopians of other times, men would still live in caves, miserable and naked. It was Utopians who traced the lines of the first city. ... Out of generous dreams come beneficial realities. Utopia is the principle of all progress, and the essay into a better future”.*⁴⁴

⁴² BERTELS, Die dreiteilige Großstadt als Heimat, 32.

⁴³ Ibid, 32.

⁴⁴ Lewis MUMFORD, The Story of Utopias (Milton Keynes, 2008) 22.

II. TOWARDS THE AGE OF THE METROPOLIS

II.I. LANDMARKS TRANSFORMING SPACE AND TIME

The 19th century was an exciting era. An abundance of seminal inventions took the world by storm, beginning with England. The invention of the railway in the early 19th century did not only revolutionise the movement of people and goods, it also entirely changed the pictures of space, distance and time in the humans' mindsets, standing for speed and technological progress.

This development did not come quietly – it was deemed ground-braking and received with a mix of feelings between excitement and agitation. In 1843, Heinrich Heine commented on the opening of the railway lines from Paris to Orléans and to Rouen:

*"This is the way our forefathers must have felt when America was discovered, when the invention of gunpowder was announced by the first gunshots, when the printing press sent the first galley proofs of the divine words into the world . . . a new era in world history has begun and our generation can boast of taking part in it."*⁴⁵ [...] *"What changes must now occur, in our way of looking at things, in our notions! Even the elementary concepts of time and space have begun to vacillate. Space is killed by the railways, and we are left with time alone."*⁴⁶

The awareness that spatial experience was subject to fundamental change was even acknowledged by the Brockhaus dictionary in 1838, stating that the railway reduces Europe's surface to an area the size of Germany.⁴⁷

The railway was not just considered a tool for conquering space and time, it was also attributed with the potential of providing a counterpoise to class hierarchies, being a means of transportation that brought both the rich and the poor from A to B in the same time - of course, type and comfort of accommodation varied by rank, but the reachable radius and thereby the 'disposability' of space was the same. The fact that the "earl and the beggar" were now in the position of traveling with the same speed was of course not conceived as an achievement by everyone – amongst the elite, anxious fears of a collapse of social order were widespread.⁴⁸

Furthermore, like every time an epoch-making change takes place, concerns that seem rather bizarre today came up: doctors warned of the unforeseeable health effects of speeds of around 30 kilometres per hour, of potential brain damages or 'Delirium furiosum', a terrible form of anxiety that can be caused merely by looking at a train in full motion.⁴⁹

This excitement has subsided – among other things due to improved security in the railway traffic – around the turn of the 20th century when again new means of transportation altered urban configurations and the links between city and country.

⁴⁵ Anette FREYTAG, When the Railway Conquered the Garden: Velocity in Parisian and Viennese Parks. In: Michel CONAN (ed.), Landscape Design and the Experience of Motion. (Washington 2003) 215 – 242, here: 218.

⁴⁶ Wolfgang SCHIVELBUSCH, The Railway Journey: The Industrialisation of Time and Space in the 19th Century (Berkeley/Los Angeles 1986) 37.

⁴⁷ Wiebke POROMBKA, Medialität urbaner Infrastrukturen: Der öffentliche Nahverkehr. 1870 - 1933 (Bielefeld 2013) 117.

⁴⁸ Lucian HÖLSCHER, Die Entdeckung der Zukunft (Frankfurt/Main 1999) 153.

⁴⁹ Esther FISCHER-HOMBERGER, Die Büchse der Pandora: Der mythische Hintergrund der Eisenbahnkrankheiten des 19. Jahrhunderts. In: Esther Fischer-Homberger, <http://fischer-homberger.ch.galvani.ch-meta.net/fileadmin/pdf/die_buechse_der_pandora_gzfh_final.pdf> (05.01.2014), 310.

The invention and establishment of the electric tram beginning with the 1880s certainly had a significant influence on inner-city structures as it enabled a sprawl that has not been possible earlier – the radius of what was within realistic reach was enlarged to a distance of approximately 15 kilometres. Through the distribution of the automobile that followed in the early 20th century – albeit still far from being a mode of transportation for the average person – this scope was furthermore expanded to about 50 kilometres.⁵⁰ Additionally, the spread of subway systems and busses not only changed the way people moved within the city, but also the respective cityscapes.

Parallel to the developments in transportation, the technological progress reached the communication sector, which as well had space-changing impacts. In earlier times, the velocity and the distance of communication were determined by the velocity and the distance a human being could reach – before the dissemination of telegraphy in the last third of the 19th century, communication depended on corporeality.⁵¹

Profound, surreal transformation pervading all facets of everyday life was in the air - Utopia turned real - and this was particularly visible in the cities.

II.II. THE AESTHETICS OF THE FUTURE

A person living from around 1870 to 1930 could not only witness the introduction of the telephone, electric light, the compact camera and the moving stairway - this person could also experience ocean steamers crossing the Atlantic, the rise of the automobile, the short florescence of airship travel and the first powered flight. In this light, it comes as no surprise that the future back then was on everybody's lips. Predicting it became a wide-spread activity.⁵² As a consequence, visionary depictions of what the future could look like gained

popularity – a unique kind of aestheticising the future emerged that became visible in various areas of art, in architecture and, last but not least, in everyday culture. Graphical illustrations inspired by literary utopias written by authors like Jules Verne or H.G. Wells were published in newspapers or in the form of collectable



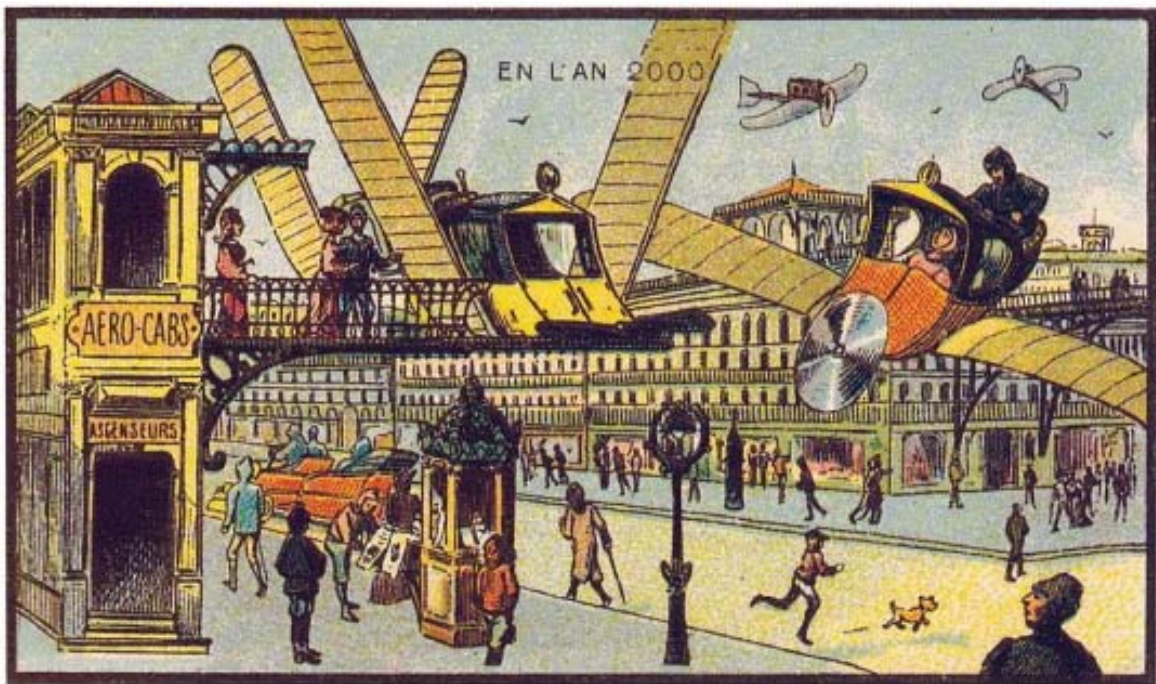
FIG. 1

cards – the German chocolate manufacturer “Hildebrand Kakao & Schokolade” (FIG. 1) for instance distributed a sequence of cards displaying possible scenarios regarding traveling and transportation, city life, recreation and communication for the year 2000.

⁵⁰ BERTELS, Die dreiteilige Großstadt als Heimat, 37.

⁵¹ BERTELS, Die dreiteilige Großstadt als Heimat, 34.

⁵² Solveig GROTHE, Technikräume um 1900. In: Spiegel Online, <http://einestages.spiegel.de/static/topicalbumbackground/4378/vision_possible.html> (05.01.14).



Aero-Cab Station

FIG. 2

Similarly, the picture series “En l’an 2000” (FIG. 2), designed on the occasion of the Paris World Fair in 1900 by Jean-Marc Côté, was distributed enclosed to cigarette packs - until the 1910s, such cards were highly esteemed collectibles.

Around 1930, when the collector’s passion awoke anew, the margarine manufacturer “Echte Wagner” likewise published a scrapbook with a focus on future prospects.

It is evident that the visual language in the 1930s (FIG. 3 and 4) differs from the ones displayed before, but the motifs obviously stayed the same –transportation, communication, city life.

Those examples demonstrate that issues revolving around future outlooks were not a marginal issue, but a recurrent part of everyday culture that made its way into the centre of society. In view of the advent of a new century, it seems obvious that the

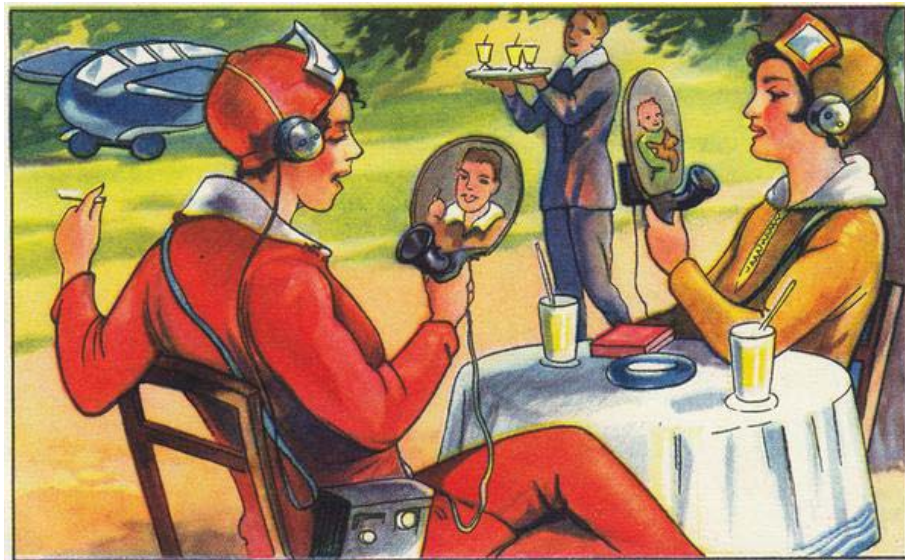


FIG. 3

occupation with such topics was intense – the newspapers back then were filled with predictive commentaries and articles on how the future human beings would lead their lives. The New York World, for instance, wrote in the last days of 1900:

"When the last week of the year is also the last week of the century, and when anticipation is free to extend itself along the limitless vista of the coming 100 years, we all become, instinctively and irresistibly, 20th century prophets. Nobody is thinking of anything else now."⁵³



FIG. 4

In the same year, the magazine "The Ladies' Home Journal" published an article written by John Elfrehth Watkins, a civil engineer, in which he predicted quite accurately that within the next 100 years, the American population would rise to 350 - 500 million people, that "wireless telephone and telegraph circuits will

span the world" and that the farmer "will [...] grow large gardens under glass". In other aspects, his guesses were off the mark, such as the assumptions that a higher education would be free of charge for everyone, that the letters "C", "X" or "Q" would be "abandoned because unnecessary" or that "cities [...] will be free from all noises" as "there will be no street cars in our large cities".⁵⁴ He expected that city traffic would take place on underground and on very high levels – a very popular conjecture at the time.

A similarly optimistic assessment was given by the Boston Globe in the last days of the 19th century: in the article "Boston at the end of the 20th century" there was a mention of moving sidewalks, pneumatic tubes for all sorts of deliveries (those were assigned a key role in everyday domestic life) and airships as additional means of transportation (FIG. 5) next to the automobile that "every person will own".

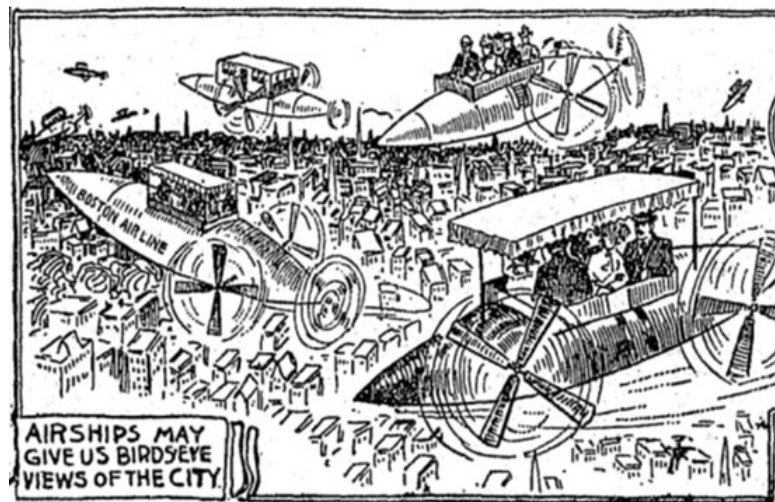


FIG. 5

⁵³ Michael S. JAMES, 1900 Predictions of the 20th Century (31.12.2000). In: ABC News, <<http://abcnews.go.com/US/story?id=89969>> (12.01.14).

⁵⁴ John Elfrehth WATKINS Jr., What May Happen in the Next Hundred Years (The Ladies' Home Journal). In: Paleofuture, Gizmodo, <<http://www.paleofuture.com/blog/2007/4/17/what-may-happen-in-the-next-hundred-years-ladies-home-journa.html>> (13.01.14).

The future city was furthermore imagined as an environment in which the “*pungent breath of major cities*” – smoke and steam – would be things of the past thanks to new ways of energy generation.

The same would apply to noise, which as a by-product of the horse-drawn carriage would disappear with the spread of the car.⁵⁵ Obviously there has been a lot of speculation on transport within the city and in retrospect, not all of them were entirely far-fetched: long before the invention of the Segway that cannot deny a certain resemblance to the device on the right (FIG. 6), the “Brown County Democrat” stated that “*In the new century no one will walk. All will have wheels.*”⁵⁶ The future was in vogue.

However, those funny depictions and optimistic perspectives should not conceal the fact that a large number of people living in the 19th century had to face very “present” problems of immediate existential significance – to state that the conditions of daily life in the cities were stringent would be an understatement. Even if the situation slightly improved around 1900, working and housing conditions of the lower social strata were desolate and the continuing influx of job seekers to the cities did not contribute to reducing the tension.

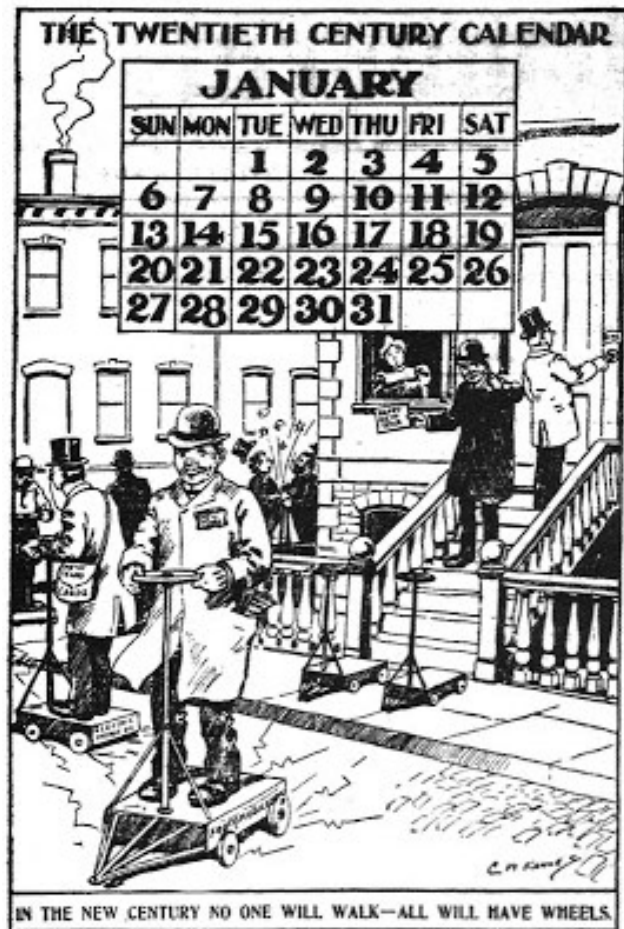


FIG. 6

II.III. LIVING CONDITIONS IN THE CITIES

As a consequence of industrialisation, urbanisation occurred on an unprecedented scale throughout the 19th century. The technological innovations that triggered those evolutions can be traced back to the late 18th century – the invention of “Spinning Jenny” by Richard Arkwright, the first industrial spinning machine, in 1764, the advancement of the steam engine by James Watt in 1769, the invention of the power loom in 1785, progress in the field of ore mining and steelmaking at the turn of the century and, as mentioned, the spread of the railway in the early 19th century.

⁵⁵ Matt NOVAK, The Boston Globe of 1900 Imagines the Year 2000. In: Smithsonian Magazine, <<http://www.smithsonianmag.com/history/the-boston-globe-of-1900-imagines-the-year-2000-97021464/>> (13.01.14).

⁵⁶ Matt NOVAK, No One Will Walk - All Will Have Wheels (Brown County Democrat, 1900). In: Paleofuture, Gizmodo, <<http://paleo-future.blogspot.co.at/2007/03/no-one-will-walk-all-will-have-wheels.html>> (13.01.14).

As those developments had their origin in Britain, the “*workshop of the world*”⁵⁷, it is not surprising that the dimension of urban growth became apparent in British cities some decades before it reached continental Europe.

Manchester, for instance, grew from a small town of about 20.000 inhabitants in 1750 by a factor of twelve to become Britain’s third largest city with a population of 250.000 in 1850.⁵⁸ In the same year, London was not only Britain’s largest city, but – with not less than 2,3 million inhabitants – the largest city that had ever existed.⁵⁹ Another 50 years later, the population of Greater London more than doubled rising to approximately 6,5 million people.⁶⁰ This trend of massive increase in population numbers continued with a slight delay on the European mainland and in the rest of the world with the result that in 1900, there existed 17 cities of over a million inhabitants worldwide (of which most were situated in Europe and the United States).⁶¹

The reasons behind the attraction of cities were obvious: first and foremost, they promised jobs and consequently stirred up hope for better futures – throughout the 18th and 19th centuries, self-subsistence had become more and more difficult in rural areas. This was, on the one hand, due to improvements regarding health and hygiene and the absence of serious epidemics, both resulting in a lower mortality rate while the birth rate stayed equally high – the demand for food increased. On the other hand, structural and legal changes in the feudal system played a significant role: in the 18th and 19th century, the abolition of commons as a consequence of increasingly appearing Enclosure Acts had the effect that farmers lost access to lands they previously cultivated.⁶² What followed was a large-scale agricultural depression.⁶³ Moreover, cities played a certain anchoring role with regards to “*flows of people, goods and information [...] linking the region to its outside markets*”⁶⁴ – when having little to lose it seemed logical to try one’s luck in the urbanising areas. An immense rural exodus was the result.

In Great Britain, for instance, the percentage of agricultural workers dropped from 21,7 % to 8,7 % within the years from 1851 to 1901.⁶⁵ The age of cities had dawned and kicked off unstoppable mechanisms – introducing problems that, at least on such a scale, were new.

Industrialisation itself was never questioned – the machine was perceived as “*the embodiment of progress*”⁶⁶, the machine age as a materialised utopian vision.

„*In the nineteenth century the machine-based eutopia developed. Whether it be the railroads, the pneumatic tube, or the steam engine, machines were either to take the burden of labor from the worker’s back or to make meaningful labor possible for the first time.*”⁶⁷

⁵⁷ Paul M. HOHENBERG, Lynn Hollen LEES, *The Making of Urban Europe. 1000-1950* (Cambridge/London 1985) 193.

⁵⁸ The Leverhulme Trust, *Mortality and Epidemiological Change in Manchester, 1750 – 1850*. In: The Leverhulme Trust, <<http://research.ncl.ac.uk/pauperlives/ManchesterInfantMortality.htm>> (20.01.14).

⁵⁹ Julia ZECHMEISTER, *Von funktionalen Stadtutopien der Moderne in der sozial- und politikwissenschaftlichen Debatte der 1960er und 1970er Jahre* (Diploma Thesis University of Vienna). In: Universität Wien, <http://othes.univie.ac.at/18346/1/2012-01-30_0270008.pdf> (27.01.14) 6.

⁶⁰ Franz HEIGL, *Die Geschichte der Stadt* (Graz 2008) 424.

⁶¹ Wolfgang NENTWIG, *Humanökologie: Fakten-Argumente-Ausblicke* (Berlin/Heidelberg 2005) 86.

⁶² John Desmond BERNAL, *Die Wissenschaft in der Geschichte* (Berlin 1961) 362.

⁶³ Peter HALL, *Cities of Tomorrow. An Intellectual History of Urban Planning and Design in the Twentieth Century* (Oxford 2002) 90.

⁶⁴ HOHENBERG, LEES, *The Making of Urban Europe*, 196.

⁶⁵ Robert FISHMAN, *Urban Utopias in the Twentieth Century - Ebenezer Howard, Frank Lloyd Wright, Le Corbusier* (Cambridge/London 1989) 55.

⁶⁶ Ruth EATON, *Die ideale Stadt. Von der Antike bis zur Gegenwart* (Berlin 2001) 122.

⁶⁷ SARGENT, *Authority & Utopia*, 577.

And indeed, technological progress brought along economic growth, but it didn't take long until the downsides of these developments became clear: the evolution of urban centres simply happened too fast to react adequately according to the needs arising with the industrial era.⁶⁸

The immediate consequences of the massive migration into the cities proved to be highly problematic and equally affected matters of labour, transportation, habitation and sanitation: due to the high population density, housing space was scarce and exorbitantly overcrowded, hygienic conditions were catastrophic, being a perfect breeding ground for diseases. Working conditions were not one bit better – and given the abundance of cheap labor supply, there was no incentive to improve them either.

All in all, immiseration and pauperisation gained ground. Whoever could afford it, escaped these circumstances and moved to the outskirts and suburbs. Industrialisation, and with it the increasing social gap between the rich and the poor, not only manifested itself in terms of spatial distribution and in the emergence of slums, it also changed the traditional configurations of pre-industrial cities, initiating the period of the liberal city in the first half of the 19th century. The main distinguishing feature of the liberal city is that changes of spatial structures usually occurred as reactions to economic interests whilst social necessities were mostly neglected.⁶⁹

II.IV. CONTEMPORARY REACTIONS

These grievances, however, were not simply acquiesced without comment: for one thing, they inspired utopian socialists (as they came to be known later) like Charles Fourier, Robert Owen or Saint-Simon to come up with alternative concepts of ideal societies in the early 19th century.

Furthermore, they called a number of observers into action, who took up these issues in various ways. This was reflected in literary and artistic expressions by writers such as Charles Dickens and Emile Zola or the French illustrator Gustave Doré whose drawings of London street scenes illustrate the misery of the situation (FIG. 7 and 8), but also in more pragmatic respects: certainly, the best known description of social circumstances from this time stems from Friedrich Engels (*“Die Lage der arbeitenden Klasse in England”*, 1854) who depicted the living conditions of the proletariat (which as such was a child of the era of industrialisation, emerging from the newly arrived rural population) under different aspects, for instance with regards

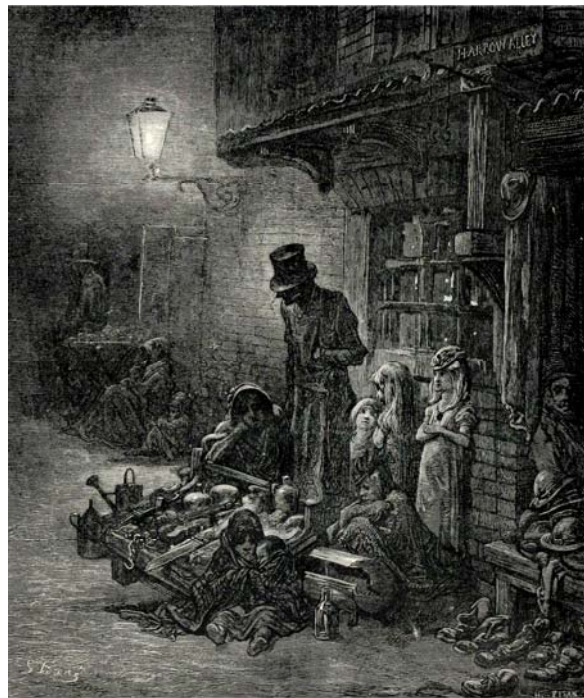


FIG. 7

⁶⁸ EATON, Die ideale Stadt, 123.

⁶⁹ TU Graz, Raumorganisation und Planen (Vorlesung). In: TU Graz, http://lamp.tugraz.at/~f145stdb/Raumorganisation%20und%20Planen/Vorlesung/ROP_05.pdf (05.02.14).

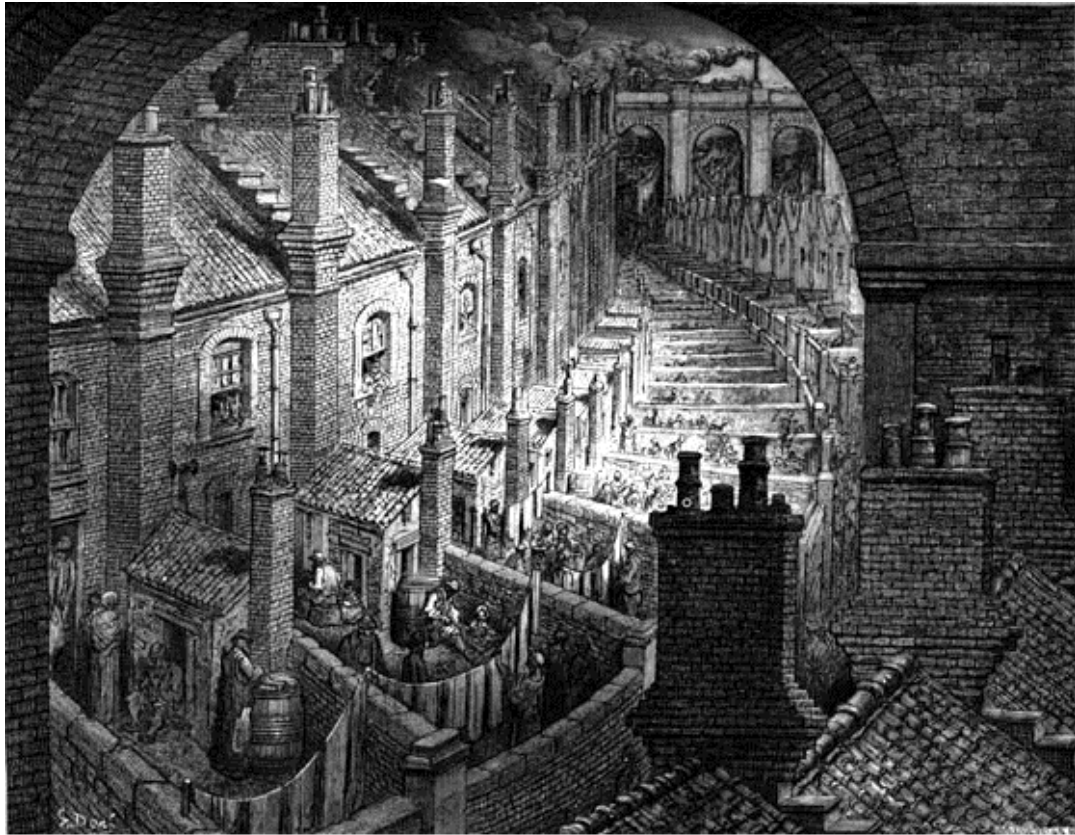


FIG. 8

to spatial configuration and building technique (which he labeled as ‘hypocritical’), both promoting a high level of segregation between the working class and the bourgeoisie.

“And the finest part of the arrangement is this, that the members of this money aristocracy can take the shortest road through the middle of all the labouring districts to their places of business, without ever seeing that they are in the midst of the grimy misery that lurks to the right and the left. For the thoroughfares leading from the Exchange in all directions out of the city are lined, on both sides, with an almost unbroken series of shops, and are so kept in the hands of the middle and the lower bourgeoisie, which, out of self-interest, cares for a decent and cleanly external appearance and can care for it.”⁷⁰

Engels can definitely be considered a pioneer in the field of social observation – and his emphasis was indeed on observation rather than on active involvement: in his opinion, the desolate situation was an atrocious, but necessary intermediate step towards the proletarian revolution.⁷¹

Anyhow, he was not the first to portray the manifold grievances that could be found in Britain’s big cities: Sir Frederick Morton Eden, who was reputed to have a high level of “*social sensitivity*” and a “*scholarly mind*”⁷², carried out investigations on the living conditions of the poor already at the end of the 18th century.

⁷⁰ Friedrich ENGELS, *The Condition of the Working-Class in England in 1844* (New York 2008) 46.

⁷¹ Vittorio Magnano LAMPUGNANI, *Die Stadt im 20. Jahrhundert. Visionen, Entwürfe, Gebautes* (Berlin 2011) 13.

⁷² F.G. PYATT, M. WARD (ed.), *Identifying the Poor: Papers on Measuring Poverty to Celebrate the Bicentenary of the Publication in 1797 of ‘The State of the Poor’ by Sir Frederick Morton Eden* (Amsterdam 1999) 5.

What should be noted is that he did this in a very structured manner, using a questionnaire and – highly unusual and controversial at that time – sampling as methods. His findings were published in three volumes entitled “*The State of the Poor*” in 1797.

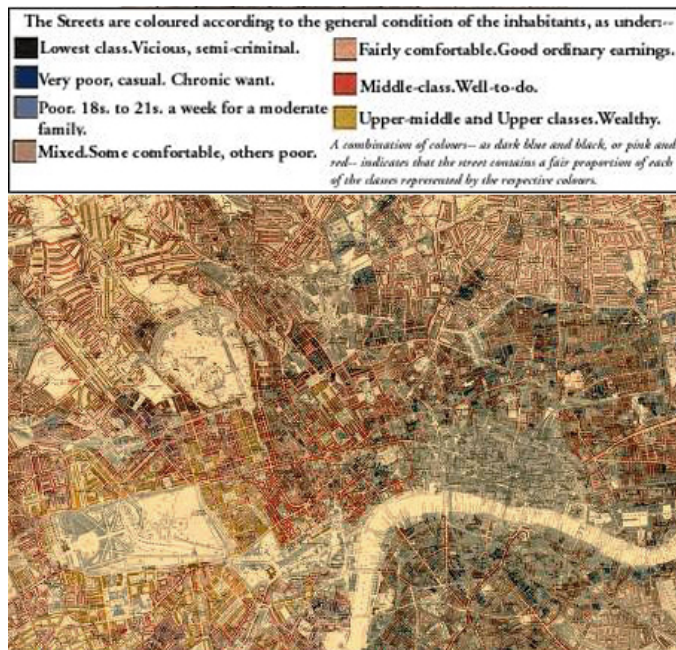


FIG. 9

of view, but also from a journalistic perspective. In the first years of the 20th century, the Austrian journalists Max Winter and Emil Kläger published a series of social reportages⁷⁵ (back then a new type of media coverage) on life in Vienna’s sewerage system, a popular refuge for the homeless.

All of those efforts had the very important effect that information about the desperate conditions slowly but surely made their way into the centre of society.

The subsequently increasing awareness resulted in the advancement or the implementation of quantitative and qualitative sociological methods such as the census, social investigation, house-to-house surveys, the use of questionnaires and interviews, thus enabling not only a far better documentation of the societal situation in general, but also the identification of specific patterns.

For this purpose, the first statistical societies were founded in Manchester (Manchester Statistical Society, 1833) and London (Statistical Society of London, 1834) and investigative commissions were implemented by the parliament and the crown.⁷⁶

Thereby, a scientific basis for further action was established, which marked a great moment not just for sociology as a science, but also for those contemplating on ideal cities: the 'hard facts' available for the first time supported the legitimacy of their concerns, the often disputed reference to reality and the feasibility of their claims.⁷⁷

⁷³ Christian SEIPEL, Peter RIEKER, Integrative Sozialforschung. Konzepte und Methoden der qualitativen und quantitativen empirischen Forschung (Weinheim/München 2003) 15.

⁷⁴ ZECHMEISTER, Von funktionalen Stadtutopien der Moderne (Diploma Thesis), 17.

⁷⁵ In 1905, Winter published some of his reports as a book titled “Im unterirdischen Wien”. (Hans OSTWALD (ed.), part of the series “Großstadt-Dokumente” (Berlin/Leipzig 1905).

⁷⁶ SEIPEL, RIEKER, Integrative Sozialforschung, 15.

⁷⁷ EATON, Die ideale Stadt, 123.

II.V. URBANISM - ANTI-URBANISM

Against this background, it comes as no surprise that the discourse on urban development was strongly characterized by contrasts. Once the initial euphoria about the seemingly unlimited abundance of opportunities opening up with technological progress had subsided in the light of the negative sides of industrialisation, a strong anti-urban movement emerged. Naturally, throughout urban history, there have always been critical voices, but the era of the machine unearthed completely new facets of reluctance, thereby bringing a persistent, rather pro-urban tradition to an end.

Since ancient Greece, the polis was considered as the “*natural and good unit for the development of human society*”⁷⁸, enabling self-sufficiency and the interaction of private and public life and providing opportunities for artistic, intellectual and political expression.

“*The Athenians demonstrated for the first time the capacity, richness and depth of the human mind in the theatre of the city. It didn’t matter that Athens also harboured extremes of rich and poor - the possibilities for transcending inequality were legion because of the possibilities the city offered for human innovation.*”⁷⁹

This positive image of the city as a place of boundless possibilities, including the feasibility of overcoming poverty of one’s own accord, was a common theme through the ages that only with the advancing of the industrial revolution gradually lost ground.

“*The good city for the good life morphed into Frederick Engels Manchester, Henry Mayhews London, and Upton Sinclair’s Chicago, to name but a few representations of the industrial city as dirty, dark, crowded, anonymous, threatening to the weak, a jungle of brick, stone and smoke. These representations were powerful in part because their audiences could see how far things had fallen, how much the industrial city had become the brutal opposite of the Athenian model.*”⁸⁰

Hardly flattering descriptions of big cities such as “The Great Wen” (London, William Cobbett), “Coke Town” (Manchester, Charles Dickens) or “Monstrosity” (Paris, Honoré de Balzac) gained currency in what Peter Hall later termed “*the age of radical ferment*”⁸¹.

The negative consequences of rapid urbanisation then were not just part of daily-life debates, but also became a popular object of scientific interest in the middle of the 19th century, shared by various disciplines such as biology, sociology, psychology and (what would now be called) urban research. Yet, the initial impulses of the discussion stem from the fields of psychiatric and medical research and revolved around questions of pathologic implications triggered by urban life. Much attention was paid to an alleged correlation between living in a metropolis and the occurrence of symptoms of degeneracy in a moral and social, but equally in a physiological and in a ‘racial’ sense. One of the first to argue in favor of such a connection was the French psychiatrist Bénédict Augustine Morel. His text “*Traité des dégénérescences physiques, intellectuelles et morales de l’espèce humaine*”, published in 1857, is regarded as the starting point of modern degeneration theory. Morel stated that most mental illnesses can be traced back to the unhealthy living conditions and the “*sumpfige, malariahafte Konstitution*” [swampy, malarial constitution] prevailing in the big cities.⁸²

⁷⁸ Tom SLATER, Anti-Urbanism. In: The University of Edinburgh, <<http://www.geos.ed.ac.uk/homes/tslater/Anti-urbanism.pdf>> (27.02.2014) 3.

⁷⁹ Ibid, 4.

⁸⁰ SLATER, Anti-Urbanism, 5.

⁸¹ HALL, Cities of Tomorrow, 89.

⁸² Steffen KRÄMER, Entartung und Urbanität: Krankheits- und Verfallsmetaphorik als Großstadtkritik im 19. und 20. Jahrhundert. In: Schriftenreihe der Winckelmann Akademie für Kunstgeschichte München, Textbeitrag Nr. 7 (November 2013) 1 - 36, here: 5.

This view was shared by other scientists, for instance by Morel's English colleague Henry Maudsley, who held the industrial upturn responsible for an increased disposition for insanity. He went even further and expressed his deep concern that the reproduction of the species would be endangered if degeneration was given free rein.⁸³ Even if the fear about the survival of the human race was not shared by the society's mainstream, the apprehension that the perceivable social transformations might lead to biological decline in epidemic dimensions was widespread. Of course, what stood behind this were first and foremost concerns on behalf of the bourgeoisie assuming political unrest that would jeopardise their privileged position.⁸⁴

These concerns were taken seriously in England as can be illustrated by the fact that, in the early 20th century, a Commission aiming at investigating the extent of degeneration was appointed.⁸⁵

Such considerations transcended national borders - the Italian pathologist Cesare Lombroso referred to Morel and Maudsley, but added another facet to the discussion by concluding that urban degeneration not only caused an overrepresentation of lunacy, but also of ingeniousness, what in his opinion can be ascertained by the fact that far more artists and highly gifted people can be found in major population centres than in rural areas - a view he was not alone with. Robert Vaughan, professor of history in London, similarly concluded that the occurrence of "*intelligence and virtue [...] in large cities*" was much more frequent than "*among any scattered and rural population*".⁸⁶

It was not unusual that the city was encountered with a "*mixture of attraction and repulsion*"⁸⁷ and, as it turned out, the harshest critics in many cases have also been the most faithful followers. Charles Dickens' daughter, for instance, elaborated on her father's relation to London:

*"Whenever he reached a point of frustration [...] he would walk through the busy, noisy streets, which would act on him like a tonic and enable him to take up with new vigour the flagging interest of his story and breathe new life into his pages."*⁸⁸

On the whole it can be said that urban discourse in the late 19th and early 20th centuries moved between polarities - progress and decay, culture and savageness, prospects and despair, fascination and condemnation. Closely related to this, the contradiction between the city - as the great unknown - and the countryside - as the traditional and the familiar - was a strong motif within the urbanism - anti-urbanism debate that has been approached from different perspectives.

Emile Durkheim, for instance, equated the conceptual pairs 'urban vs. rural' with 'modern vs. traditional' forms of social organization and thereby created an analytical framework for the explanation of societal distortions. In his works, the city - even though not explicitly addressed - constituted the background to the examination of phenomena emerging with modernity.⁸⁹

⁸³ Ibid, 6.

⁸⁴ David PINDER, *Visions of the City. Utopianism, Power and Politics in Twentieth-Century Urbanis* (New York/London 2011) 31.

⁸⁵ KRÄMER, *Entartung und Urbanität*, 19.

⁸⁶ Christopher J. FERGUSON, *Inventing the Modern City: Urban Culture and Ideas in Britain, 1700-1800* (Doctoral Thesis, Indiana University). (Ann Arbor 2008) 194.

⁸⁷ Ibid, 194.

⁸⁸ Ibid, 194.

⁸⁹ Markus SCHROER, Jessica WILDE, Emile Durkheim. In: Franz ECKHARDT (ed.): *Handbuch Stadtsoziologie* (Wiesbaden 2012) 60.

Others followed a less epistemological, but more demagogic strategy: with his views on the ignominious and shameful influence of the city on family life and natural hierarchical order⁹⁰, the German historian Wilhelm Heinrich Riehl is deemed to be a precursor of *konservative Großstadtkritik* in the middle of the 19th century. His contempt for the city went hand in hand with a deeply ingrained aversion against the urban proletariat and its demand for political rights such as the right to vote. This, in Riehl's opinion, offended against the principle of "*natural inequality of human beings*".⁹¹

More than 60 years later and immediately after the turmoil of World War I, Oswald Spengler's opus "The Decline of the West" found great approval. He described culture as a cyclic model, the end thereof being the metropolis, which for him signified downfall and misery. Spengler postulated that the population development would stagnate due to the emancipated urban women's defiance of their obligation to bear children.

*"The 'quiverful' which was still an honourable enough spectacle in the days of Werther, becomes something rather provincial. The father of many children is for the great city a subject for caricature."*⁹² The consequences he predicted would be disastrous: the "*race suicide*" of the civilized and rootless strata⁹³ and, in the end, the final descent to the most primitive form of human existence, the "*Fellah type*".⁹⁴

As can be seen, a wide range of perceptions and more or less obscure fears revolved around urbanisation in those days. However, besides mere criticism and dark premonitions, the stirring developments of the time and the interplay of contrasts that are characteristic of the urban also gave rise to a range of utopian ideas that can roughly be divided into two types: Firstly, utopias of "*restorative*" nature - a term that has been coined quite accurately by David Pinder⁹⁵. The advocates of this group aimed at reverting to simpler, less chaotic forms of spatial organisation. The approaches that can be subsumed under this category can, but do not necessarily have to be anti-urban as such - the spectrum includes attempts of designing cities according to the inhabitants' need for contact with nature as well as such targeting at returning to medieval structures or at provoking the entire dissolution of urban structures.

The second type is referred to as "*modernist*" throughout literature as its best known proponents adopted a rather futurist stance in accordance with technological and industrial progress. The ideal city was conceptualized as an efficiently operating machine, exuding power and functionality. Both types, as different as they have been, reflected the common fin-de-siècle spirit: the signs pointed towards renewal - the chaotic, industrial city that ignored the inhabitants' needs had become obsolete.

⁹⁰ Wilhelm Heinrich RIEHL, Die Naturgeschichte des Volkes als Grundlage einer deutschen Socialpolitik. Dritter Band: Die Familie (Stuttgart/Augsburg 1855).

⁹¹ Helmut STOCKHAMMER, Die klassische und moderne Großstadtkritik (Linz 1969). In: Universität Klagenfurt, <<http://www.uni-klu.ac.at/hstockha/cmsms/uploads/grossstadtkritik.pdf>> (10.3.14) 3.

⁹² Oswald SPENGLER, The Decline of the West. Perspectives of World History. Volume 2 (New York 1928) 105.

⁹³ Oswald SPENGLER, The Decline of the West. Form and Actuality. Volume 1 (New York 1926) 359.

⁹⁴ SPENGLER, The Decline of the West. Perspectives of World History, 105.

⁹⁵ PINDER, Visions of the City, 23.

III. SEARCHING FOR SMALLER UNITS

Considering that, at the turn of the century, the cities' most urging problems could be associated with rapid population growth and the pressure resulting from it, it is only logical that a lot of improvement ideas and utopian visions for urban scenarios aimed at implementing smaller urban units. Decentralisation and dispersal were the mottos. A "Back to the Land" movement became popular among the educated upper class, "*fueled by urban growth and urban squalor, agricultural depression, nostalgia, quasi-religious motives, anti-Victorian motives*".⁹⁶

What clearly also played a role was a certain psychological factor, manifesting itself in the desire to return to plainer forms of social and residential coexistence, which is why a lot of those ideas were perceived as rather retrogressive: "[...] *much utopianism is basically quite conservative. It expresses the desire to return to earlier forms...[...] rejecting the change which is characteristic of contemporary life.*"⁹⁷ This notion, if generalised, would obviously be too narrow: even within the range of 'restorative' utopians, a lot of potential for innovation can be found as the problem-solving approaches were manifold. Ironically (and contrary to Engels' image of the exploiting capitalist) several of the early pioneers in England stem from a group that is usually not reputed to have a pronounced social vein: the industrialists.

III.I. COMPANY TOWNS

Throughout industrial history, there are several examples of committed company owners who tried to address the mentioned problems by building model communities or towns for their workers. Even though social-reformist and utopian efforts almost always played a decisive role in the course of planning company towns, the motives behind such endeavours were rarely of purely altruistic nature. First and foremost, the majority of company towns or industrial villages developed in response to economic interests⁹⁸ and logistic requirements such as the proximity to and the good accessibility of resources. The establishment of an appropriate infrastructure was therefore in a lot of cases a necessity. Besides the provision of affordable housing, this infrastructure often included social, cultural, religious and educational facilities such as libraries, schools, churches, cultural centres and sporting institutions.

Also, the organization of communal events and the encouragement for certain activities (for instance gardening or sports) on behalf of the paternalistic company owner were not uncommon. In this way, the manner of life – including private life – could be slightly shaped, allowing for a degree of control over the workforce. The fact that, in most cases, all shops and other facilities where money could be spent were in the hand of the company not only represented an additional source of revenue, but also contributed to the further strengthening of ties between the owner and his workforce.

For the workers, this of course implied a certain isolation and limitation of alternatives, but, on the other hand, it enabled them and their families to enjoy a decent standard of living and equitable working conditions far away from the urban slums.

⁹⁶ HALL, *Cities of Tomorrow*, 92.

⁹⁷ SARGENT, *Authority & Utopia*, 583.

⁹⁸ J. D. PORTEOUS, *The Nature of the Company Town*. In: *Transactions of the Institute of British Geographers*, No. 51 (London, Nov. 1970) 127 – 142, here: 129.

Many of the company owners furthermore realised that satisfied and loyal workers performed much more efficiently, thus generating more profit for the company, and some also kept in mind that beneficial conduct might be rewarded in the not so unlikely case of social unrest.⁹⁹ Unsurprisingly, it was again Great Britain where the development of company towns had its beginning, but the Netherlands, Germany, France and the United States followed shortly after.¹⁰⁰

Robert Owen, head of a Scottish cotton factory in New Lanark in the early 19th century, has to be mentioned here as one of the first social reformist company owners to implement groundbreaking improvements regarding the labour and living conditions of his workers. He limited the daily working time to 10,5 hours, prohibited labour for children under the age of 10 and introduced a pension and health insurance system. Additionally, he tried to 'export' his ideas to the United States: in 1825s, he bought a small town in Indiana named "Harmony" and turned it into an experimental cooperative colony - his project of 'New Harmony' (which was not implemented in the way he had initially envisioned [FIG. 10]) was bound to fail after only a few years, but - in combination with Owen's continued efforts back in Great Britain - it nevertheless had a considerable impact on the further evolution of the cooperative movement.



FIG. 10

⁹⁹ Stephen M. STREETER, John C. WEAVER, William D. COLEMAN (ed.), *Empires and Autonomy. Moments in the History of Globalisation* (Vancouver 2009) 121.

¹⁰⁰ PORTEOUS, *The Nature of the Company Town*, 129.

One of the earliest examples of a ‘real’ company town is Saltaire in West Yorkshire, founded by Titus Salt between 1851 and 1871. He chose a logistically favourable location for his textile mills, situated by the railway and the Leeds and Liverpool canal, and commissioned the architects Henry Lockwood and Richard Mawson to build workers’ houses and a range of public facilities including a school, a park, a hospital, a poorhouse, an educational institute and – back then an absolute rarity – a drainage system¹⁰¹. Due to its impressive degree of preservation, Saltaire has been designated a World Heritage Site in 2001, “*giving a vivid impression of Victorian philanthropic paternalism*”¹⁰². Saltaire is not only exceptionally significant as an example of capitalistic beneficence, but also because it served as a template for other projects of similar kind in the United Kingdom, the USA and Italy and because it had an effect on the development of the Garden City Movement shortly after.

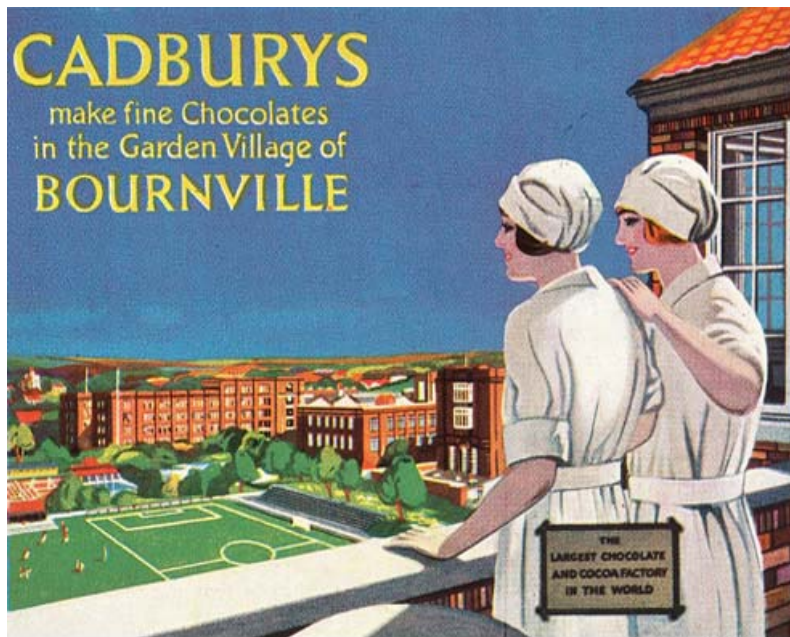


FIG. 11

A similarly paternalistic approach was practiced by George Cadbury, one of the Cadbury brothers, whose beneficial ambitions became manifest in 1893 through the foundation of Bournville (FIG. 11) near Birmingham, where he intended to make the amenities of village life accessible to the public.¹⁰³

Cadbury was a Quaker whose religious convictions had a significant influence on the company and village culture he promoted. This ethical concept – the

“cornerstone of Cadburys”¹⁰⁴, was responsible for a very specific understanding of business and capitalism, involving “*fair dealing and financial rectitude*”¹⁰⁵ and a sense of social responsibility on the basis of prosperity.

He therefore not only built a town and homes for future residents (who did not necessarily have to be Cadbury’s workers) at favourable conditions, he sincerely *took care* for them by planning private gardens and public recreation areas, by encouraging physical training and promoting certain ‘Rules of Health’ (such as the well-meant advice to let tea brew for three minutes minimum)¹⁰⁶ and last but not least by keeping away the temptations of alcohol:

¹⁰¹ W. ASHWORTH, British Industrial Villages in the 19th Century. In: The Economic History Review, New Series, Vol.3, No. 3 (1951) 378 – 387, here: 380.

¹⁰² UNESCO, World Heritage List: Saltaire. In: Unesco, <<http://whc.unesco.org/en/list/1028>> (06.04.14).

¹⁰³ LAMPUGNANI, Die Stadt im 20. Jahrhundert, 19.

¹⁰⁴ Charles DELLHEIM, The Creation of a Company Culture: Cadburys, 1861 – 1931. In: The American Historical Review, Vol. 92, No. 1 (Oxford, February 1987) 13 – 44, here: 15.

¹⁰⁵ Ibid, 15.

¹⁰⁶ FISHMAN, Urban Utopias in the Twentieth Century, 60.

*"George Cadbury hoped that doing God's work in the garden would prove more satisfying for workers than doing Satan's bidding in the pub. To play it safe, however, no pub was built in Bournville."*¹⁰⁷

In essence, Bournville was indeed not just intended as an industrial expansion project, but as a holistic solution to the questions and challenges of the big cities and the physical and moral evils resulting from them.

At around the same time, William Hesketh Lever, producer of "Sunlight Soap", implemented a similar project: in 1890, he opened Port Sunlight (FIG. 12), a village that within ten years should consist of houses for the workers of his company, two schools, two social clubs, a theatre, a swimming bath, a technical institute, Sunday schools and a church.¹⁰⁸

With regards to appearance and architecture, Lever attached particular importance to a picturesque and charming character. Unlike in Bournville, non-employees could not rent a house in Port Sunlight, as the underlying financial structure was based on a system of prosperity sharing: the funds for the building of the village were provided by the



FIG. 12

profits the company generated. Hence, the houses were let to the employees at a rent that was just high enough to cover the maintenance costs.

*"The Village is, in this way, as much the mark and monument of the progress of the business as is the growth of the Port Sunlight output or the increase of the Company's capital."*¹⁰⁹

As can be seen, there have been very different approaches to giving shape to paternalistic ambitions, especially in Great Britain. What they have in common, however, is that they all marked important steps towards what should become one of the most significant cornerstones in modern urban planning: the Garden City Movement.

¹⁰⁷ DELLHEIM, The Creation of a Company Culture, 20.

¹⁰⁸ ASHWORTH, British Industrial Villages in the 19th Century, 382.

¹⁰⁹ J. E. FITZWILSON, A Successful Experiment in Prosperity-Sharing. In: Boston Rotary Club, The National Rotarian, Vol. 2, No. 5 (May 1912) 19 – 21, here: 20.

III.II. THE GARDEN CITY MOVEMENT

The history of the Garden City Movement is inseparably linked to one person: Ebenezer Howard. Howard spoke of himself not as a planner, neither as a utopist, but as an inventor. Like many of his contemporaries, he was not a studied architect or engineer, but an autodidact in his field. So, what was his field? When he elaborated his concept of a Garden City in the years between 1889 and 1892, the physical appearance of such a city was not at all at the heart of his endeavour – what Howard was primarily concerned with was the entire transition of social and political structures, away from the capitalist order towards a system based on community and brotherhood. This is also reflected by the fact that the one and only book Howard felt urged to write (and to spread – he had it printed at his own expenses) was entitled “*Tomorrow. A Peaceful Path to Real Reform*” before, in the course of the publishing of a second edition in 1902, it was given the nowadays well-known title “*Garden Cities of Tomorrow*”.

An adequate and functional urban structure was obviously deemed necessary as the spatial framework for such a large-scale social transformation and could therefore be understood as “*the vehicle for a progressive reconstruction of society into an infinity of cooperative commonwealths*”.¹¹⁰

Howard was a very peculiar, somewhat quirky character. He was not, as one might assume from superficial observation, a communist, and he was by no means a conservative ‘Back-to-the-Land’ anti-urbanist. He was an enthusiast, who displayed a great deal of interest in the technological developments of his time and contemplated over how he could benefit from them in context with his goal of overcoming social grievances.

Via the participation in various debating societies (some of them were inspired by Edward Bellamy, a Science-Fiction writer whose novel “*Looking Backward*” was highly influential with regards to utopian thinking in the United States and also in Europe), Howard became part of the middle-class London Radicalism¹¹¹, a movement that criticised the economic system and the concentration of power associated with it, but that did not – like the Marxists – see the solution in the violent overthrow of the system, but in cooperative organization.

In Howard’s view, urban decentralisation was the indispensable prerequisite for such a society – Port Sunlight and Bournville as successfully implemented examples of decentralised model towns played their part in consolidating his conviction that the days of the metropolis as it was known were numbered. He was convinced that

“*these crowded cities have done their work; they were the best which a society largely based on selfishness and rapacity could construct, but they are in the nature of things entirely unadapted for a society in which the social side of our nature is demanding a larger share of recognition.*”¹¹²

The concept he alternatively displayed was, as he put it, a “*unique combination of proposals*”¹¹³ that, in one form or another, had already been in circulation. On a modular principle, he pieced together sociological ideas of Edward Gibbon Wakefield and Alfred Marshall (on organized migration and settlement), economic principles of land tenure described by Thomas Spence and Herbert Spencer (“*‘the dictum of absolute ethics’ – that all men are equally entitled to the use of the earth*”¹¹⁴) and urban design principles that James Silk Buckingham had

¹¹⁰ HALL, *Cities of Tomorrow*, 88.

¹¹¹ FISHMAN, *Urban Utopias in the Twentieth Century*, 28.

¹¹² Ebenezer HOWARD, *Garden Cities of To-morrow* (London, 1902) 133.

¹¹³ FISHMAN, *Urban Utopias in the Twentieth Century*, 28.

¹¹⁴ HOWARD, *Garden Cities of To-morrow*, 109.

already applied in context with his plan for a model town in 1849 (specifically the attempt to consolidate the agricultural with the industrial mode of society).¹¹⁵

The centerpiece of the conception – and what Howard considered to be the most convincing argument in favor of the Garden City – was the idea that one could combine the benefits of the countryside with the amenities of urban life *without* the respective drawbacks and that, consequently and obviously, everyone would choose to live in such an environment.

He illustrated this with a chart of “the three magnets” (FIG. 13), listing the various advantages and disadvantages of urban and rural life, whilst the combination of the two leaves nothing to be desired: beauty of nature, social opportunity, bright homes and gardens, no slums, low rents and high wages – the question “Where will they [the people] go?” is clearly rhetorical.

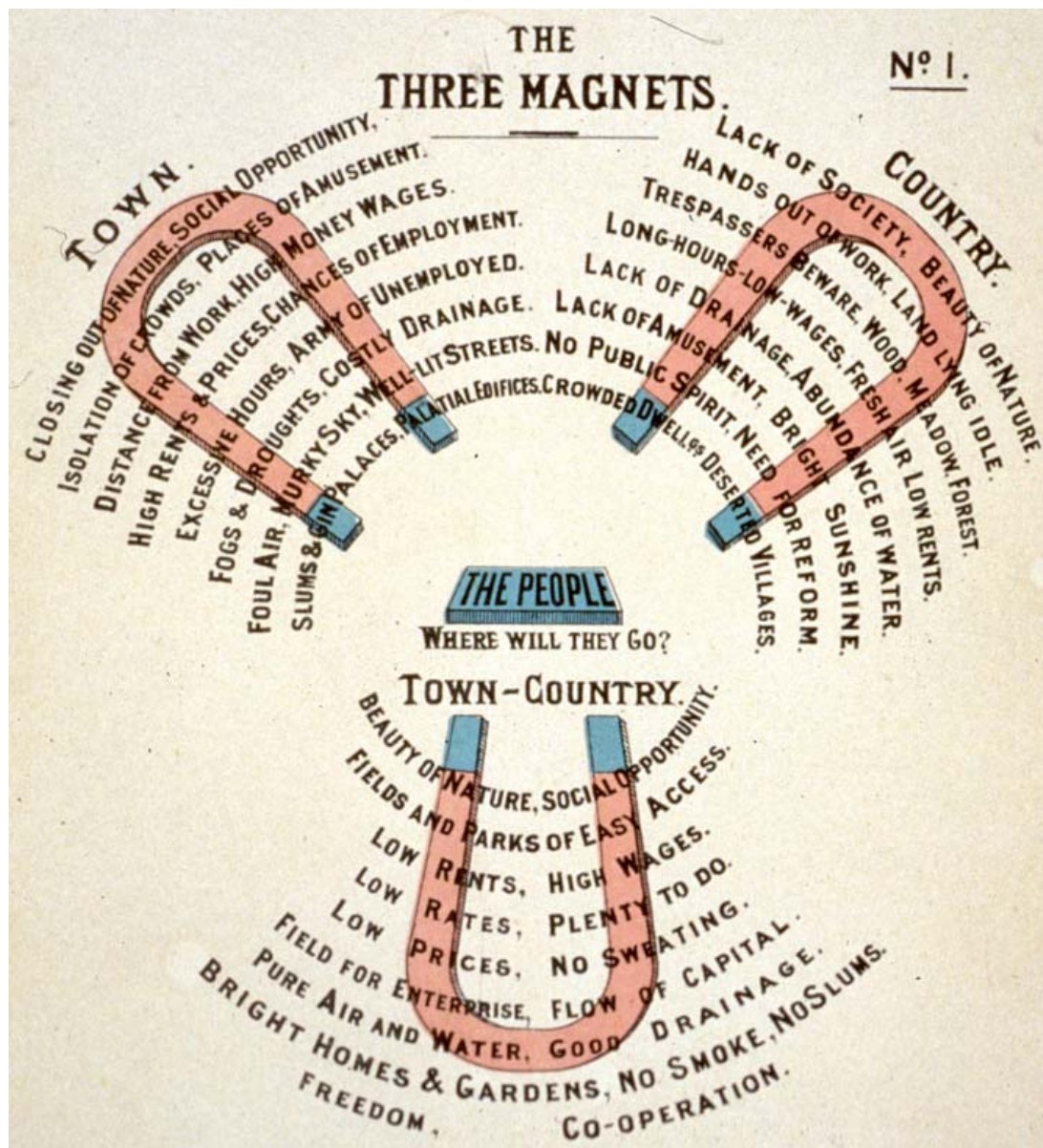


FIG. 13

¹¹⁵ LAMPUGNANI, Die Stadt im 20. Jahrhundert, 24.

found numerous emulators and that should affect strategies of urban planning throughout the following centuries.

It is certainly only due to Howards' persistence and profound conviction of his vision that this accomplishment was made possible: as already mentioned, the book containing the bundle of his ideas collected over the years was published at his own charge (having the income of a parliamentary stenographer, he even had to borrow the 50 pounds that were needed), because he found no one who was willing to do it. Also, when it was published, it was not really received with frenetic applause, but rather with indifference or even ridicule. Howard, however, was not impressed by this – or if he was, it was at least not reflected in his behaviour – he started a persuasion campaign, traveling *"tirelessly throughout Great Britain, addressing any group that would listen to him"*.¹¹⁹

And indeed, he found supporters from various groups, each putting different expectations in Howard's idea: the Land Nationalisation Society (LNS), for instance, saw the opportunity to reverse the rural exodus of the recent decades in the realisation of a Garden City – and thus a potential solution to the agricultural depression of the time. The LNS's backing was indeed a crucial step for Howard as it enabled him to found the Garden City Association in 1899, which from then on used a small office in the LNS premises as its (euphemistically termed) 'headquarters'.

Two years later, Howard gathered the support of Ralph Neville, a well-reputed lawyer from London – and a convinced liberal, who had no affinity at all for Howard's idea of a peaceful revolution leading to a cooperative society. He took the view, however, that the Garden City offered an economically reasonable (as it did not require the involvement of governmental funding) possibility of reducing working class tensions in the cities, which, as Neville believed, would very likely lead to *"the ultimate decadence and destruction of the race"*¹²⁰, if no countermeasures were taken. Through Neville's contribution to the Garden City Association (he was appointed chairman right away), Howard's vision became suitable for a much broader audience all at once, *"away from the crowded parlors of English radicalism into the more affluent drawing rooms of English liberalism."*¹²¹

Howard was pragmatic enough to know that a certain degree of flexibility in the course of the implementation of his idea was an inevitability, but naive enough to believe that once the first Garden City was built, he would have a free hand to shape it according to his plans.

Neville established Howard the contact to George Cadbury and W. H. Lever, who – given their own background experiences with model towns, not too surprisingly – were willing to finance a conference targeted at presenting and advertising the Garden City idea to significant key players who were entrusted with tasks of urban and social relevance. And so it came to pass that more than 1500 officials attended the so-called "Bournville conference" (named after its venue), assuring the Garden City *"a place in British town planning discussions which it never lost"*¹²². And indeed, Howard fell on welcome ears, although *"neither group wanted to hear of the cooperative commonwealth or radical social change. They looked to the Garden City as a plausible and thrifty means to relieve urban overcrowding."*¹²³

¹¹⁹ FISHMAN, *Urban Utopias in the Twentieth Century*, 57.

¹²⁰ Ralph NEVILLE, *The Divorce of Man from Nature*. In: *Garden Cities and Town Planning* 4, No. 34 (August 1909) 227.

¹²¹ FISHMAN, *Urban Utopias in the Twentieth Century*, 58.

¹²² *Ibid*, 61.

¹²³ *Ibid*, 62.

With regards to funding, Howard's approach was clearly thought through. The starting conditions were quite favorable due to the fact that the agricultural depression prevailing at the time had caused a fall in prices of farmland by up to 50 %.¹²⁴ Still, it required external funding by investors who were willing to accept a rather modest interest rate of 4 %, which turned out to be one of the major obstacles of the undertaking.

The profits derived from the increase of land value in the course of city growth and development – when agricultural soil turns into urban soil, also referred to as an “*unearned increment*” or, as Howard prefers, “*collectively-earned increment*” as “*this enormous difference of rental value is [...] almost entirely due to the presence in the one case and the absence in the other of a large population*”¹²⁵ – would be spent on investments in the city's infrastructure and in social welfare benefits such as old-age pensions. The financial contributions the residents would have to make would consist of a rather modest rate-rent that – after paying off the debts to the investors – would be used for the further advancement of the welfare system. That way, private land ownership would slowly but steadily fade away – the soil would be transferred to the ownership of the inhabitants (the “community”) bit by bit.¹²⁶

So much for the theory. Of course in the implementation, Howard had to contend with a number of practical problems such as the already mentioned difficulty to attract investors. However, the First Garden City Company, founded in 1903 as a subsidiary of the Garden City Association, was able to start construction work in the area of Letchworth, 34 miles from London, in the same year – even if only with a much smaller budget than assessed (40.000 pounds instead of 300.000).¹²⁷

This was compounded by the unexpected and very vexing fact that the soil was absolutely useless for farming due to its poor quality, making clear quite soon that complete autarky would not be feasible. Also, Howard had to make compromises in terms of design questions, beginning with the choice of the architects, Barry Parker and Raymond Unwin who highly valued Howard's intentions but whose composition tastes did not necessarily comply with his faible for symmetry and clear shapes. Instead, they followed a more “organic” approach, influenced by the Arts-and-Crafts movement, by Sitte's concept of beauty in urban planning and, above all, inspired by a rather romantic perception of the English medieval village.¹²⁸

Howard was well aware of the fact that there would have to be deviations from his plan – and he did not mind, especially with regards to the physical appearance of Letchworth.

Quite the contrary, he emphasised that his plan, which is to be understood as a “*merely suggestive*” sketch, “*must depend upon site selected*”.¹²⁹

However, one thing he had to accept more grudgingly was the fact that his “path to real reform” receded more and more to the background – which really came as no surprise considering that his influential associate partners who had made the project possible in the first place were business people who, even if philanthropic by nature like Cadbury and Lever, “*wanted to be sure they would get their money back*”.¹³⁰ In concrete terms, Howard was outvoted when it came to questions concerning finances and rental structures.

¹²⁴ FISHMAN, *Urban Utopias in the Twentieth Century*, 62.

¹²⁵ HOWARD, *Garden Cities of To-morrow*, 28.

¹²⁶ Merijn OUDENAMPSEN, *Retracing the Garden City*. In: Merijn Oudenampsen, <<http://merijnoudenampsen.org/2013/04/03/retracing-the-garden-city/>> (07.07.2014).

¹²⁷ Peter HALL, *Cities of Tomorrow*, 99.

¹²⁸ FISHMAN, *Urban Utopias in the Twentieth Century*, 70.

¹²⁹ PINDER, *Visions of the City*, 40.

¹³⁰ HALL, *Cities of Tomorrow*, 97.



FIG. 15

this – were built in Germany, France, the United States, in Australia and even in Japan. Apart from making clear that the need for an easing of the tense situation in the big cities was urgent in all parts of the urban world, it also showed that the exchange of ideas was very fruitful across cultural and spatial borders.

This, in one specific case, led to conflicts regarding intellectual property: the German publisher Theodor Fritsch, who had written a book entitled "Die Stadt der Zukunft"¹³⁴ in 1896, accused Howard two years later of having stolen his idea. Indeed, there were some conceptual similarities between Howard's and Fritsch's drafts, but they largely concerned rather general elements such as the conviction that a city should be reasonably planned, more or less functionally zoned and not too densely populated whilst the land should belong to the community offering favourable long-term leasing conditions. However, there was one fundamental difference between the two approaches: whilst Howard was a reformer who never tired of encouraging humanitarian values and social progress, Fritsch's efforts towards urban reorganisation sprung from a völkisch ideology¹³⁵.

"The Garden City was succeeding not as a social movement but as a planning movement. Howard failed to protest against these trends, in part because he had no choice, in part because he believed that once one Garden City was built, its example would inspire the broad support he had originally sought."¹³¹

His hopes for this kind of support, paving the way for a more radical approach, remained unfulfilled. However, a second Garden City, Welwyn (FIG. 15), was built under Howard's auspices in the 1920s – now involving government subsidies. In the course of the works, though, he withdrew more and more from the operative side. Over time, the Garden City movement turned into a Garden Suburb movement which was primarily about establishing communities that are "clean, compact, and close to nature".¹³²

Even if the developments did not quite meet the expectations of its initiator, the long-term impact was truly tremendous and border-crossing: garden cities – or rather what the respective "home-grown garden-city advocate"¹³³ in a country understood by

¹³¹ FISHMAN, Urban Utopias in the Twentieth Century, 62.

¹³² Ibid, 80.

¹³³ HALL, Cities of Tomorrow, 117.

¹³⁴ FRITSCH, Theodor, Die Stadt der Zukunft: Gartenstadt (Leipzig 1912).

¹³⁵ Massimo FERRARI ZUMBINI, Die Wurzeln des Bösen. Gründerjahre des Antisemitismus: Von der Bismarckzeit zu Hitler (Frankfurt 2003) 415.

He, convinced of the supremacy of the German race, was seriously concerned about the impending doom of the nation caused by foreign immigrants occupying German dwellings.¹³⁶ Fritsch's frustration over the ignorance his oeuvre was met with – even on behalf of the German Garden City Association, which, founded in 1902, promoted Howard's values¹³⁷ – is clearly reflected in the foreword of the second edition¹³⁸ of "Die Stadt der Zukunft", now subtitled "Gartenstadt".

III.III. BROADACRE CITY

Another approach to decentralisation, completely diametral to Howard's, stem from one of the most "American" among the American architects: Frank Lloyd Wright.

Wright grew up in the 1870s in Weymouth, a small city in Massachusetts, but spent his summers at "the Valley", his grandfather's farm in the countryside where much of the attitude that should become crucial for his architectural and planning activities – the emphasis on space, economic autonomy, independence and hard but rewarding work for the benefit of the family and the kin (the most important unities of a society) – was shaped.

He believed that every American should have the right to possess as much land as he requires for fulfilling the maxim of being a "*self-reliant rural proprietor*"¹³⁹ (at least one acre, as Wright assumed) with his own "*inviolable sanctuary*"¹⁴⁰. Highly influenced by Jeffersonian values ("*That Government is best Government that is least Government*"¹⁴¹), he complained about the "*exaggeration of government*"¹⁴² and constantly highlighted the significance of the triad consisting of individuality, freedom and democracy that was nothing but obvious to him: "*Individuality is the most precious thing in life, after all – isn't it? An honest democracy must believe that it is.*"¹⁴³

Being aware of this background is indispensable for understanding Wright's reflections on cities. Known for dramatic descriptions of the city as a "*monstrous aberration built by greed, destructive both to efficient production and to human values*"¹⁴⁴ and for quotes such as "*To look at the plan of a great city is to look at something like the cross-section of a fibrous tumor.*"¹⁴⁵, he went down in history as a passionate anti-urbanist, but this is actually not the whole truth.

In 1887, when Wright was 20, he moved to Chicago and "*plunged into city life with joyful abandon, frolicking [...] with his new friends and colleagues*"¹⁴⁶, benefiting from the variety of the city's cultural and culinary offers. Chicago, being a single construction site after the Great Fire of 1871, was probably the most thrilling and instructive place to be for architects and those aspiring to be so back then.

¹³⁶ FRITSCH, Die Stadt der Zukunft, 16.

¹³⁷ Dirk SCHUBERT, Theodor Fritsch and the German (völkische) Version of the Garden City: the Garden City Invented Two Years Before Ebenezer Howard. In: Planning Perspectives, Vol. 19, No. 1 (January 2004) 3 – 35.

¹³⁸ published in 1912.

¹³⁹ FISHMAN, Urban Utopias in the Twentieth Century, 94.

¹⁴⁰ Ibid, 100.

¹⁴¹ Frank Lloyd WRIGHT, An Autobiography (Petaluma 2005) 167.

¹⁴² Ibid, 166.

¹⁴³ Ibid, 233.

¹⁴⁴ FISHMAN, Urban Utopias in the Twentieth Century, 92.

¹⁴⁵ Morgan MEIS, Frank Lloyd Wright Tried to Solve the City. In: The New Yorker, <<http://www.newyorker.com/culture/culture-desk/frank-lloyd-wright-tried-to-solve-the-city>> (22.08.14).

¹⁴⁶ Robert C. TWOMBLY, Undoing the City: Frank Lloyd Wright's Planned Communities. In: American Quarterly, Vol. 24, No. 4 (1972) 538 – 549, here: 538.

The intellectual scene, highly influenced by the overrepresentation of poverty and affluence existing side by side and the social fabric resulting from this condition, bore a new school of thinking and building.

So this is where Wright acquired most of his knowledge on architecture – after only two semesters of part-time studies at the University of Wisconsin, he started an apprenticeship with Louis Sullivan, a representative of the Chicago School and the “father of skyscrapers”¹⁴⁷, who is known for coining the phrase “form follows function”¹⁴⁸. Sullivan became Wright’s mentor, his “Lieber Meister”¹⁴⁹ – at least until 1893 when they parted in disagreement over contractual obligations. However, it is certainly through Sullivan’s influence that Wright concerned himself intensively with questions surrounding the interrelation between architecture, society and democracy – in Sullivan’s opinion, the “wellbeing of the republic depends upon the architect: his creative mind must embody the democratic idea in visible, functional form”.¹⁵⁰ Wright, “attracted by the grandeur of the concept”¹⁵¹, adopted much of this thinking as will be clearly reflected in his conception of “Broadacre City” 40 years later.

Over this following period, in which Wright mostly lived in suburban areas (whilst always having a larger city within reach), the picture of modern cities as places for “banking and prostitution and very little else”¹⁵² consolidated in his mind. New York, the “City of Night”¹⁵³, crowded with buildings that represent “no higher ideal of unity than commercial success”¹⁵⁴, topped the list of cities he had nothing good to say about. These emotions, however, did not prevent him from residing in a permanently rented corner suite at the Plaza Hotel from 1954 to 1959.

So, what might an urban utopia designed by a man who “professed to hate all cities”¹⁵⁵ look like? First and foremost, it doesn’t look like a city at all (FIG. 16), because it lacks all the features that commonly define a city – compactness, marked boundaries (or any form of spatial separation between the city and the countryside), municipal institutions and at least an idea of density – the only reference to urbanity can be found in its name. Broadacre City, as he termed his brainchild, was actually not a city but a “condition shared by all”¹⁵⁶, in which rural and urban spaces would melt together in an ‘organic’ way, by which Wright meant a development that “in all directions is inherent and inevitable”¹⁵⁷.

Broadacre City should be “nowhere unless everywhere”¹⁵⁸, thus constituting the foundation of a newly emerging American society, *Usonia*, for free, individual citizens with private properties: the Usonians.

¹⁴⁷ Mervyn D. KAUFMAN, *Father of skyscrapers: A Biography of Louis Sullivan* (Boston 1969).

¹⁴⁸ “Form ever follows function, and this is the law. Where function does not change, form does not change”. Louis SULLIVAN, *The Tall Office Building Artistically Considered*. In: *Lippincott’s Monthly Magazine* (Philadelphia, March 1896) 408.

¹⁴⁹ Meryle SECREST, *Frank Lloyd Wright, A Biography* (Chicago 1998) 105.

¹⁵⁰ FISHMAN, *Urban Utopias in the Twentieth Century*, 105.

¹⁵¹ *Ibid.*, 105.

¹⁵² Susan RATCLIFF, *Oxford University Press, Little Oxford Dictionary of Quotations* (Oxford 2012) 413.

¹⁵³ *Architect Biography, Frank Lloyd Wright*. In: *Architecture.sk*, <<http://architect.architecture.sk/frank-lloyd-wright-architect/frank-lloyd-wright-biography.php>> (15.03.14)

¹⁵⁴ Frank Lloyd WRIGHT, *Modern Architecture: Being the Kahn Lectures for 1930* (Princeton 2008) xliii.

¹⁵⁵ Jane King HESSON, Debra PICKREL, *Frank Lloyd Wright in New York: The Plaza Years, 1954-1959* (Layton 2007) I.

¹⁵⁶ Mark PIMLOTT, *Without and Within: Essays on Territory and the Interior* (Rotterdam 2007) 164.

¹⁵⁷ FISHMAN, *Urban Utopias in the Twentieth Century*, 122.

¹⁵⁸ WRIGHT, *Modern Architecture: Being the Kahn Lectures for 1930*, xlix.



FIG. 16

In fact, when Wright started elaborating on his plan for redesigning America (like with many eccentric personalities, Wright's ambitions were far from modest) in the early 1930s, he was convinced that, due to technological advances, cities would become superfluous, that they had "*outlived their historical utility*"¹⁵⁹. In Wright's opinion, cities have been legitimate and necessary in times in which there had been no technological solutions to overcome the burdensomeness of density, in which physical presence was a prerequisite for communication.

It is quite obvious that Wright's attempt of dissolving the borders between the urban and the rural didn't have its source in a sentimental desire of turning back time. On the contrary, he greatly valued the new technological evolutions that promised to inaugurate a new era.

Hence, the technologies eliminating the need for cities should constitute the fundamentals for his own vision – Wright in particular stressed the importance of three developments: 1.) The spread of the automobile for private transportation as a device that - more or less overnight - had pulled down the natural limitations of planning and urban design, allowing for "*a new mastery of time and space on which a new kind of city can be built*"¹⁶⁰. For such a new city, Wright had a spatial spread in mind that could easily reach about 100 square miles, therefore a personal car would not be a luxury item but a necessary commodity (FIG. 17).

It is this strong focus on cars that earned him the critique that "*Broadacre City is really a vision of life as gas station.*"¹⁶¹ And indeed, besides from refilling the fuel tank, Wright had big plans with petrol stations: they should serve as places to shop, rest, dine and meet. "*The great highways are in the process of becoming the decentralized metropolis.*"¹⁶²

¹⁵⁹ Mark B. LAPPING, *Toward a Social Theory of the Built Environment: Frank Lloyd Wright and Broadacre City*. In: *Environmental Review*, Vol. 3, No. 3 (Spring 1979) 11 – 23, here: 12.

¹⁶⁰ Cynthia L. GIRLING, Kenneth I. HELPHAND, *Yard - Street - Park. The Design of Suburban Open Space* (New York 1994) 93.

¹⁶¹ Matt NOVAK, *Broadacre City: Frank Lloyd Wright's Unbuilt Suburban Utopia*. In: *Paleofuture*, Gizmodo, <<http://paleofuture.gizmodo.com/broadacre-city-frank-lloyd-wrights-unbuilt-suburban-ut-1509433082>> (06.03.2014).

¹⁶² WRIGHT, *Modern Architecture: Being the Kahn Lectures for 1930*, 110.

2.) The advancements in machine invention and scientific discoveries that, in Wright's opinion, should not be subject to property rights but be publicly owned. 3.) New means of communication (the radio, telephone and telegraph) that would provide up-to-date information, education and entertainment at any time and furthermore banish the risk of cultural and social isolation. In this way, Broadacre City would be interconnected on various levels.

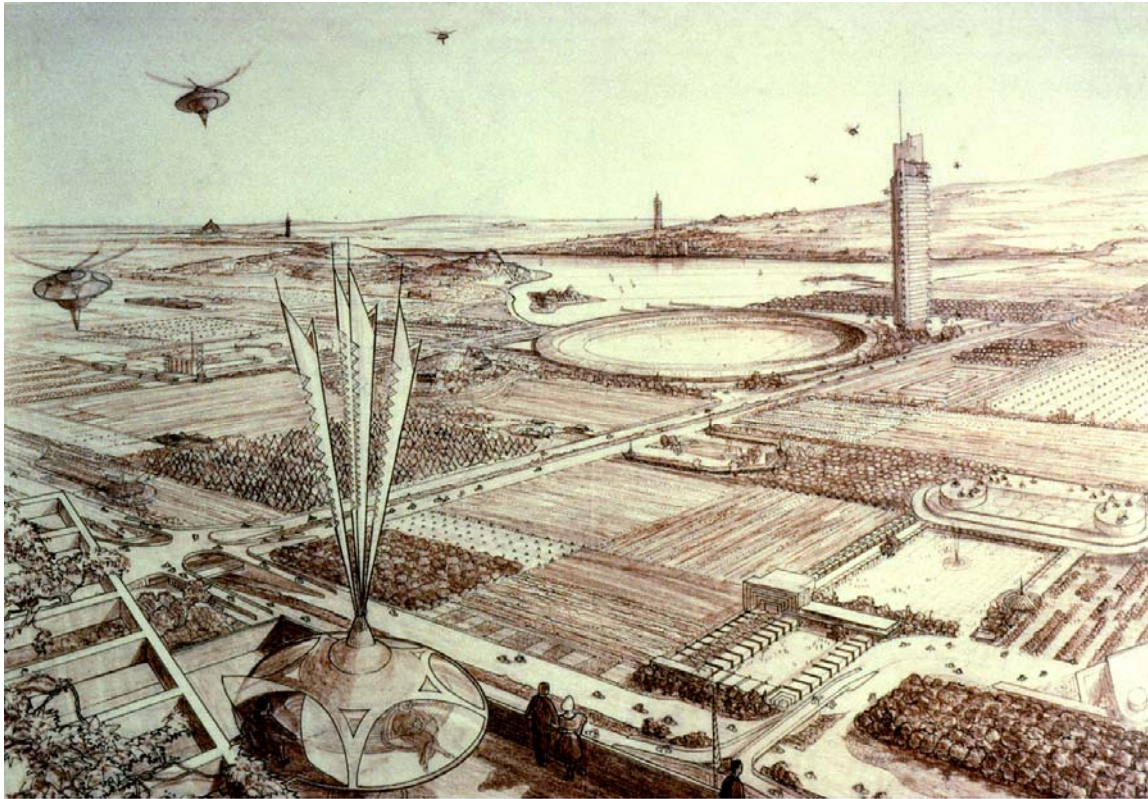


FIG. 17

As for geographic links, a vast network of superhighways via which the generously dimensioned scattered single-family homesteads (the common type of residence in Broadacre City) would be within easy reach, would cover the landscape. Those homesteads should furthermore serve as locations of agricultural production (allowing every family to be self-sufficient) and as offices insofar as they would still be necessary - administration and economy would be reduced to the basic necessities.

In the common sense, there would be no public spaces serving the purpose of social intercourse. This function (which Wright knew was unavoidable) should be satisfied by "community centres" including cultural, educational, leisure, entertainment and shopping facilities, located by the highways.

As Wright was not exactly enthusiastic about governmental structures, his plan provided for a reduction of official institutions to an absolute minimum - administration on municipal level would be cut completely. Instead, there would be just one administrative unit, pivotal for all social, economic, educational, aesthetic, health and safety issues: the county, headed by the county architect (the "*architect-king*", as a critic aptly describes¹⁶³) who, given Wright's

¹⁶³ LAPPING, *Toward a Social Theory of the Built Environment*, 19.

unshakeable conviction that architects are the “essential interpreters of America’s humanity”¹⁶⁴, would certainly know what’s best and aesthetically most appealing for Broadacre citizens. His powers include the distribution of land to the people, the authority on decisions regarding harmonious design and the monitoring of compliance with the principles of organic architecture.

Unlike Ebenezer Howard, Wright not really seemed to be determined to put his plan into practice. Indeed, he had a huge model of Broadacre City built (by his unremunerated apprentices - FIG. 18), which was exhibited at the Rockefeller Center in 1935 from where it toured through different American cities.

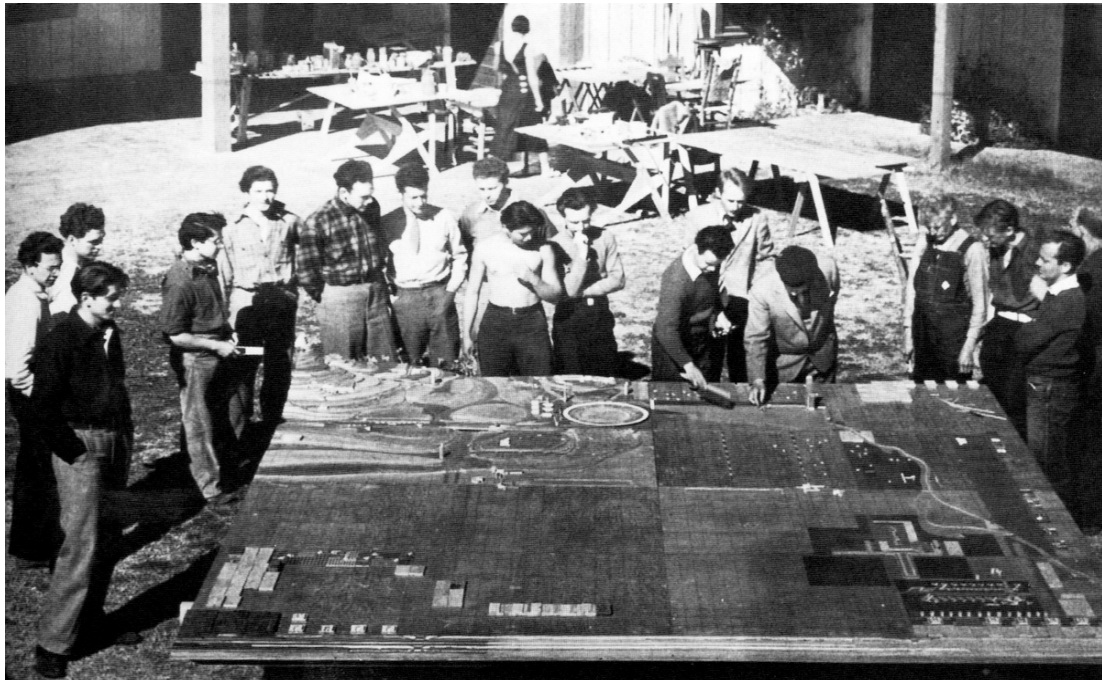


FIG. 18

However, he did not give a clue about how the concrete implementation – concerning political and economical parameters, logistical issues, how the Usonian would get their houses and so on – might look. „Such mundane matters did not concern the theorist.”¹⁶⁵

And, in spite of all the talk of democracy, freedom and his proclaimed struggle for the right to individuality, he didn’t deem it necessary to get in contact with those he allegedly felt committed to.

[...]“everything about his life [...] suggests that his deepest concern was with physical beauty, that he was better prepared to manipulate space and objects than to understand the needs of people en masse. Wright was an elitist who evinced almost no comprehension of racial injustice, the causes and effects of poverty or the horrors of war. He believed that beneficial surroundings would eradicate human ills, but he usually perceived the environment as an aesthetic challenge, not a social problem, which is another way of saying that he was first of all an artist.”¹⁶⁶

¹⁶⁴ LAPPING, *Toward a Social Theory of the Built Environment*, 19.

¹⁶⁵ TWOMBLY, *Undoing the City*, 546.

¹⁶⁶ *Ibid*, 548.

It thus comes as no surprise that Frank Lloyd Wright nowadays is known for his specific 'organic' architecture rather than for his visions on urban utopia.

Anyway, in some respects his visions have proven to be quite foresighted as they reflect some of the defining features of today's American suburbia. This is especially true of the role of the car in everyday American life (including the vast network of motorways and the importance of fuel) as well as of the procedure of outsourcing public and social spaces to giant entertainment centres and shopping malls. This, however, is rarely perceived as part of the realised democratic and individualistic utopia Wright envisioned, but rather as a symptom of a society that sprawls, functioning inefficiently with regards to waste production and infrastructural costs and in which furthermore the danger of social segregation and isolation is latent.

III.IV. CITÉ INDUSTRIELLE

Tony Garnier, the intellectual father of the Cité Industrielle, was persistent. In 1899, as a Prix de Rome winner, he was granted a scholarship at the Villa Medici of the French Academy in Rome where his main duty first and foremost was the documentation and drawn representation of ancient buildings. He fulfilled these tasks rather casual - almost neglectful - as if they were an annoying chore, but when he sent his assignments back to Paris in 1901, he enclosed a series of drawings titled "Une Cité Industrielle", depicting drafts of a utopian industrial city in great detail. The École des Beaux-Arts, who had awarded the scholarship, was not at all amused - not only because Garnier's designs of such a city were regarded as daubery, but especially because he did not show due respect with regards to his instructions.¹⁶⁷ Garnier, however, seemed unimpressed by this reproach: in the following three years, when it came to transmitting his annual reports, he did so with the greatest possible minimalism and in 1904, he topped his demonstrative nonchalance by again sending along his old as well as further elaborations on the Cité Industrielle.

For whatever reason, his unorthodox methods were now received much more favourably than three years before - the journal "La construction moderne" for instance particularly praised Garnier's attractive approach towards hygienic requirements that come along with a modern industrial urban environment.¹⁶⁸ Concrete measures Garnier had in mind in this context were the implementation of a complex drainage system¹⁶⁹ and the provision of a generously dimensioned area for health care facilities in a rather remote part of the city.

Altogether, the process of working out this concept took Garnier from 1899 to 1917, the year in which the complete version was published in book form. His vision was a very detailed, modern proposal for a city of approximately 35.000 people, basing on some sort of local industrial production. Due to the richness of detail (consisting of 164 plates) and the concreteness and plausibility of the approach, Garnier's vision was often labelled as realistic but this should not obscure the fact that, in many respects, the Cité Industrielle is highly utopian. Given its time of origin, the concept reflects the social developments of the late 19th century as well as the technological advancements of the early 20th century - Garnier particularly emphasised the role of electricity which he associated with cleanliness, progress

¹⁶⁷ LAMPUGNANI, Die Stadt im 20. Jahrhundert, 67.

¹⁶⁸ Ibid, 68.

¹⁶⁹ Mason WHITE, Maya PRZYBYLSKI, On Farming: Bracket 1 (Barcelona/Basel/New York 2010) 100.

and the "*emancipation of man from its [note: the machine's] enslavement*"¹⁷⁰ as opposed to the dirt and dust of former times. In his opinion, the urban society is indeed grounded on labour as a precondition for growth, but this should not mean that man's sole *raison d'être* is strenuous work - the "*mastery of the machine*"¹⁷¹ has dawned with the age of electricity.

Garnier was influenced by a broad scope of socialist ideas that are reflected in his design. Like Ebenezer Howard, he upheld the principles of cooperation and equality¹⁷².

He furthermore shared the opinion of the French economist and radical socialist Pierre-Joseph Proudhon, that private ownership should be abolished¹⁷³ - in the Cité Industrielle, all unbuilt urban spaces should be accessible and belong to everyone whilst the city was responsible for providing the goods necessary for satisfying basic needs such as foodstuff and medicine.

There are also some parallels to the early socialist utopias of the 19th century: Garnier followed Charles Fourier's example of having faith in the inherent goodness of man (though he didn't share his ideal of collectivism), thus Garnier believed that "*society will have attained a higher level of morality*"¹⁷⁴ and that with the fall of capitalism, criminals would cease to exist which is why there are no legal institutions such as courts, jails and police stations to be found in his plan. The same applies to religious sites that - as institutions offering consolation - would no longer be necessary.



FIG. 19

In some way, the whole Cité can furthermore be regarded as a reference to French novelist Émile Zola who - himself influenced by Fourier's ideas - describes a socialist city in his novel "*Travail*", *La Crêcherie*, that shows a striking similarity to Garnier's. This is clearly intended - Garnier, who was a member of the "*Société des Amis d'Émile Zola*"¹⁷⁵ even decorated some of the public buildings' walls with quotes from the book (FIG. 19).

¹⁷⁰ Dora WIEBENSON, Utopian Aspects of Tony Garnier's Cité Industrielle. In: *Journal of the Society of Architectural Historians*, Vol. 19, No. 1 (1960) 21.

¹⁷¹ Ibid, 21.

¹⁷² Supriya PUNDLIK, Tony Garnier: Une Cité Industrielle (1917). In: *MA Architecture + Urbanism*, Manchester School of Architecture, <<http://architectureandurbanism.blogspot.co.at/2010/11/tony-garnier-une-cite-industrielle-1917.html>> (03.04.2014).

¹⁷³ Franz FÜRST, Ursus HIMMELBACH, Petra POTZ, *Leitbilder der räumlichen Stadtentwicklung im 20. Jahrhundert - Wege zur Nachhaltigkeit?* (Dortmund 1999). In: TU Dortmund, Institut für Raumplanung, <<http://www.raumplanung.tu-dortmund.de/irpud/pro/struktur/ber41.pdf>> (03.04.2014).

¹⁷⁴ Hanno-Walter KRUFT, *A History of Architectural Theory. From Vitruvius to the Present* (New York 1994) 393.

¹⁷⁵ Tony GARNIER, *Une Cité Industrielle* (New York 1989) 8.

Concerning the location, Garnier had a specific area in southeastern France near Lyon - his hometown - in mind. In order for an industrial city designed for approximately 35.000 people to function, the proximity to a waterway and transport infrastructure is a prerequisite. Garnier chose this medium size because he wanted to draft a scenario that involves the challenges of a city on one side and that allows for a relatively broad scope of architectural design options on the other side.

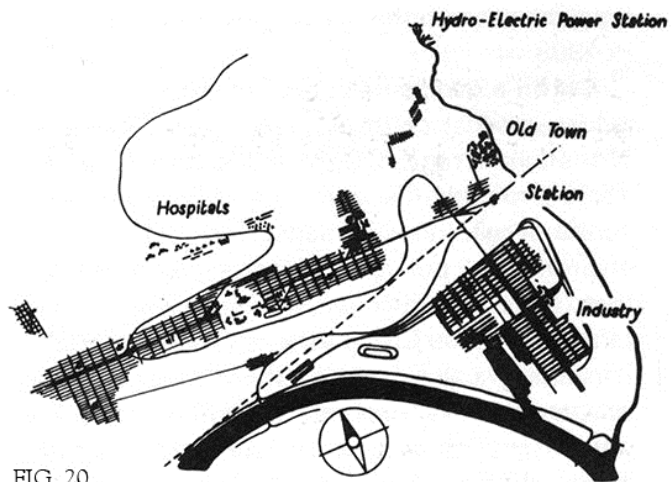


FIG. 20

One of his major intentions was to generate an urban environment in which industry and quality of living and housing do no longer represent fundamental opposites. With that goal in mind, his plan maintained the zoning of the main functions in order to avoid mutual inconveniences.

The respective areas - public, industrial, residential and health - should be strategically located with regards to transportation and distances: the industrial area would be situated by the river and with easy connection to the hydroelectric power dam in the northeast that supplied the whole city with energy whilst the residential area would stretch across a hill - a location that allows taking best advantage of solar and wind conditions (FIG. 20).¹⁷⁶

The different zones would be separated from each other by green areas, thereby generating a park-like setting all over the city with houses of no more than two storeys (FIG. 21) (with the exception of the area around the railway station, where the only tall buildings - hotels,

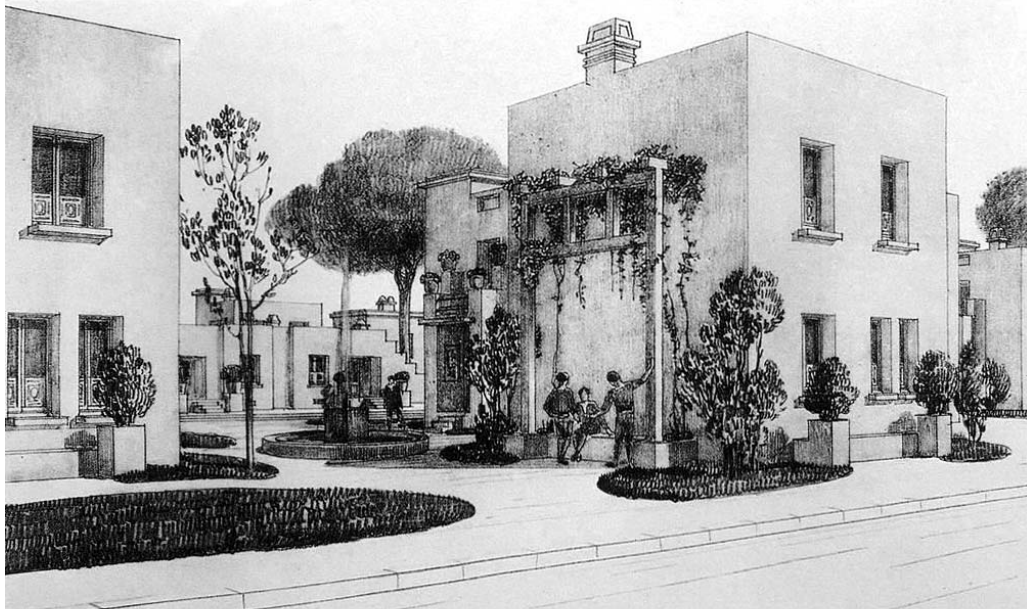


FIG. 21

¹⁷⁶ KRUFT, A History of Architectural Theory, 393.

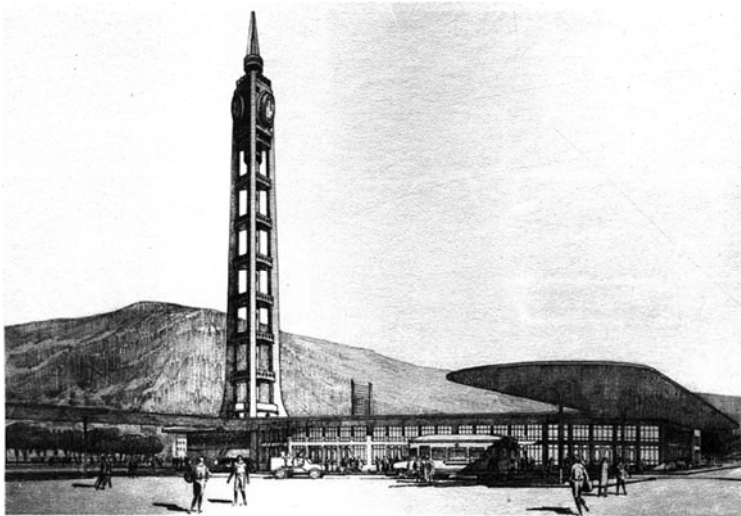


FIG. 22

department stores, four-storey apartment buildings and a clock tower (Fig. 22) - should be located¹⁷⁷). The park impression should be furthermore underlined by the entire lack of enclosure or fencing.

As shown below, Cité Industrielle is not orbital, but stretched (FIG. 23), which, as Garnier stressed, is advantageous with regards to possible future expansions as well as from the hygienic point of view.

Due to its shape, the city centre is not defined "naturally", but by its function, which is public life.

Administrative facilities and - the architectural centrepiece of Cité Industrielle - an extravagantly designed assembly hall with a step pyramid on top are surrounded by facilities for public leisure such as a library, a museum, an indoor pool and a training track.

Housing areas frame the centre, spreading from the east and west, including educational facilities that are dispersed throughout the residential area. This sort of alignment allowed the orientation of all homes towards the south.

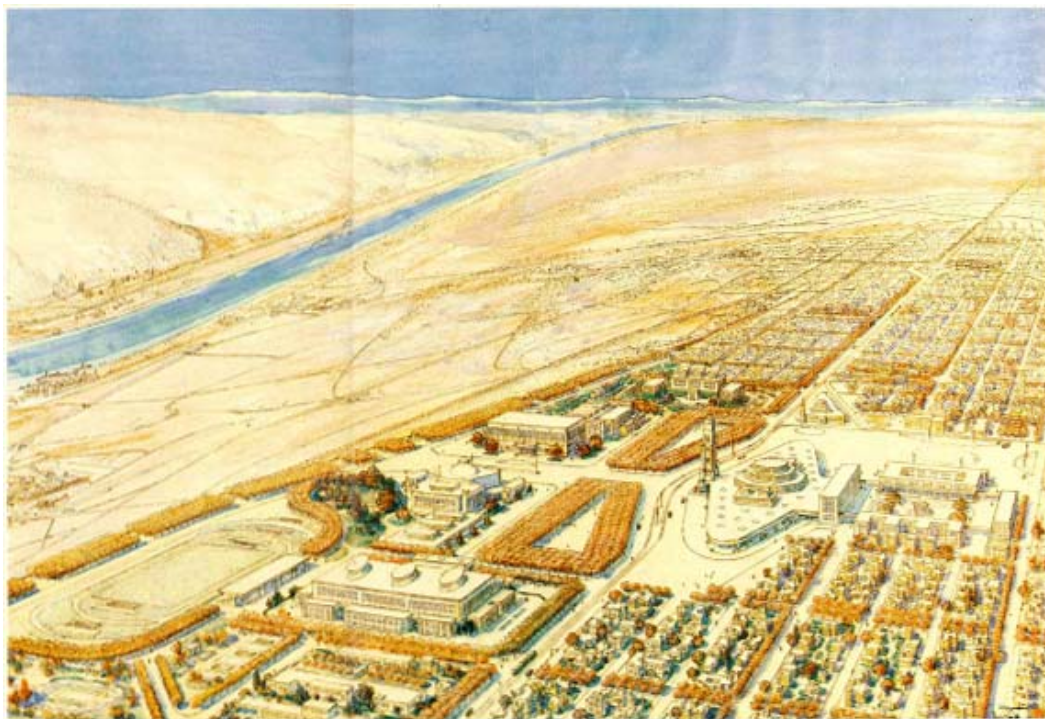


FIG. 23

¹⁷⁷ KRUFT, A History of Architectural Theory, 393.

Green space surrounding each house would be guaranteed due to the fact that the covering of more than half the space of a lot was prohibited. Even the planting of trees was well thought so that the vegetation allowed for sufficient ventilation and light transmission.¹⁷⁸

Generally, the layout can be considered as very modern in the way that it not only considered the requirements of industry, but it also took account of the fundamental human needs of sun, air, space and movement in an urban environment that may not necessarily be utopian.

After Garnier returned to Lyon, the city's mayor Edouard Herriot who was highly enthusiastic about his works, appointed him the city architect in 1906, a position he held for 14 years.

During this period, Garnier was entrusted with "Les Grands Travaux de la Ville de Lyon"¹⁷⁹, a series of construction works with which he could, at least to some extent, realise several of the projects he envisioned in the Cité Industrielle: this includes Grange-Blanche, a hospital complex that - as laid out in the utopian draft - consists of several pavilions, the Gerland stadium and a slaughterhouse, today being used as a venue for concerts.

Apart from Garnier's mere architectural achievements, he played a significant role in early modern urban planning in two respects: firstly, he was - along with Patrick Geddes - one of the first to adopt a regionalist approach, highlighting the "*organic relation of the city to the country*"¹⁸⁰. As he pointed out in the preface to "Une Cité Industrielle", such a city should not stand alone but be part of a federation, interconnected by trade, communication and cultural exchange.

And secondly, the principle of zoning found manifestation in the Charter of Athens that was adopted in the context of the Congrès Internationaux d'Architecture Moderne (CIAM) in 1933, but this was via a detour: In 1917, after "Une Cité Industrielle" was published, Le Corbusier sent a letter to Garnier in which he expressed a "*profound admiration*" of his work, which he called a "*signpost*" that he had found "*in the midst of the ignorable scibblings*"¹⁸¹.

It is obvious that Le Corbusier was significantly influenced by Garnier, specifically with regards to functional separation, a principle that through him reached a broad audience and that thus became an undisputed guideline of city planning until the 1970s.

III.V. DISTINCTIONS AND SIMILARITIES

The examples displayed illustrate that the approaches towards solving one problem - the congestion and decay of the big cities - were manifold and depended highly upon the individual biography of the person behind the concept, on the respective urban background and the first-hand experiences with cities: drafting an ideal city seems to have been a very personal matter and not just a technical challenge, resulting from an urge to improve a situation that in its current form is unacceptable.

Despite the variety of strategies, decentralisation seems to have been a common denominator. This, of course, in many cases followed economic interests - especially in those

¹⁷⁸ Howard MANSFIELD, *Cosmopolis. Yesterday's Cities of the Future* (New Jersey 1990) 76.

¹⁷⁹ Reyner BANHAM, *Theory and Design in the First Machine Age* (London 1960) 37.

¹⁸⁰ Supriya PUNDLIK, Tony Garnier: Une Cité Industrielle (1917). In: MA Architecture + Urbanism, Manchester School of Architecture, <<http://architectureandurbanism.blogspot.co.at/2010/11/tony-garnier-une-cite-industrielle-1917.html>> (04.04.2014).

¹⁸¹ GARNIER, *Une Cité Industrielle*, back cover.

of company towns -, however, certain paternalistic or social ambitions were always part of the considerations.

Given the fact that largeness and especially density made up a big part of the problems with contemporary cities, size was of course (even if not in every case explicitly declared) an issue: the cities envisioned were intended to be smaller than the cities experienced.

With regards to company towns that were not just drafts on paper but physical realities, this resulted from the factual circumstances, economic feasibilities and spatial conditions.

For Howard, Wright and Garnier, who formulated their ideas entirely free from restrictions on the proverbial "green field", this was easier: they were in the position to define the perfect size of their ideal city a priori. Howard and Garnier determined the most favourable number of inhabitants with approximately 30.000 people within defined boundaries that in Howard's case were supposed to be static, whilst growth of the Cité Industrielle was well thinkable. Thereby, specific densities would be achieved - Howard's Garden City should be denser in the centre - with 30 persons per acre - and less dense in the agricultural areas - with 1 person per 2,5 acre.¹⁸² In comparison, the density in the London urbanised area was 17.550 persons per square kilometre (approximately 70 persons per acre) in 1901.¹⁸³ Similar to Howard, Garnier favoured medium densities, and they both conceived their cities as "walkable" ones in which pedestrians could stroll through an urban space resembling a park.

With regard to all of these respects, Wright, whose concept emerged out of a very different cultural regional and personal background as well as at a later time, in which the car embodied the promise of a new era, was the exact counterpart: in Broadacre City, the automobile would replace the feet, density should be reduced to a minimum and boundaries would be completely dissolved, therefore the determination of a size, a beginning or an end would be impossible.

What, however, those three men had in common, was the belief that the ideal city would have to be accompanied by a new form of society: be it one based on community, cooperation and equality as aspired by Howard and Garnier or one in which individuality, freedom and private property would be the highest values.

¹⁸² Brenda VALE, Robert VALE, Is the High-Density City the Only Option? In: Edward NG (ed.), *Designing High-density Cities for Social and Environmental Sustainability* (Abingdon/New York 2010) 24.

¹⁸³ Urban Area Historical Densities: Index. In: Demographia/Wendell Cox Consultancy, <<http://www.demographia.com/dbx-uzahist.htm>> (11.01.2015).

IV. AIMING HIGH

There were little utopian projections that inspired the imaginations of planners and architects more than those of the city in the sky. This is especially true for the late 19th and early 20th centuries, the time in which high-rise buildings made their prominent appearances, and it is peculiarly true for the United States. The history of skyscrapers - promises of modernity - begins in Chicago and New York in the late 1870s and follows two technological innovations that may look insignificant at first glance, but that have proven to be absolutely indispensable: the invention of a safety brake in passenger elevators and the development of the steel skeleton frame.

IV.I. LIFT ME UP!

The history of the passenger elevator is - at least in modern historiography - first and foremost associated with one name and one specific event: the name is Elisha Graves Otis, founder of the E. G. Otis Elevator Company (in the year 1853). His business - elevators equipped with a safety device that should prevent the hoist from plunging - didn't fare quite so well in the first months, that is until he was given the opportunity of presenting his invention in the following year within the frame of the Exhibition of the Industry of All Nations in New York. Acting as a human guinea pig, Otis showcased the functional principle behind his newly contrived safety catch by having himself lifted up on a platform from where he ordered his assistant to cut the suspension cable - contrary to the expectations of the shocked crowd, the platform didn't drop into the depth but stopped after only a few centimetres (FIG. 24). „All safe, gentleman, all safe“¹⁸⁴, is what he is said to have stated - and the audience believed him: the business slowly began to flourish.

The first elevator of this kind was in service in the store of Haughwout and Company, a glass and porcelaine retailer, but taken out of operation after only three years because the customers didn't use it. It should take a few more years until the mistrust towards the new device was dispelled, thus paving the way for a success story.



FIG. 24

The credits for the invention, however, can't be awarded to Otis alone. The history of hoisting apparatuses in general dates back to the classical antiquity, that of passenger elevators to the 17th century. Furthermore, as from the 1830s, freight elevators were common in mines and factories in the United States as well as in Great Britain.¹⁸⁵ The early models were steam powered, followed by the rope-gearred hydraulic elevator in the 1870s.¹⁸⁶

¹⁸⁴ Andreas BERNARD, *Lifted: A Cultural History of the Elevator* (New York/London 2014) 1.

¹⁸⁵ *Ibid.*, 4.

¹⁸⁶ Richard Shelton KIRBY, Sidney WITHINGTON, Arthur Burr DARLING, Frederick Gridley KILGOUR, *Engineering in History* (1990 Mineola) 320.

The reasons, however, why it was Elisha Graves Otis who went down in the annals of history and no one else, are twofold: firstly, the staginess and the general sense of excitement that accompanied his presentation served as an excellent narrative, giving the event the nimbus of being “a demarcation line, dividing the predecessors from the canonical figures, the mere curiosities from the fully developed, production-ready apparatuses”¹⁸⁷ and a “clean, unambiguous beginning”¹⁸⁸ of a historical path that should substantially change architecture, construction and urban design. The second – and less solemn – reason is the fact that Elisha Otis' sons, who took over their father's business as „Otis Brothers and Company“, bought up most of their national competitors in 1898 (fourteen, to be exact) and subsequently claimed “historiographic hegemony over the apparatus”¹⁸⁹ based on their monopoly position. It is due to this strategy that Elisha Otis' namesake, Otis Tufts, who had been praised as the inventor of the elevator by his contemporaries, almost sunk into oblivion in the later 20th century. His „Vertical Screw Elevator” or „Vertical Railway“, patented in 1859, was a celebrated tourist attraction back then.¹⁹⁰

In any case and notwithstanding the persons involved, the safety enhancements in elevator technology and the suitability for daily use were essential requirements for the construction of high-rise buildings – an insight that was already prevalent in the late 19th century. In a San Francisco Call article – “The Mania for Tall Buildings” – published in 1891, the “perfection of elevator work” is even referred to as “the one fundamental condition for high buildings”.¹⁹¹

This is, of course, only one part of the truth – the second indispensable condition was the introduction of a new construction method in the late 1880s: the steel skeleton frame that very soon became the technological standard, especially in New York and Chicago.

Until then, buildings were set up using the solid masonry technology – even the first skyscrapers were built with this method that did, however, only allow for economically and technologically reasonable heights of up to twelve floors.¹⁹² Climbing up those twelve floors day after day was certainly asking too much of the residents, employees or guests – it was indeed the introduction of the elevator that made such heights accessible. For buildings higher than that, however, the masonry technology was inapplicable because each additional storey would have required a disproportionate broadening of the building's base.

The steel frame, “on which the exterior sheath could be hung like a curtain”¹⁹³, provided a solution for this problem. When soon after that, around the turn of the century, the elevator technology was converted from hydraulic to electric drive – thereby enabling a much higher velocity – the path towards the sky was virtually endlessly open.

The development occurred just in time: the combination of the sharp increase in population combined with the fact that land, especially in the central and business areas, was a valuable (and thus a very expensive) asset really called for new strategies of increasing the efficiency of space utilisation.

¹⁸⁷ BERNARD, Lifted, 2.

¹⁸⁸ Ibid, 11.

¹⁸⁹ Ibid, 9.

¹⁹⁰ Ibid, 7.

¹⁹¹ John Beverley ROBINSON, The Mania for Tall Buildings. In: San Francisco Call, Volume 70, Number 7 (07.06.1891). In: California Digital Newspaper Collection, <<http://cdnc.ucr.edu/cgi-bin/cdnc?a=d&d=SFC18910607.2.214#>> (07.01.2015).

¹⁹² Peter BUITENHUIS, Aesthetics of the Skyscraper: The Views of Sullivan, James and Wright. In: American Quarterly, Vol. 9, No. 3 (Autumn 1957) 316 - 324, here: 316.

¹⁹³ Spiro KOSTOF, The Skyscraper City. In: Design Quarterly, No. 140, Skyscraper View (1988) 32 - 47, here: 32.

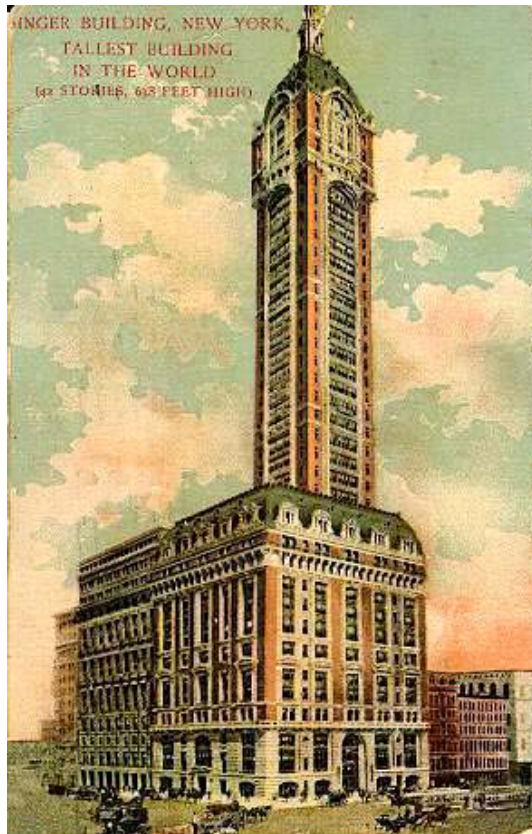


FIG. 25



FIG. 26

Unsurprisingly, in the beginning this particularly concerned commercial buildings. The unleashing of an impassioned competition over who could build the highest, the most representative and the most elegant skyscrapers was the logical consequence.

With regards to matters of aesthetics and appearance, the early phase of skyscraper design was not exactly characterised by innovativeness but by the attempt "to adapt existing building types, most notably the *palazzo*, to the new heights that were allowed by elevators."¹⁹⁴

This phase of caution was followed by a period set in motion in the early 20th century, in which a high level of enthusiasm, an eagerness to experiment and creativity were noticeable: the Singer Tower (FIG. 25) and the Metropolitan Life Insurance building (FIG. 26) - each at the time of its construction the tallest building in the world - mark the beginning of what turned out to be the flowering stage of the skyscraper.

IV.II. NEW PERSPECTIVES

As with all phases of transition, the new times were received with mixed feelings. From enthusiasm and fascination to awe, resentment and fear, the whole spectrum of emotions was covered.

On behalf of the proponents, the rapidly growing skyline did not only promise a new cityscape, a new design and appearance, but "the birth of yet another legendary cosmopolis, like the *Babylon of antiquity with its Tower of Babel*, and so a new age."¹⁹⁵

¹⁹⁴ Cesar PELLi, *Skyscrapers*. In: *Perspecta*, Vol. 18 (1982) 134-151, here: 135.

For the first time in history, the concept of the skyline – in its original sense “*the line where earth and sky met*”, shifted into the realm of human and technological manipulation.¹⁹⁶

Other observers voiced their concerns about the pace and extent of change, manifesting itself in optical alterations, in shambles, monumentality and a lack of harmony and alignment with given circumstances. Skyscrapers, indeed in virtually all cases the result of economic considerations and profitseeking, were furthermore perceived as the “*naked celebration of corporate capitalism*”¹⁹⁷, appearing from nowhere and as such were doomed to failure. In the words of the American author Henry James:

“Crowned not only with no history, but with no credible possibility of time for history, and consecrated by no uses save the commercial at any cost, they are simply the most piercing notes in that concert of the most expensively provisional into which your supreme sense of New York resolves itself. They never begin to speak to you, in the manner of the builded majesties of the world as we have heretofore known such - towers or temples or fortresses or palaces - with the authority of things of permanence or even of things of long duration. One story is good only till another is told, and sky-scrapers are the last word of economic ingenuity only till another word be written.”¹⁹⁸ Well, his assessment of the situation proved inaccurate.

Still other critics, such as the now already well known and cantankerous Frank Lloyd Wright, sympathised with the very concept of the skyscraper, but were repelled by the method of implementation. He remained relatively vague on the question which material qualities a „good“ skyscraper would have to demonstrate. He did, however, uphold the principles of skyscraper design his „Lieber Meister“ Louis Sullivan had formulated as follows:

“The force and power of altitude must be in it. The glory and pride of exaltation must be in it. It must be every inch a proud and soaring thing, rising in sheer exaltation that from bottom to top it is a unit without a single dissenting line.”¹⁹⁹

In Wright’s eyes, the skyscrapers that were being built were not at all “*proud and soaring things*”, but altogether constituting a tangled, dense aggregation of buildings that only impresses at large instead of as individual pieces of art.

In a talk entitled “The Tyranny of the Skyscraper” he referred to the new way of construction as “*the prostitute semblance of the architecture it professes to be*” and of the buildings themselves as “*utterly barbaric*” as “*they rise regardless of special consideration for environment or for each other, except to win the race or get the tenant. Space as a becoming physic element of the American city is gone.*”²⁰⁰

Despite the exuberant pathos of his words, with emphasising the loss of space, Wright addressed one point that had been debated since the 1880s and that became more and more problematic and noticeable on the streets in the early 20th century: the increase in density and the withdrawal of light and air caused by the highness of the new buildings.

This - understandably enough - caused a lot of annoyance among the public as well as among experts, especially in New York, the city most affected by the problem. A mobilisation of private and professional initiatives was the result.

¹⁹⁵ KOSTOF, The Skyscraper City, 33.

¹⁹⁶ Ibid, 33.

¹⁹⁷ Ibid, 34.

¹⁹⁸ BUITENHUIS, Aesthetics of the Skyscraper, 321.

¹⁹⁹ Frederick KOEPER, Marcus WHIFFEN, American Architecture. Volume 2: 1860 - 1976 (Cambridge 2001) 255.

²⁰⁰ BUITENHUIS, Aesthetics of the Skyscraper, 321f.

As early as 1894, the Architectural League of New York organised a symposium on the topic of height limitations²⁰¹ and in 1907, the "Committee on Congestion of Population in New York" was founded²⁰² - the desire for change was in the air.

However, the last straw that broke the camel's back - and thus the catalyst that urged the municipal government to act - was the construction of the 41-storey Equitable Building (FIG. 27) in 1915. Set up within only three years and equipped with state-of-the-art technology (more than 50 elevators, modern fire protection and ventilation), it provided 1.200.000 square feet (111.484 m²) of office space for 16.000 workers.²⁰³

Already before its construction, the building was heavily criticized for its gigantic proportions, and several alternative proposals were submitted - and rejected. After its completion according to the initial plans (there were no legal means to determine the height or shape of skyscrapers at all), the Equitable Building came just at the right time to serve as the "chief villain"²⁰⁴, as the "handy scapegoat in the heat of contemporary rhetoric"²⁰⁵ for proponents of respective regulations.

The complaints were manifold: that the building prevented the exchange of air and the influx of light, casting a shadow "six times its own area" at noon and diminishing the value of neighbouring properties, that it was dangerous for firefighters and that it provoked a congestion of transportation.²⁰⁶

Altogether, the widespread opinion was that "the Equitable Building [...] carried the development of the skyscraper to [...] intolerable extremes"²⁰⁷.

Even if the Equitable Building was just a symptom of a deeper-seated problem: the time was ripe for legal measures: in 1916, the New York Zoning Resolution²⁰⁸ aimed at enhancing public safety and quality of life was adopted.



FIG. 27

²⁰¹ Sally A. KITT CHAPPELL, A Reconsideration of the Equitable Building in New York. In: Journal of the Society of Architectural Historians, Vol. 49, No. 1 (March 1990) 90 - 95, here: 90.

²⁰² John Louis RECCHIUTI, Civic Engagement: Social Science and Progressive Era-Reform in New York City (Philadelphia 2007) 88.

²⁰³ Landmark's Preservation Commission, Equitable Building. In: New York City Government, <<http://www.nyc.gov/html/lpc/downloads/pdf/reports/equitable.pdf>> (08.01.2015) 5.

²⁰⁴ Landmark's Preservation Commission, Equitable Building. In: New York City Government, <<http://www.nyc.gov/html/lpc/downloads/pdf/reports/equitable.pdf>> (08.01.2015) 6.

²⁰⁵ CHAPPELL, A Reconsideration of the Equitable Building in New York, 90.

²⁰⁶ Ibid, 91f.

²⁰⁷ Ibid, 90.

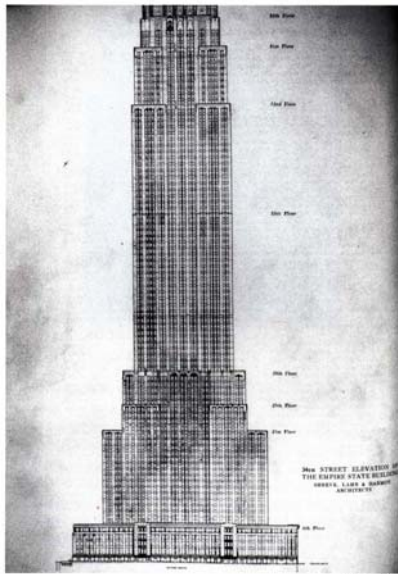


FIG. 28



FIG. 29

Generally speaking, the resolution covered two factors: firstly, it applied a separation of areas by functions - residence, business and unrestricted districts -, going hand in hand with certain rights and restrictions.

Secondly, it introduced a spatial division into five height zones, allowing for specific building heights in relation to the width of the street. Above the respective limit, height could be increased by adding set back storeys "*within a line drawn from the centre of the street through the top of the wall on the lot line*".²⁰⁹ Furthermore, the construction of a tower occupying one-quarter of the plot at maximum was allowed. Those instructions reveal a distinctive template, determining the shape a building would necessarily have if it made most efficient use (in terms of profitability) of the available plot. This characteristic pattern is evidenced by most Art Déco Buildings in New York, such as the Empire State (FIG. 28) or the Chrysler Building (FIG. 29).²¹⁰

The impacts of the Zoning Resolution were anything but marginal: not only did the optical appearance of the cityscape undergo a notable change, but it also affected the entire conditions of New York's urban pattern: from "*a kind of fungus comprised of unrelated cells*" [...] to a "*'mechanism' of related parts*".²¹¹ The restrictions imposed were welcomed enthusiastically by the vast majority of planners and architects, not only because it proved to be a viable solution for the problems of the preceding years, but also because it turned out to be a valuable, forward-looking tool with "*epochal significance*"²¹² for active urban planning, an instrument "*to rationalize the city of the future*"²¹³.

A new aesthetic, characterized by a more orderly, less dense structure and "*iconic tall, slender towers*"²¹⁴ instead of bulky buildings, emerged from the ingenuity of the builders and creative minds.

²⁰⁸ For the original text, see: City of New York, Board of Estimate and Apportionment, Building Zone Resolution (25.07.1916). In: New York City Government <http://www.nyc.gov/html/dcp/pdf/history_project/1916_zoning_resolution.pdf> (08.01.2015).

²⁰⁹ Hugh FERRISS, The New Architecture. In: The New York Times (19.03.1922). In: <<http://query.nytimes.com/mem/archive-free/pdf?res=9D07E4DC1E3CE533A2575AC1A9659C946395D6CF>> (12.01.2015).

²¹⁰ Carol WILLIS, Zoning and "Zeitgeist": The Skyscraper City in the 1920s. In: Journal of the Society of Architectural Historians, Vol. 45, No. 1 (March 1986) 47 - 59, here: 48.

²¹¹ Ibid, 52.

²¹² Ibid, 49.

²¹³ Ibid, 50.

²¹⁴ City of New York, About Zoning. In: New York City Government, Department of City Planning. <<http://www.nyc.gov/html/dcp/html/zone/zonehis.shtml>> (23.01.2015).

The thus established setback style was apprehended as the reflection of modernity, as the architecture for the city of the future. The success of both the instrument of regulation and the design emerging from it is clearly demonstrated by two facts: firstly, more than three hundred American municipalities followed New York's example and applied their own zoning regulations within the following twenty years²¹⁵, and secondly, numerous setback style skyscrapers were built in cities where no such legal restraints existed.²¹⁶

What furthermore played an important role was the fact that the new style was perceived as a piece of a newly gained, uniquely American identity, exhibited with a sense of pride, as the words of the architect Harvey Wiley Corbett illustrate:

*"What we are getting now is something utterly new and distinctive. And its effect will be felt on the architecture of the whole world. The setback style will go down in history along with the Gothic, the Classic and the Renaissance."*²¹⁷

IV.III. DRAWING THE METROPOLIS OF THE FUTURE - NEW YORK, NEW YORK

In the early 20th century, the ideas on a skyscraper metropolis were heavily debated public issues, not only among experts, but also in popular media: several articles on those topics, often accompanied by utopian drawings, were published. Back then there were a handful of delineators, architects and illustrators who dealt intensively with future urban scenarios.

Interestingly, the influence of the Zoning Resolution was tangible also in terms of utopian projections, as pre-zoning depictions distinguished themselves in some crucial points from those after the implementation of the regulations.

This concerns first and foremost the shape of the buildings (obviously, as the setback style arose from the resolution in the first place), the degree of density (much higher in pre-zoning scenarios), and the extent of regularity and order (much higher in post-zoning scenarios).

IV.III.I. PRE-ZONING

The most famous graphic representations of the late 19th and early 20th centuries are those published by Moses King. King was an editor specialised on guide books on American cities, best known for his series "King's Views of New York", featuring illustrations that anticipated a potential future of New York. The pictures, mostly drawn by Richard W. Rummell and Harry M. Pettit, portray a dense, high city at multiple levels connected via sky bridges, including diverse means of transportation - railways, airplanes, automobiles and airships (FIG. 30).

Those visions met the pulse of time: New York at the edge of a new century and a new era, the embodiment of *"the city of the world to come"*, an *"urban paradigm for the mass application of science and technology"*²¹⁸, provided the golden opportunity of observing and experiencing the realisation of a utopia first-hand, simply because of the rapidness of innovation and its manifestation in the urban space.

*"New Yorkers amazed the world by their audacity in 'defying the clouds in the sky'."*²¹⁹

²¹⁵ Hugh FERRISS, *The Metropolis of Tomorrow* (Mineola/New York 2005) 72.

²¹⁶ WILLIS, *Zoning and "Zeitgeist"*, 57.

²¹⁷ Hyungmin PAI, *The Portfolio and the Diagram: Architecture, Discourse and Modernity in America* (Cambridge 2002) MIT Press, 2002, p. 111.

²¹⁸ Javier MONCLUS, Manuel GUARDIA (ed.), *Culture, Urbanism and Planning* (Aldershot/Burlington 2006) 97.

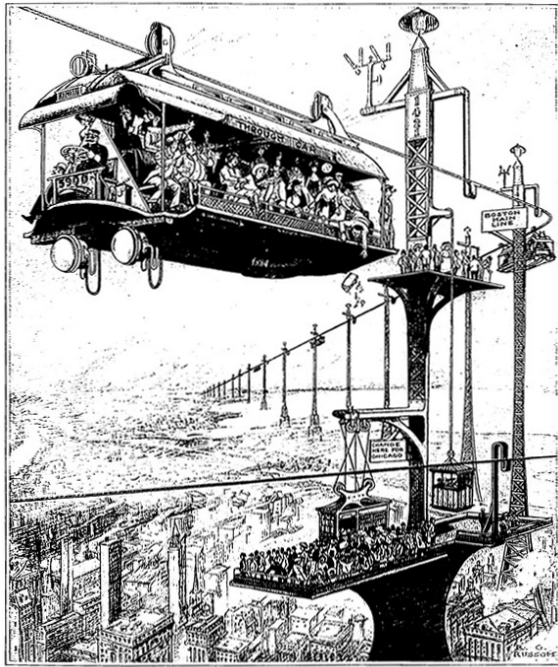
²¹⁹ *Ibid*, 100.

FUTURE NEW YORK, "THE CITY OF SKYSCRAPERS,"



NEW YORK.

FIG. 30



NEW YORK TO BOSTON—FORTY MINUTES

FIG. 31



FIG. 32

It thus comes as no surprise that Moses' books were big sellers and that his pictorial forecasts didn't remain the only ones on the market: the Life Magazine (FIG. 31), the New York Tribune (FIG. 32), the Cosmopolitan Magazine (FIG. 33), Popular Science Monthly (FIG. 34) - just to name a few - turned their attention to the topic, in graphic as well as in textual form.

In the article "Man's Machine-Made Millenium", published in the Cosmopolitan Magazine in 1908, the author Hudson Maxim, an inventor, imagined

a "great city" in the farer future, that "will have the aspect of a frail structure of webs and ribbons of steel through which the sun and air will find a freer access to the earth than they now find between the present city walls. [...] Instead of individual buildings, disunited and independent in architecture, that great city of the future will be as one enormous edifice. The present streets upon the surface of the ground will become the basement, and the business thoroughfares will be upon an enormous platform a story high; and stupendous banks of streets, arcades and corridors, parks and playgrounds will rise one above another, tier on tier, to eye-tiring heights, supported by vast columns several blocks in diameter at the base, traversed by great streets and thoroughfares and rising to a height of two thousand feet or more. Each tower will be so built as amply to house several hundred thousand persons, and there will be homes in sky-hung parks and gardens up in the clear, cool, pure air, and from their commercial work down near the earth

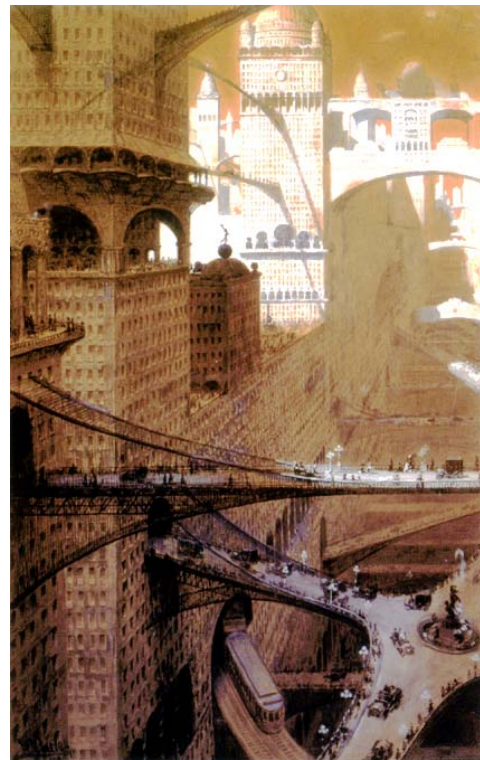


FIG. 33



business men will take express elevators to their homes in a veritable 'airy, fairy dreamland of nightingales', where the clouds hover and smile in the evening sun long after the ink of night has engulfed the lower floors."²²⁰

Whilst Maxim already imagined the future city in the sky as a light construction, flooded by light and air, but at the same time bustling with activity on various levels, others had different ideas: the illustration "New York City - As it will be in 1999" by Louis Biedermann (FIG. 35) was printed in the New York World in 1900, back then one of the most popular newspapers with a run of up to 500.000 copies²²¹.

The picture displays a city crammed with towers, almost sticking together and leaving hardly any space for light, air or streets. Whilst there are bridges, probably for cars, numerous landing stages for ships and means of air transportation looking like hybrids composed of ships and planes, there doesn't seem to be a single spot suitable for pedestrians. "Traffic

congestion was an obsession."

With this image, Biedermann depicted a city that "exaggerated present trends and technologies and reflected both the fascination and fears of unconstrained growth."²²²



FIG. 35

²²⁰ Hudson MAXIM, Man's Machine Made Millenium. In: Cosmopolitan Magazine, No. 6 (November 1908) 569 - 576, here: 576.

²²¹ Carol WILLIS, Future City: 20/21. 1900. In: The Skyscraper Museum, <http://www.skyscraper.org/EXHIBITIONS/FUTURE_CITY/NEW_YORK_MODERN/walkthrough_1900.php> (15.01.14).

²²² Ibid.

IV.III.II. POST-ZONING

As already mentioned, the Zoning Resolution brought forth new trends in urbanism. In this and in the context of post-zoning urban utopia, one person deserves particular attention: Hugh Ferriss. Actually being an architect himself, he established an excellent reputation as an illustrator and delineator in cooperation with the contemporary architectural elite, among others Harvey Wiley Corbett and Raymond Hood. Together, they constituted the three pivotal figures of American architectural utopianism.

In cooperation with Harvey Wiley Corbett, a vehement advocate of skyscrapers and their contribution to modernity, Ferriss devised a series of four drawings in 1916 as a direct result to the enactment of the Zoning Resolution which he referred to as *"the most formidable restraint yet placed upon the rank growth of American Building"*²²³. "The Four Stages" or "The Evolution of the Set-back Building" demonstrate how - in compliance with the new legal requirements - a building would reasonably be designed in order to make best use of a building envelope²²⁴ in technical and economic as well as in terms of the available space volume (FIG. 36).

The first picture shows the exact building mass allowed within the scope of legal provisions, including the required setbacks at the prescribed height and one high tower covering not more than one fourth of the plot.

*"It must be understood that the mass thus delineated is not an architect's design; it is simply a form which results from legal specifications. It is a shape which the law puts into the architect's hands. He can add nothing to it; but he can vary it in detail as he wishes. It is a crude form which he has to model."*²²⁵

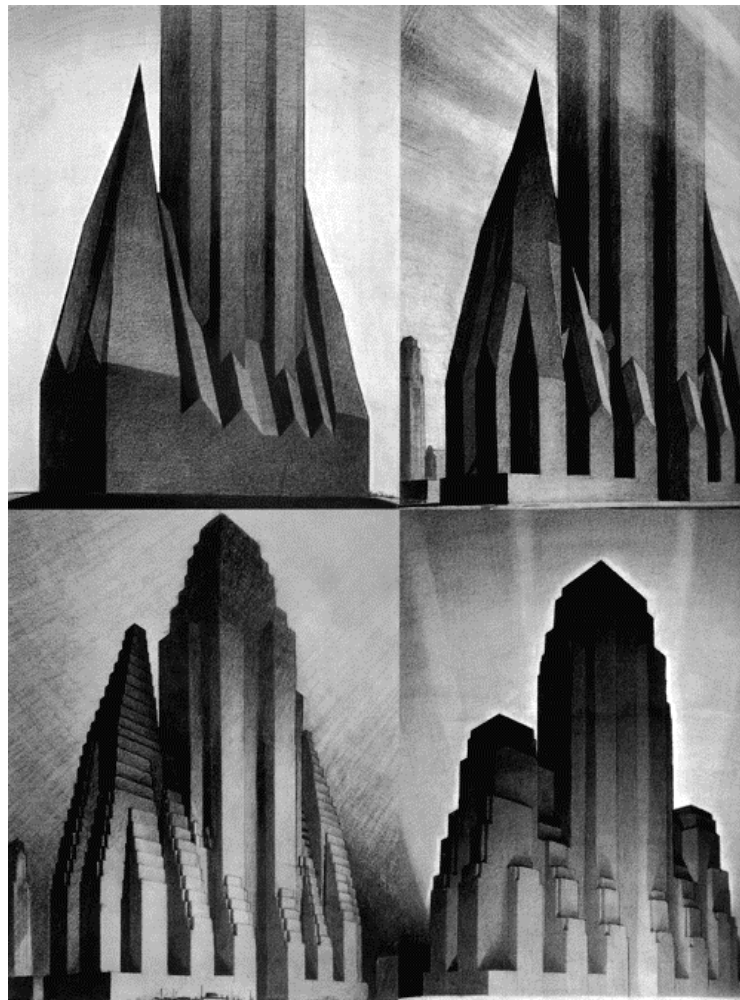


FIG. 36

²²³ FERRISS, *The Metropolis of Tomorrow*, 72.

²²⁴ "A building envelope is the maximum three-dimensional space on a zoning lot within which a structure can be built, as permitted by applicable height, setback and yard controls." In: New York City Government, <<http://www.nyc.gov/html/dcp/html/zone/glossary.shtml>> (18.01.2015).

²²⁵ FERRISS, *The Metropolis of Tomorrow*, 74.

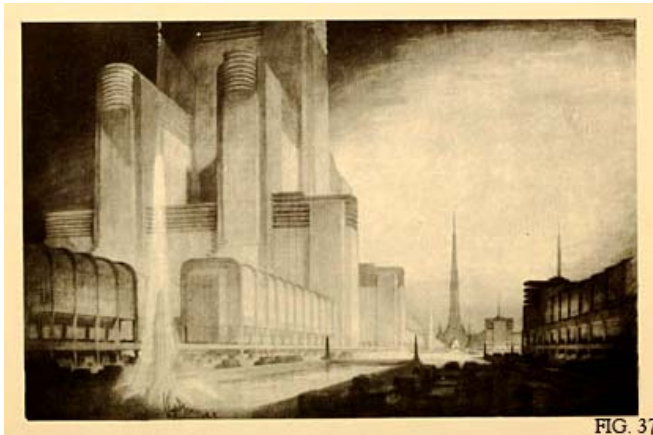


FIG. 37

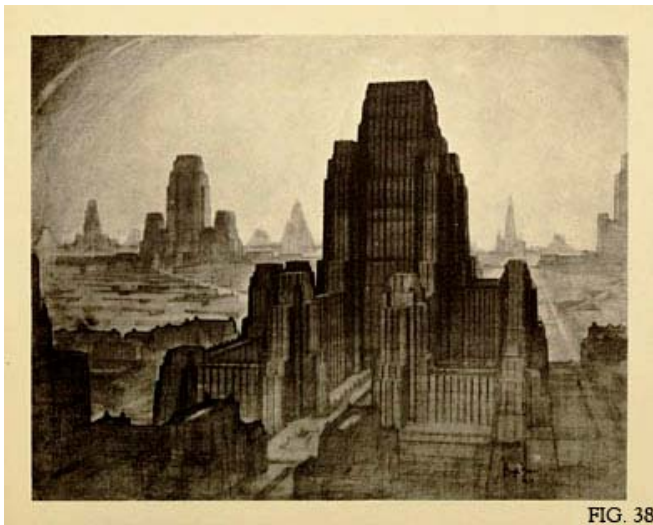


FIG. 38

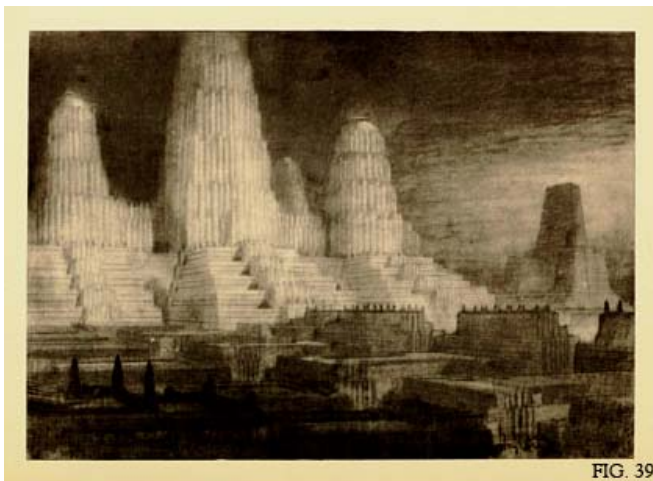


FIG. 39

In the following three stages, Ferriss does exactly this on paper: he sculpts the shape in a way that is technologically reasonable, that permits increased incidence of natural light (by cutting out horizontal lines on the 2nd drawing) and that is economically logic (for instance, by shortening the tower on the 3rd drawing). What remains is "a practical, basic form for large buildings erected under this type of Zoning Law"²²⁶ in a pyramid form which, in Ferriss' eyes, has one substantial advantage over the cubic shape: due to the fact that usually all sides of a pyramid are visible (as opposed to a cubic building which, assuming that it is adjacent to another, shows only its front facade), the shape offers a much broader scope of design. Unlike the cube that "loses its essential identity in the row", the pyramid "possesses that effect of individuality which is essential to architectural dignity." [...] With the return of the third dimension, Architecture seems to resume possession of a lost glory."²²⁷

From 1922 onwards, when the drawings appeared for the first time in the New York Times Magazine accompanied by an article explaining "The New Architecture"²²⁸, the "Four Stages" were frequently published. This not only encouraged the understanding of the new legal provisions, but above all it passed on the enthusiasm and excitement for the new style, heralding a new urban era.

In the following years Ferriss occupied himself with a series of projects addressing the topic of the future city in a rather utopian way

²²⁶ Ibid, 78.

²²⁷ FERRISS, The Metropolis of Tomorrow, 78.

²²⁸ Hugh FERRISS, The New Architecture. In: The New York Times (19.03.1922). In: <http://query.nytimes.com/mem/archive-free/pdf?res=9D07E4DC1E3CE533A2575AC1A9659C946395D6CF> (12.01.2015).

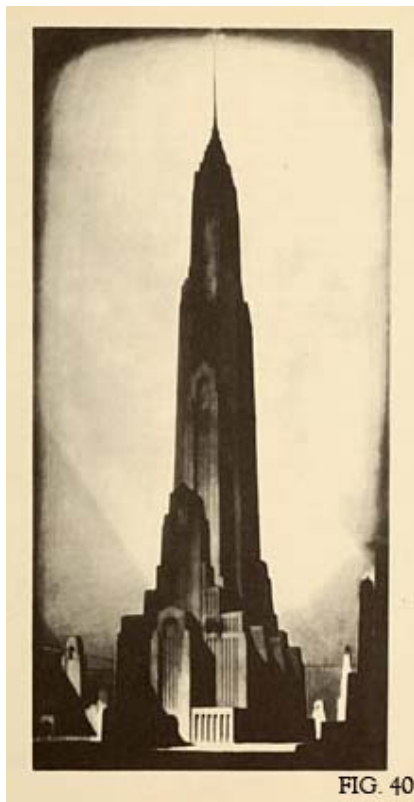
and within only a few years, he created a unique look that

*"quickly came to be what the public expected of the future city: hanging gardens on penthouses, apartment towers on bridges, different levels of pedestrian and automotive traffic, and cliffs of buildings disappearing into the sky."*²²⁹

As a continuation of his previous drawings and ideas, he elaborated his principal work "The Metropolis of Tomorrow" from 1922 to 1929. In the book divided into three parts, he takes the status quo of contemporary cities as a starting point, moves on to the description of projected trends (such as the Four Stages) and, in the last step, drafts an "imaginary metropolis" in textual and pictorial form.

The drawings show high (approximately 1000 feet, as we learn from the text), imposing, massively dimensioned towers, standing on broad bases stretching over three to four blocks. The buildings aren't situated directly adjacent to each other but at greater, relatively regular intervals of approximately half a mile, obviously following an urban pattern.

His visionary city is functionally divided into three zones: the business, the art and the science zone, each of which has a primary centre - a huge building complex in which the respective core competencies and tasks are housed. Taken together, the Science (FIG. 37), the Business (FIG. 38) and the Art Centre (FIG. 39) establish the heart of the city, each featuring different characteristics with regards to architecture, transportation and urban design. What the centres have in common, though, is that traffic is organised on multiple levels - a common motif in urban utopianism - and in proximity to a major highway. Further public facilities that appear exceptionally utopian are the interdenominational religious site (in tomorrow's metropolis, religious conflicts are things of the past) (FIG. 40) and the Centre of Philosophy (FIG. 41), serving as an interface between arts and science.



²²⁹ MANSFIELD, Cosmopolis. Yesterday's Cities of the Future, 13.

Between the high buildings, the "towering mountain peaks"²³⁰, as Ferriss calls them, are lower buildings of averagely six floors with planted roofs used as gardens with sun porches or swimming pools. When comparing the city of his imagination with the actual metropolises, Ferriss concluded that due to its configurations and its design, the former would be advantageous with respect to exposure of light, air and "ample vistas" - to put it briefly, it would provide a "more humane environment"²³¹.

And this, as Ferriss concludes in the epilogue of his book after bringing himself back to here and now, to the "city of today" with its challenges and its attractions, is exactly what architecture needs to achieve: "Our criterion for judging this self-conscious Architecture will be its effect on human values: its net contribution to the harmonious development of man."²³²

Nowadays, the influence of Ferriss' works is - albeit unconsciously - familiar to a broad public: without his drawings serving as an inspiration for film designer Anton Furst, who was working on the Batman movie in 1989, we wouldn't know Gotham City as we know it today - iconic and gloomy (FIG. 42).

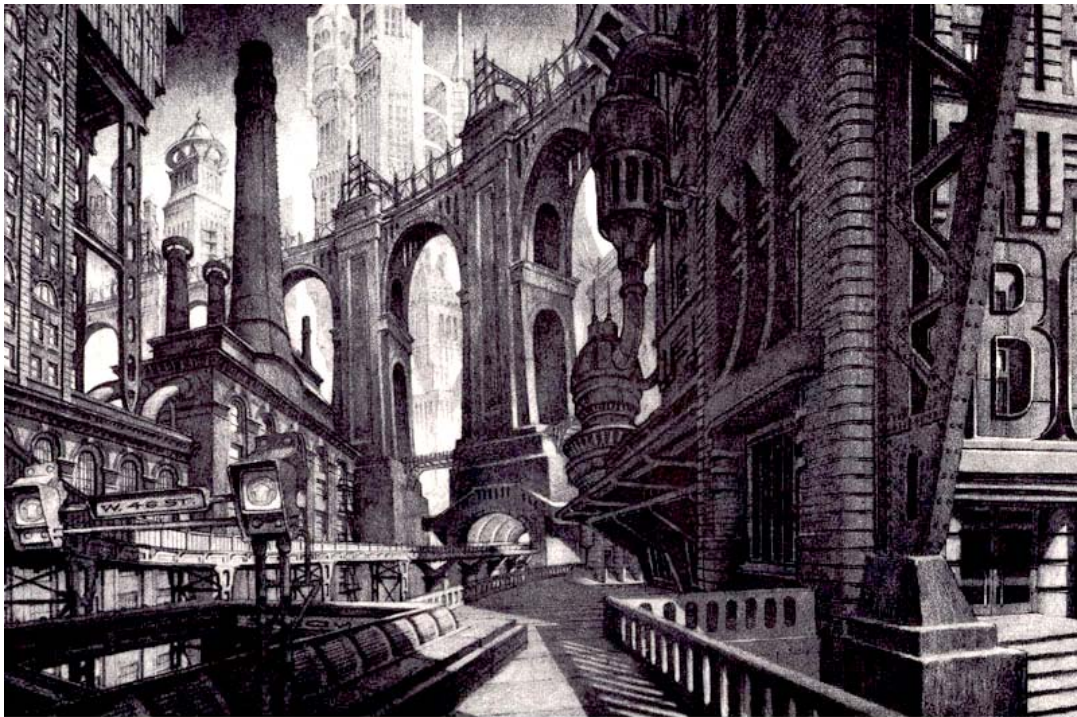


FIG. 42

Whilst Ferriss was working on his oeuvre, Harvey Wiley Corbett received the possibility of displaying his own ideas of a future New York by preparing the exhibition "The Titan City, a Pictorial Prophecy of New York, 1926-2026" at the Wanamaker Department Store.

Corbett was bubbling over with ideas, but he was not a particularly gifted delineator. Therefore, once again, he took Ferriss aboard as illustrator, encouraging him with the prospect of "a most interesting opportunity to get someone to pay for the futuristic ideas we have

²³⁰ FERRISS, The Metropolis of Tomorrow, 109.

²³¹ Ibid, 110.

²³² Ibid, 142.

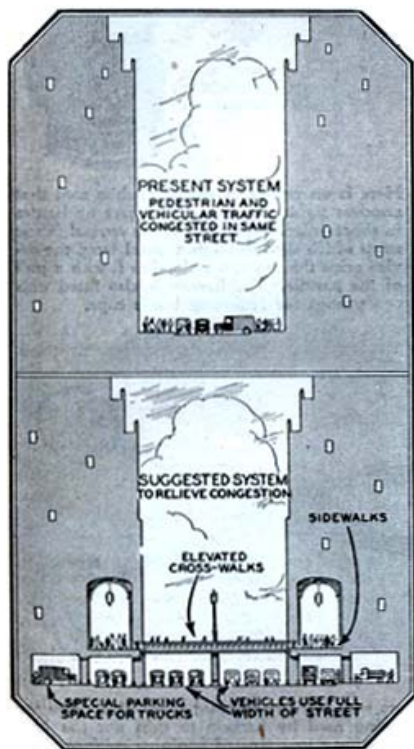


FIG. 43

discussed.²³³ The exhibition became an outstanding success: the masses and the media came to see the murals displaying futuristic sceneries and to spread the word: *"The future of architecture has become a matter of public concern."*²³⁴

Unlike Ferriss, Corbett was eager to turn his visions into reality, specifically those concerning the somewhat unsatisfactory traffic situation. In 1923, he conceptualised "Proposals for Relieving Traffic Congestion in New York by Separating Pedestrians and Vehicular Traffic" (FIG. 43).

His plan entailed the widespread construction of overhead bridges, arcade sidewalks, underground railways and elevated pedestrian levels, while the streets below would be intended for car traffic only.

Corbett romantically perceived of his utopian city as the *"reincarnation of the City of the lagoons"*²³⁵, *"a modernized Venice, a city of arcades, piazzas and [pedestrian] bridges, with canals for streets, only the canals will not be filled with water but with freely flowing motor traffic."*²³⁶

In his opinion, the implementation of his idea would be advantageous and perfectly suitable first and foremost for New York, but moreover for any city in the world. However, obviously his model, though valued as a visionary thought experiment by many, didn't convince the decision makers as a viable method of resolution.

Others, such as Lewis Mumford, highly criticised Corbett's approach as a

*"project from Cloudeuckooland ... Only a megalomaniac imagines that life in a two-hundred-story building is in any way better or greater than life in a two-story building. [...] We are dealing here ... with a religion, with a deep mystical impulse, a hierarchy and a theology...Traffic and commerce are the names of the presiding deities."*²³⁷

Raymond Hood, whose fame as an architect came rather late and suddenly when, aged 41, he (together with John Mead Howells) won the competition for the construction of what was intended to be *"the most beautiful and distinctive office building in the world"*²³⁸ - the Tribune

²³³ Carol WILLIS, Future City: 20/21. Popular Culture. In: The Skyscraper Museum, <http://www.skyscraper.org/EXHIBITIONS/FUTURE_CITY/NEW_YORK_MODERN/walkthrough_popculture.php> (16.01.14).

²³⁴ Donald L. MILLER, Supreme City: How Jazz Age Manhattan Gave Birth to Modern America (New York 2014) 435.

²³⁵ Harvey Wiley Corbett, Drawings. In: Chaz Hutton Tumblr, <<http://chazhuttonsfm.tumblr.com/image/725099115>> (17.01.15).

²³⁶ MILLER, Supreme City, 435.

²³⁷ Ibid, 435.

²³⁸ Blair KAMIN, Building is Far More Than a Headquarters (26.06.2008). In: Chicago Tribune, <http://articles.chicagotribune.com/2008-06-26/business/0806250941_1_landmark-status-tribune-tower-skyscraper> (17.01.15).

Tower in Chicago. He, who had earned the nickname *"the brilliant bad boy"*²³⁹ of architecture - probably deriving from his persistent refusal to commit himself to only one style, his partiality for the experimental and his very persuasive, winning personality - was the third of New York's famous utopians.

His ideas, first published in 1924 as an article entitled "The City of Needles" in the New York Times, differ significantly from those promoted by Ferriss and Corbett, despite some congruities. Like Ferriss, he imagined a city with two different types of buildings according to height - a low one *"that responds to the street-level public realm"*²⁴⁰ and another one, rising to almost infinite heights - the higher, the better. The towers he imagined would be - unlike Ferriss' mountainous, massive structures - slender, freestanding, light buildings surrounded by open space and distributed in large, but regular intervals (FIG. 44).

With regards to the traffic situation, Hood wasn't convinced of the back then much propagated solution of using multiple levels. Instead, he proposed a widening of the streets, depending on the heights of the buildings situated in the streets: the higher a building, the more street space would be required. Thereby, he wished to achieve a de-densification on the streets, thus allowing a free flow of traffic.²⁴¹ Whilst Hood put much effort in elaborating on a way to design a very orderly, almost rigid layout and to reduce the building density in the streets, he enthusiastically endorsed the principle of human congestion - it was, as he said

*"the best thing we have in New York" [...] "New York has the right idea - a busy bee hive with bees swarming all over; just a fine big ant hill with ants everywhere, that's my idea of what a city should be."*²⁴²



FIG. 44

This bee hive or ant hill would best be situated in a skyscraper, a structure Hood admired, among others for its opportunities of keeping space compact, of doing business and encountering people in very efficient ways. His City of Needles is, as Rem Koolhaas accurately stated, above all a city of *"interior pleasures"*²⁴³.

What, despite their varieties, virtually all American urban utopian ideas between the last ten years of the 19th and (roughly) the first two decades of the 20th century have in common is that they are all oriented towards the sky. The very technical possibility of constructing buildings to almost infinite heights triggered deep-seated fantasies that were not reserved for an intellectual or professional elite only, but that equally captured the general public.

The visionary future boomed and found its reflection in the everyday media. New York, more than any other city, represented utopia in the making - and thereby brought forth a unique style that became part not just of the city's, but also of the American identity.

²³⁹ Orest J. HUMENNYJ: Hoodwinks. The Architecture of Raymond M. Hood. In: The Fifth Column, <<http://fifthcolumn.mcgill.ca/article/viewFile/54/47>> (17.01.15) 26 - 31, here: 27.

²⁴⁰ Roger TRANCIK, Finding Lost Space: Theories of Urban Design (Hoboken 1986) 39.

²⁴¹ Ibid, 39.

²⁴² MILLER, Supreme City, 441.

²⁴³ Ibid, 441.

IV.IV. MODERNITY ON THE OTHER SIDE OF THE ATLANTIC

In the early 20th century, trends in urban utopianism in Europe and the United States developed relatively independently of one another. Exchange happened only at a small scale until the late 1920s when Le Corbusier's "Vers une architecture" was translated into English.²⁴⁴

Generally, most utopian scenarios were born out of the minds of individuals, visionaries who in some cases managed to convince others of their models, in others they didn't. In any case, however, their ideas emerged under the influence of the respective conditions they encountered. In the case of American modernism, the development of the skyscraper constituted a one of a kind visual stimulus which, in its immediacy, entirely lacked in Europe, where there existed practically no skyscraper culture until after World War II.

This, however, didn't hinder architects on this side of the Atlantic to contemplate over what was happening on the other. On both, obviously, there were sceptics as well as enthusiasts. After returning from a trip to New York in 1922, for instance, Raymond Unwin warned his European contemporaries of the destruction of "*old urban patterns*"²⁴⁵ through the spread of the skyscraper. He specifically stressed the point of increased population and traffic pressure on relatively small spaces resulting from the immense densification through skyscrapers on the one hand and from the availability of cheap cars on the other. His gloomy forecast wasn't taken too seriously as scenarios like those he described were hard to imagine in Europe.

*"There would never be skyscrapers in Europe [...], and such traffic conditions as Unwin observed in New York would never be realized. Manhattanization was still very remote and improbable."*²⁴⁶

Another architect, renowned for his passion for radical solutions and high buildings, had a very specific, contradictory relationship with New York and its skyscrapers:

*"Le Corbusier and New York were opposites. He objected to the irrationality of a 20th century city built on streets laid out in the 19th, and was frightened by 'the mad speculation of private enterprise'. New Yorkers in turn had no use for a master plan: Nobody had the time or power to bulldoze and rebuild Manhattan."*²⁴⁷

At his first visit in 1935 in New York, which he had always envisaged as "utterly devoid of harmony"²⁴⁸, he made himself popular with statements such as "*Your skyscrapers are too small.*"²⁴⁹, addressed to a journalist of the Herald Tribune or "*American skyscrapers have not attained the rank of architecture; rather, they are merely small objects such as statuettes or knick-knacks, magnified to titanic proportions.*"²⁵⁰, as he stated in a New York Times commentary.

Despite his nagging, though, he appreciated New York for the night views of its skyline, its "*fairy splendour*"²⁵¹ and for being a "*beautiful and worthy catastrophe*"²⁵².

²⁴⁴ WILLIS, Zoning and "Zeitgeist", 59.

²⁴⁵ KOSTOF, The Skyscraper City, 42.

²⁴⁶ Joseph RYKWERT, The Seduction of Place. The History and Future of the City (Oxford/New York 2000) 209.

²⁴⁷ Jonathon KEATS, Le Corbusier vs. Manhattan: MoMa Exhibit Shows Why The Original Starchitect Never Quite Conquered New York (12.08.2013). In: Forbes, <<http://www.forbes.com/sites/jonathonkeats/2013/08/12/le-corbusier-vs-manhattan-moma-exhibit-shows-why-the-original-starchitect-never-quite-conquered-new-york/>> (18.01.14).

²⁴⁸ Mardges BACON, Le Corbusier in America: Travels in the Land of the Timid (Cambridge 2003) 115.

²⁴⁹ Alain DE BOTTON, The Architecture of Happiness (New York 2008) 242.

²⁵⁰ Fred A. BERNSTEIN: Le Corbusier and New York City. A Love-Hate Relationship (12.06.2013). In: Architectural Record, <http://archrecord.construction.com/news/2013/06/130612-LeCorbusier-and-New-York-City-A-Love-Hate-Relationship.asp?WT.mc_id=rss_archrecord> (22.01.15).

²⁵¹ PINDER, Visions of the City, 91.

Le Corbusier's own versions of a skyscraper city, developed in the 1920s and 1930s, will be closer examined in the following. Before that, however, we will turn our attention to a man who, in spite of his tremendous achievements for modernist architecture, had never received a comparable extent of attention: Antonio Sant'Elia.

IV.V. LA CITTÀ NUOVA

"Iconoclastic, enigmatic, and dead in his twenties, with a mythic reputation based on a handful of pieces." - It is not for nothing that Antonio Sant'Elia posthumously was nicknamed *"the James Dean of modern architecture."*²⁵³ Having been the first person in Europe to draft a vertical visionary city, the "Città Nuova", in a series of drawings created from 1913 to 1914, he didn't live to see the considerable impact his works had on the next generations of architects. His short career ended abruptly with his death as a volunteer at the front in 1916.

Before developing his very distinct style, he was appreciably influenced by the works of the Secession, of Art Nouveau and Symbolism. This, however, *"is interesting only as a prelude to the groundbreaking and revolutionary drawings of 1914"*²⁵⁴, says Da Costa Meyer, who has probably published Sant'Elia's most inclusive artistic biography. In the early 1910s, immediately prior to the creation of his masterpiece, Sant'Elia focused his attention on the American developments in skyscraper construction, which he studied on the basis of photographs and illustrations. As can be guessed from his following work on the "Città Nuova", this apparently left a lasting impression. With these drawings, he left behind an astounding legacy that prepared the grounds for modern architecture in Europe.

Sant'Elia, who nowadays is widely acknowledged as *the* exponent of Italian Futurism, became one rather coincidentally. Since 1913, he was part of a newly founded group of radical architects, the "Nuove Tendenze", that held their first exhibition in 1914, displaying amongst others Sant'Elia's drawings on a modern city, accompanied by the "Messaggio", a text declaring the principles of the new architecture Sant'Elia and his artist colleagues wished to encourage. Filippo Tommaso Marinetti, the founder of Italian Futurism, was thrilled by the drawings and the text. The Nuove Tendenze and the Futurists had the same artistic roots, but whilst the latter praised danger, war, speed and destruction, chanting slogans like *"Get a hold of picks, axes, hammers and demolish, demolish without pity the venerated cities."*²⁵⁵, the former were *"quieter and more conciliatory"* and *"offered a home for those unwilling or uninvited to join the antics of Marinetti and his supporters"*.²⁵⁶

However, Marinetti's mind was made up about the recruitment of Sant'Elia: he sent Carlo Carrà, one of his futurist comrades and a former fellow student of Sant'Elia, to the promising talent *"to do everything to convince him to join our group"*²⁵⁷, which Sant'Elia - however only after a certain initial reluctance - did.

Marinetti edited Sant'Elia's "Messaggio", which in the further course went down in history as the "Manifesto of Futurist Architecture".

²⁵² BACON, Le Corbusier in America, 156.

²⁵³ Marla STONE, Review: The Work of Antonio Sant'Elia by Esther Da Costa Meyer: Antonio Sant'Elia. In: Journal of the Society of Architectural Historians, Vol. 56, No. 3 (September 1997) 376 - 378, here: 376.

²⁵⁴ Ibid, 377f.

²⁵⁵ Futurist Manifesto, first published in Le Figaro in 1909, cited from: MANSFIELD, Cosmopolis. Yesterday's Cities of the Future, 82.

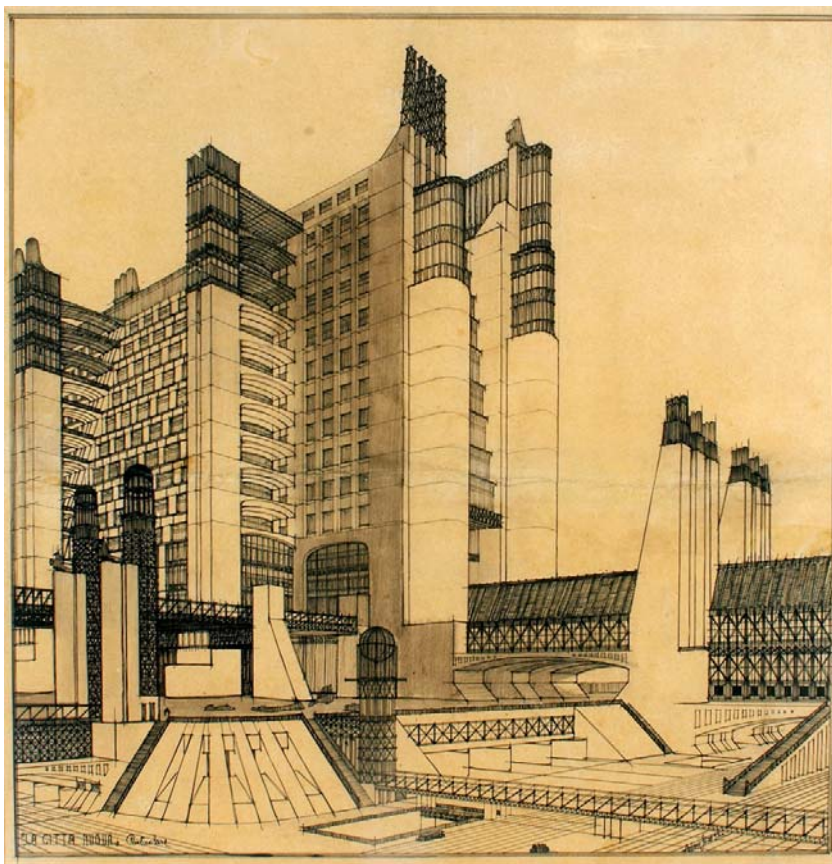
²⁵⁶ Günter BERGHAUS (ed.), International Futurism in Arts and Literature (Berlin/New York 2000) 356.

²⁵⁷ Ibid, 356.

Concerning the authorship, this part of the story is still a grey area - some sources state that the *Messaggio* wasn't written by Sant'Elia at all, but by Ugo Nebbia, the journalist who edited the exhibition catalogue²⁵⁸, others say Nebbia just expressed Sant'Elia's thoughts in written form²⁵⁹. Similar obscurities exist with regards to the extent of revisions of the "Manifesto of Futurist Architecture", made by Marinetti and others. In any case, there is wide consensus of the assertion that Marinetti "insisted on inserting the term 'Futurism' wherever possible"²⁶⁰ and that he replaced each "new" and "modern" in the original text with "futurist".

Whoever was involved in its genesis, the text voices its opposition against (a) the traditional, the static, the monumental and against what "in idiotic flowering of stupidity and impotence [...] took the name of neoclassicism". "We no longer feel ourselves to be the men of the cathedrals, the palaces and the podiums. We are the men of the great hotels, the railway stations, the immense streets, colossal ports, covered markets, luminous arcades, straight roads and beneficial demolitions."; (b) the traditional and ornamental, the useless, the "pretty and pleasing"; and (c) antiquated and expensive materials.

On the other hand, the text argues in favour of (a) crudeness, the omittance of colours or the use of "violently colored materials"; (b) the use of modern materials such as reinforced concrete and glass; (c) the exploitation of roofs and underground spaces; (d) futurist cities and buildings that satisfy the "daily increasing needs imposed by the speed of communications, by the



concentration of population, by hygiene, and by a hundred other phenomena of modern life" - cities "which should be the immediate and faithful projection of ourselves" and that "cannot be subjected to any law of historical continuity", inspired by "the elements of the utterly new mechanical world", cities that are dynamic like "an immense and tumultuous shipyard" and houses that are like machines. The manifest signed by Antonio Sant'Elia concludes with a statement, a call for "impermanence and transience": "Every generation must build its own city."²⁶¹

FIG. 45

²⁵⁸ LAMPUGNANI, Die Stadt im 20. Jahrhundert, 195.

²⁵⁹ BANHAM, Theory and Design in the First Machine Age, 128.

²⁶⁰ Lebbeus WOODS, Sant Elia's Words (02.11.2009). In: Lebbeus Woods Blog, <<https://lebbeuswoods.wordpress.com/2009/11/02/santelias-words/>> (15.01.14).

²⁶¹ Antonio SANT'ELIA, Futurist Manifesto of Architecture. In: Ibid (15.01.14).

With the Città Nuova, he depicted a city he deemed worthy of the modern age. His drawings show high rise buildings with cascading facades, exterior elevators shafts (FIG. 45), steel and concrete bridges, covered passageways, galleries, overpasses, conveyor belts, an electric power plant (FIG. 46) and a station for railways and planes (FIG. 47), sometimes laid out on multiple levels serving as networks of perpetual transportation. They reflect his focus of his work, his passion for technology, industry and movement.

*"His obsession with circulation and the new urban possibilities made available by cars, trains and airplanes subordinated the inhabitants of the Città Nuova to its architecture."*²⁶²

His vision didn't include contemplations on social or political structures or the role of the city's inhabitants in general - he didn't give evidence whether Città Nuova would be a liveable place for working, residing and spending leisure time and if it would promote social harmony.

Its dwellers, living in modern houses that, as Sant'Elia stated (long before Le Corbusier) are *"like a huge machine"*²⁶³, make their appearances as extras keeping the perpetuum mobile in motion.



FIG. 46

²⁶² STONE, Review: The Work of Antonio Sant'Elia by Esther Da Costa Meyer, 377.

²⁶³ Peter GAY, Modernism: The Lure of Heresy. From Baudelaire to Beckett and Beyond (New York/London 2008) 291.

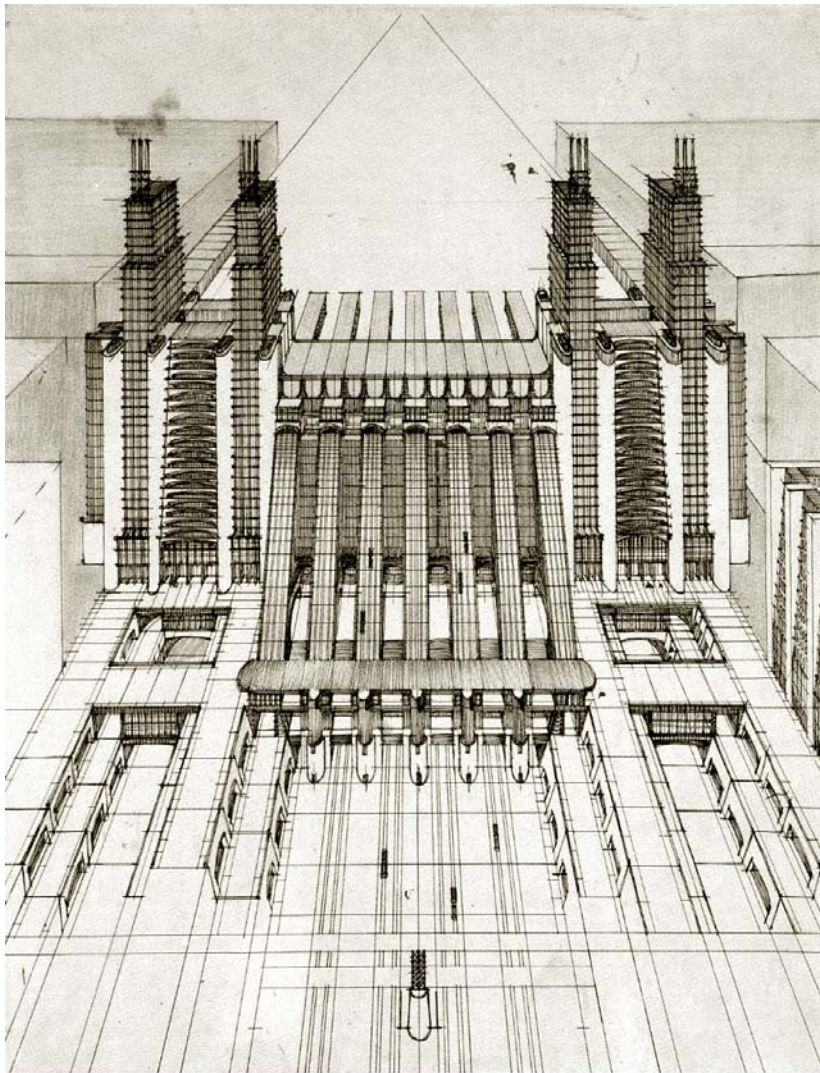


FIG. 47

After Sant'Elia's death in 1916, Marinetti heavily advertised him, not just as the pioneer of futurist architecture, but also as a "foremost fascist" who "died gloriously on the Karst"²⁶⁴.

Given the fact that Sant'Elia had been a member of the Socialist Party in his hometown, Como, this procedure appears rather peculiar. It seems to be no exaggeration to claim that his widely accepted public image is an artificial construct moulded by Marinetti. This concerns both the asserted affinity toward Fascist ideologies and the intensity of Sant'Elia's involvement with Futurism which indeed seems to be "overstated, reductionist and the product of a posthumous publicity campaign".²⁶⁵

The myth Marinetti created of course served a greater Futurist cause, namely "as a shared history for all the new members of the movement."²⁶⁶

Despite his impudence, Marinetti has to be given credit for his persistence in promoting his goals and thus Sant'Elia's memory: he used his relations to other artist groups such as *de Stijl* and *Der Sturm* to make the name known far beyond the borders of Italy.²⁶⁷

²⁶⁴ Ashley GARDINI, *The Legacy of Antonio Sant'Elia: An Analysis of Sant'Elia's Posthumous Role in the Development of Italian Futurism during the Fascist Era*. Master's Theses, San Jose State University (2014) 24.

²⁶⁵ STONE, *Review: The Work of Antonio Sant'Elia by Esther Da Costa Meyer*, 377.

²⁶⁶ GARDINI, *The Legacy of Antonio Sant'Elia*, 59.

²⁶⁷ BANHAM, *Theory and Design in the First Machine Age*, 134.

IV.VI. LE CORBUSIER

*"The work of man is to put things in order."*²⁶⁸

Le Corbusier, whose real name was Charles-Édouard Jeanneret, was a contradictory character, always eager to combine opposites. Born 1887 into a traditional Swiss artisan community, the watchmakers of La Chaux-de-Fonds, he grew up and was socialised with long-established artistic values and practices of the past. Due to his apparently existing aptitude, he was trained as a watchcase engraver at the age of 13 and attended the School of Applied Arts where he met Charles L'Éplattenier, his drawing teacher and henceforth his mentor - as Le Corbusier much later termed it, *"he was more of a master [...] than anyone"*.²⁶⁹ L'Éplattenier soon noticed Jeanneret's promising talent and had the most sophisticated of the arts in mind for him: *"You shall become an architect!"*²⁷⁰, he declared - and insisted that his most gifted disciple - who initially wanted to become a painter - turned his attention to the studies of architecture.

Despite Jeanneret's rather traditional background and despite the fact that the forces of industrialisation posed an existential threat to the old crafts his formation based on, he was absolutely fascinated by the promises and potentials the Industrial Age implied.

To him, *"the Industrial Revolution was a personal experience"*²⁷¹ through which he reached the conclusion that, whatever art he would devote himself to, it would have to be an "art of the future" - in accordance with the Machine Age - in order to be of relevance. Those conflicting influences of his early years - traditions and handicrafts versus the atmosphere of departure coming along with mechanical production - would have a significant influence on Le Corbusier's future artistic and intellectual activities.

In 1906, he went on a two-year journey that led him to Italy, Budapest, Vienna and finally, in 1908, to Paris - a journey in the course of which his approach towards big cities was shaped. It is, unsurprisingly, characterised by contrasts. *"The great city"*, he stated,

*"with its throbbing and its tumult, crushes the weak and raises the strong. [...] From the great cities, the living cells of the earth, come peace or war, abundance or famine, glory, the triumph of the mind and beauty itself."*²⁷²

To Jeanneret it was obvious that the economic, artistic and intellectual power centres of the world could only be located in the great cities and that freedom, as a consequence of exchange and opportunities, could best be achieved there. He was, however, also well aware of the fact that this did not come for free.

*"His view of the metropolis always retained something of the poor student's perspective, that combination of constant intellectual excitement and physical discomfort. He did not forget the attic rooms, the 'place des pauvres' at the concerts, the loneliness. 'For youth', he wrote at this time, 'the great cities are deserts where you die of hunger in front of thousands of closed doors: inside you can hear the clicking of forks.'"*²⁷³

He was lucky: in Paris, he made the acquaintance of Auguste Perret, an engineer and a pioneer in the field of reinforced concrete. Jeanneret became a draftsman at his office, "Perret Frères", and quickly absorbed an abundance of knowledge on the technological part

²⁶⁸ MANSFIELD, *Cosmopolis. Yesterday's Cities of the Future*, 59.

²⁶⁹ Paul TURNER, *The Beginning of Le Corbusier's Education, 1902 - 1907*. In: *The Art Bulletin*, Vol. 53, No. 2 (June 1971) 214 - 224, here: 214.

²⁷⁰ FISHMAN, *Urban Utopias in the Twentieth Century*, 167.

²⁷¹ *Ibid*, 165.

²⁷² LE CORBUSIER, *The City of Tomorrow and its Planning* (Cambridge 1971) 89f.

²⁷³ FISHMAN, *Urban Utopias in the Twentieth Century*, 169.

of architecture - the interplay between the act of building, scientific principles of materials and mathematics - through the guidance of his second mentor. This approach was new to him, who had been trained as an artist rather than a technician, but he adopted it with enthusiasm and zeal - *"technology as the hope of architecture and society"*²⁷⁴ was the credo. A conviction that Jeanneret took back home when he returned to Switzerland after 15 months, in 1909.

The contradictory influences of L'Éplattenier, who declared himself in favour of the promotion of the ancestral arts, and Perret, who wished to use innovation and technological progress for the benefit of society, aroused a vigorous inner personal battle in him - a battle he appreciated as he was of the opinion (in all modesty) that this *"solitary struggle"* would bring forth the architecture and the *"art of the future"*²⁷⁵, an art worthy of the Machine Age.

Jeanneret's sympathy towards machines that had grown stronger in the course of his travelling years was only topped by another affection, almost a passion: order. Much of his works reflect his strong desire to combine the two. He was convinced that the machine could serve to put society in order, to create harmony and beauty (three words that in his terminology can be treated as synonyms).

Against this backdrop, he dedicated the following years to elaborating on his conception of the "architecture of the future" when he returned to La Chaux-de-Fonds in 1909. He considered that the Machine Age would require collective housing, therefore he designed a model of a dwelling structure consisting of standardised components, a structure that could be uniformly used, manufactured in mass-production and easily and quickly installed - the "Dom-Ino" (FIG. 48) (derived from the words "domus" and "innovation"²⁷⁶) was a skeleton, a framework that would leave scope for action regarding the further design and layout process. Even though Jeanneret's famous saying that *"a house is a machine for living in"*²⁷⁷ (which, as mentioned above, initially wasn't his own) does not stem from this phase of creative practice, the Dom-Ino is an anticipation of this

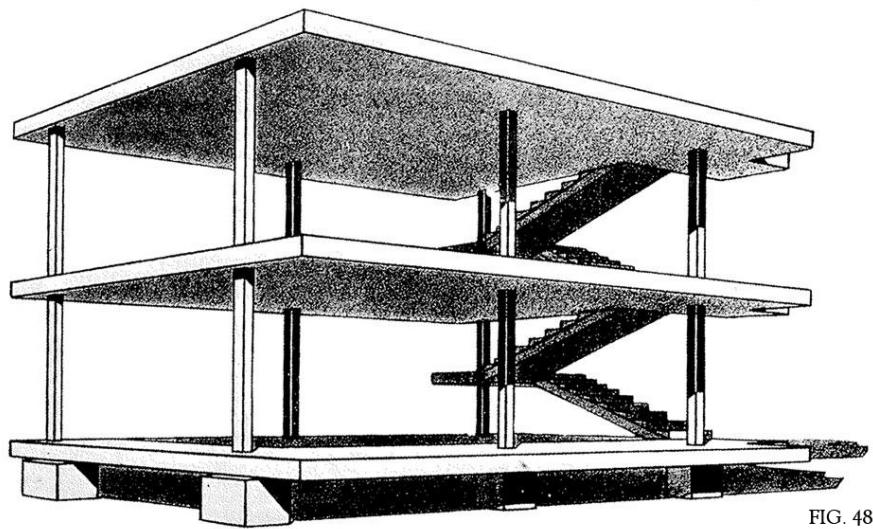


FIG. 48

²⁷⁴ Charles BESSARD, Nophadon CHATPATTANAPHONG, Le Corbusier. The Hidden City. In: Chair for Architectural Theory, Leopold Franzens University Innsbruck, <http://www.architecturaltheory.eu/archive/download/116/ARCHITEKTURTHEORIE.EU%20Hidden_City%20100dpi.pdf> 119.

²⁷⁵ FISHMAN, Urban Utopias in the Twentieth Century, 172.

²⁷⁶ Justin MCGUIRK, The Perfect Architectural Symbol for an Era Obsessed with Customisation and Participation (20.03.2014). In: <<http://www.dezeen.com/2014/03/20/opinion-justin-mcguirk-le-corbusier-symbol-for-era-obsessed-with-customisation/>> (20.01.15).

²⁷⁷ LE CORBUSIER, Toward an Architecture (Los Angeles 2007) 151.

exact principle - a house had to function precisely and to be of daily use for the resident. In Jeanneret's eyes, this was not just a question of convenience, but of physical and mental wellbeing. *"We are to be pitied for living in unworthy houses, since they ruin our health and our morale."*²⁷⁸

In 1916, he left La Chaux-de-Fonds for Paris and for good. Until almost the end of his life he should stay in the city that to him

*"was not just his home but his obsession. It embodied for him the grandeur and the misery of the modern city. His ideal cities were expansions of his ideal of Paris: the center of arts and industry, the locus of decision-making, the home of the elites, the setting for the avant-garde, the place where imagination and power met."*²⁷⁹

All of Le Corbusier's reflections on urban planning thus always have to be seen against the background of Paris, its history and, as he named it, *"all the great leaders of France"*²⁸⁰, the *"grands seigneurs, men 'without remorse'"*²⁸¹ who had defined its shape - Haussmann, Napoleon, Louis XIV - of whose logical continuation Le Corbusier enjoyed regarding himself.

He soon got acquainted with Amédée Ozenfant, an avant-garde painter, with whom he founded a new art movement - Purism - followed by the publishing of the journal *"L'Esprit Nouveau"* in 1920, in which they wrote articles on arts, architecture and design. It was in this context that he first used his pseudonym - the transformation from the person Charles-Édouard Jeanneret to the artistic figure Le Corbusier was completed.

The magazine follows an earlier joint publication: in 1918, the two had already published a manifest - *"Après le Cubisme"* - in which they declared themselves vehemently in favour of Purism with its straight geometrical shapes, mathematical precision, simplicity and order whilst rejecting all sorts of the ornamental, the decorativeness and the picturesque.²⁸²

They furthermore highlighted the new possibilities of implementing order and structure arising from the devastations of World War I that had just come to an end. Le Corbusier once proclaimed his excitement as follows:

*"The war is finished, everything is organized, everything is clarified, everything is purified, the factories are risen, nothing is any longer what it had been before the War: the grand struggle has tested everyone, it has put an end to senile methods and imposed in their place those that the battle has proven the best."*²⁸³

Such statements do not exactly contribute to the image of a socially empathic person but they are important for understanding Le Corbusier's works on an ideal city that were soon to follow: he *did* concern himself avidly with the role that architecture and innovation could play for the benefit of an orderly society. His commitment, however, was rather directed to the issue of order and aesthetics than that of social welfare. When he elaborated on modern exploitation, for instance, he traced back the core of the problem not to the very fact of hard, exhausting labour under inhuman conditions, but to the aspect that day after day, the factory workers would be in the position to take use of these fantastic new machines - the embodiments of a new era -, but not for the fulfilment of their individual needs and artistic

²⁷⁸ LE CORBUSIER, *Towards a New Architecture* (Mineola/New York 2013) 14.

²⁷⁹ FISHMAN, *Urban Utopias in the Twentieth Century*, 182.

²⁸⁰ Simone BROTT, *In the Shadow of the Enlightenment. Le Corbusier, Le Faisceau and Georges Valois*. In: *Proceedings of the Society of Architectural Historians, Australia and New Zealand*: 30, Open, Vol. 2 (2013) 777 - 789, here: 786.

²⁸¹ HALL, *Cities of Tomorrow*, 222.

²⁸² Sarah ARCHINO, *Purism*. In: *Utopia/Dystopia*, <<http://utopiadystopiawwi.wordpress.com/purism/>> (27.01.15).

²⁸³ Mark C. TAYLOR, *Disfiguring: Art, Architecture and Religion* (Chicago 1992) 110.

endeavours. In this specific manifestation of exploitation, Le Corbusier saw *"the cause of the disorder that plagued industrial society, the perpetual crises, perhaps even revolutions."*²⁸⁴ And he detested revolutions - not so much because of the violence and upheaval coming along with them, but because they cause chaos and disorder.

The architect, in his eyes, was responsible for preserving social harmony by arranging the physical surroundings and by providing the techniques for the simplification of people's everyday lives and thus should be assigned a special position as part of the social elite. It is in this light that Le Corbusier's famous and often misinterpreted dictum can be understood: *"Architecture où révolution. On peut éviter la révolution."*²⁸⁵

In 1922, however, he prepared a draft of a city worthy of the modern times according to the principles of order, administration and hierarchy, in which the architect would undertake the task of urban planning for the benefit of all: the "Contemporary City for Three Million People" or "Ville Contemporaine".

IV.VI.I. A CONTEMPORARY CITY FOR THREE MILLION PEOPLE

The idea to the "Ville Contemporaine" arose in the context of the Salon d'Automne in 1922, when Le Corbusier was asked to prepare a contribution on urbanism. He took this invitation very seriously and attempted to present the type of city that would draw a straight line between past and present, a city that would be *"not an exercise in science fiction but 'the city for our times'."*²⁸⁶

In Le Corbusier's opinion, urbanism would have to be managed by specialists and technicians exclusively trained and educated for this - urban planning as an applied science should not be left to chance or (even worse) to laypeople whose individual actions shape a city completely unregulated - this way of "organic" city development should be a thing of the past.²⁸⁷ The chief aim of the exercise was therefore to define the structural and theoretical

ideal type of a Machine Age city and, in the further process, to extract the elementary methods and principles of urbanism.

For his design, he imagined a flat plain, suitable for the symmetrical grids, geometrical shapes, right angles and axes he had envisioned (FIG. 49).

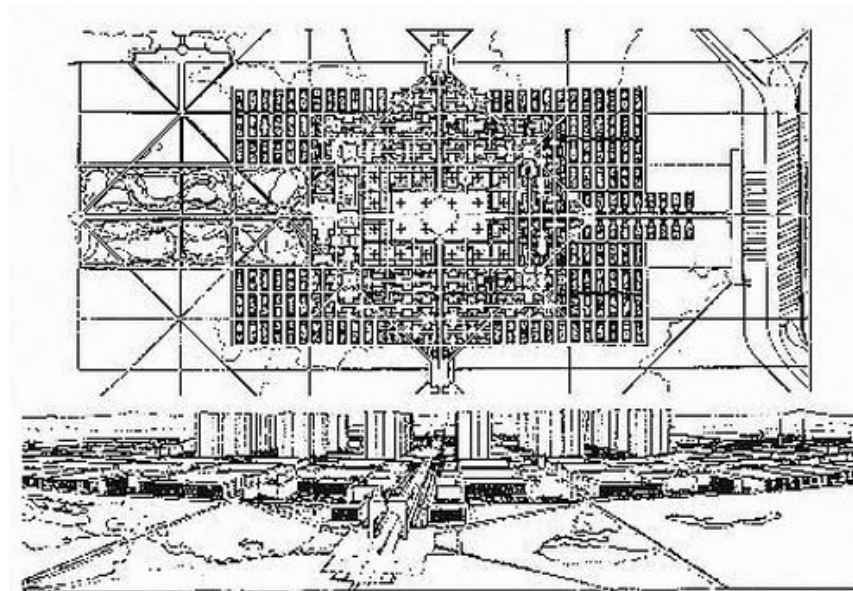


FIG. 49

²⁸⁴ FISHMAN, Urban Utopias in the Twentieth Century, 187.

²⁸⁵ "Architecture or revolution. Revolution can be avoided." [Le Corbusier, Toward an Architecture (Los Angeles 2007) 28.]

²⁸⁶ FISHMAN, Urban Utopias in the Twentieth Century, 189.

²⁸⁷ Ibid, 190.

Efficiency was the highest premise, which underlined the importance of transportation and speed - as a symbol of exchange and freedom, speed meant much to Le Corbusier: the advancement of a city depended on it. "A city made for speed is made for success."²⁸⁸

It is thus not surprising that the modes of transportation in the Ville Contemporaine were well thought out: two giant highways - one east-west, the other north-south - would pass through the city as the main axes, crossing at the city centre and thus marking its principal transportation hub with a railroad terminal, an intersection point for subways and a runway for planes - all on different vertical levels (FIG. 50).

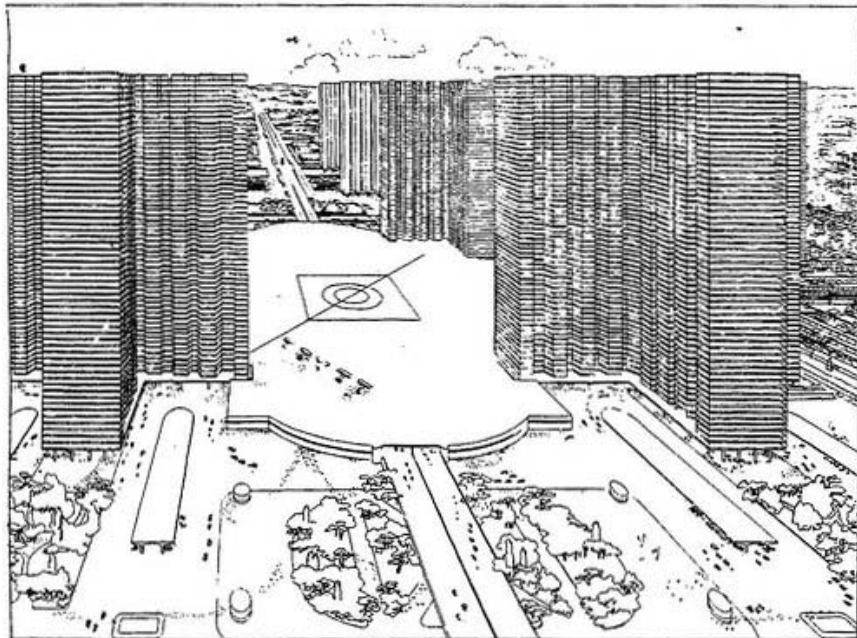


FIG. 50

Around this crossing point, the business and administration centre is located, consisting of twenty-four detached 60-storey skyscrapers made of glass and steel, surrounded by vast park-like green spaces (FIG. 51).

What is striking is that in spite of Le Corbusier's emphasis on greenery, cleanliness and air, but also on transportation and their means, his plans entirely lack any provisions for the storage of cars and planes or the environmental consequences resulting from their heavy use.²⁸⁹

He did, however, contemplate intensively over social and administrative structures and their manifestation in space. The business and administration centre, for instance, comprises bureaucratic institutions and the headquarters of big enterprises that occupy an important

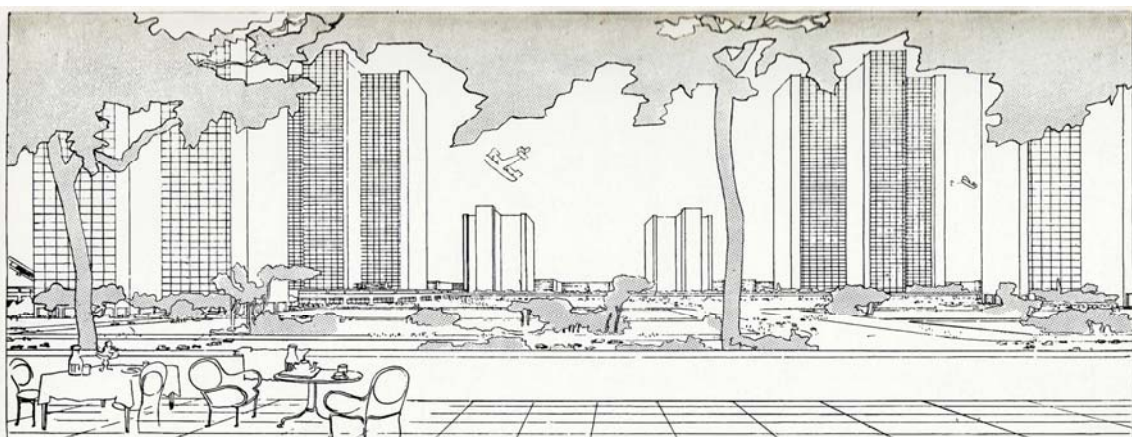


FIG. 51

²⁸⁸ LE CORBUSIER, *The City of Tomorrow and its Planning*, 179.

²⁸⁹ HALL, *Cities of Tomorrow*, 224.

position within Le Corbusier's fictional social hierarchy, being engines for growth, wealth and thereby securing social peace and order. He conceived of the business centre not just as the nucleus of the city, but saw it on a far larger scale.

*"From its offices come the commands that put the world in order. In fact, the skyscrapers are the brain of the City, the brain of the whole country. They embody the work of elaboration and command on which all activities depend. Everything is concentrated there: the tools that conquer time and space - telephone, telegraphs, radios; the banks, trading houses, the organs of decision for the factories: finance, technology, commerce."*²⁹⁰

Le Corbusier's belief in concentration and centralisation can be explained by his strong affinity towards hierarchical structures of society, including a clearly defined allocation of responsibilities. With respect to administration, his plan takes borrowings from the 19th century's early socialism of Henri de Saint-Simon who had already proposed a governing expert elite - the *industriels* - a term Le Corbusier adopted.²⁹¹ In his own proposal, the elite, composed of the most brilliant minds in arts, science, politics, and of course business and industry, was designated with the task of taking decisions for the benefit of the whole community. Regarding moral integrity, Le Corbusier had no reservations: *"The morality of industry has been transformed: big business is today a healthy and moral organism."*²⁹²

The hierarchical system was very much reflected in housing structures. The *industriels* would be living in luxurious two-storey house-like constructions within high-rise blocks in the immediate vicinity of the business and administration centre.

The architectural trick is that these units, like all within the Contemporary City, follow a "cellular principle"²⁹³: they can be mass-produced and simply fitted into the reinforced concrete frame of the building (FIG. 52).

Each accommodation comes with a terrace and a wide range of shared communal facilities such as a gymnasium, sport facilities and a garden on the roof, but also with shared services offered to the noble residents. Those include a 24/7 maid, a laundry and a shopping service as well as kitchen and waitressing staff: *"the servant problem will be solved for you, and that is no*

*slight contribution to your daily peace: you will have acquired freedom through order."*²⁹⁴

As for recreational activities for the *industriels*, Le Corbusier makes an exception to his rule of functional separation of space (between industry, housing and offices) and places their leisure facilities (such

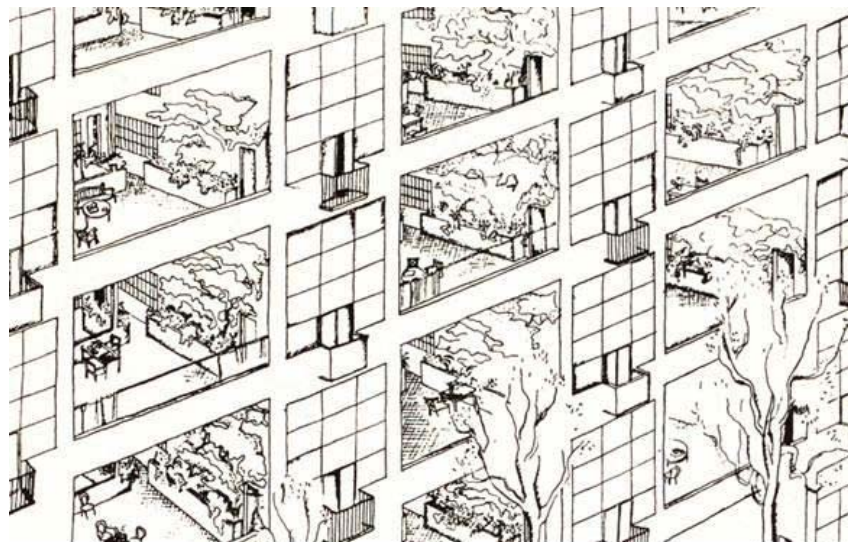


FIG. 52

²⁹⁰ LE CORBUSIER, *Urbanisme* (Paris 1925) 177.

²⁹¹ Paul MATTICK, *Art in its Time: Theories and Practices of Modern Aesthetics* (London 2003) 80.

²⁹² Barry BRUMMETT, *Rhetoric of Machine Aesthetics* (Westport 1999) 54.

²⁹³ Ross WOLFE, Le Corbusier's "Contemporary City" (1925). In: *The Charnel-House*, <<http://thecharnelhouse.org/2014/06/03/le-corbusiers-contemporary-city-1925/>> (25.01.15).

²⁹⁴ LE CORBUSIER, *The City of Tomorrow and its Planning*, 220.

as rooftop bars, shops, galleries, clubs, restaurants, theatres...) directly inside the business centre - the very centre of the city should likewise serve as the social and cultural heart for the elite - and just for them.

The regular workers, the proletarians, would not benefit from such special treatment, but they would still reside decently.

To Le Corbusier, it was important that the workers lived in satisfactory conditions since this was the most effective prevention against revolutionary thoughts - the maintenance of order through planning.

Therefore he drafted their surroundings in a way that offers opportunities for recreation and creativity as a reward for an eight hour shift at an office or a factory.

Located in satellite towns on the city's outskirts, they would be housing in garden apartments, again mass-produced units, that would not be standing alone but as part of an aesthetically and architecturally appealing group of houses - Le Corbusier's intention was to get away from the principle of the isolated cottage.²⁹⁵ The apartments would be designed in a way that allowed a reasonable use of space and room arrangement - space should not be wasted on rooms that don't require it (for instance: the restroom) and instead be used for what he called the *"family centre"*²⁹⁶, combining the kitchen, the living room and the dining room. Large window fronts would let in plenty of light.

Generally, Le Corbusier deems air, light and park-like green spaces as highly valued goods. *"Strictly speaking the city is an immense park."*²⁹⁷

The height of the buildings allows a very economic utilisation of space: in the business district, housing 1200 people per acre²⁹⁸, only 15 % of the land is occupied by buildings. Density and decongestion are the keys. Density is reached not by dispersion but by making use of high altitudes - in such a way the apparent contradiction can be resolved.

With his works, Le Corbusier had put a lot of effort into reconciling the contrarities - in the case of the Ville Contemporaine, this becomes evident with regards to the combination of vast green areas with a dense but efficiently organised traffic system. It furthermore specifically shows in the contrasts between hierarchy, the focus on administration and order from above, strictly defined leadership and limited choices on one side and comfort, progressive technologies in daily life and a certain liberty of individually organising one's own leisure time on the other side.

Endorsing both the *"holy act of individual creation"* and *"those great movements of the collectivity"*, Le Corbusier was eager to assign a place to each within his model of an ideal city. This dichotomy of which he referred to as the *"two powers each capable of attaining the sublime [...]"*, the powers between which *"life flows"*²⁹⁹, should accompany him on his further quest for harmony through order.

²⁹⁵ FISHMAN, Urban Utopias in the Twentieth Century, 199.

²⁹⁶ Ibid, 200.

²⁹⁷ LE CORBUSIER, The City of Tomorrow and its Planning, 172.

²⁹⁸ Susannah HAGEN, Taking Shape: A new Contract Between Architecture and Nature (Oxford 2001) 184.

²⁹⁹ LE CORBUSIER, Precisions sur un état présent de l'architecture et de l'urbanisme (Paris 1930) 217, cited in: FISHMAN, Urban Utopias in the Twentieth Century, 202.

IV.VI.II. PLAN VOISIN

Le Corbusier's first attempt of putting the theoretical framework behind the *Ville Contemporaine* - which in his eyes constituted the fundamental principles of modern urban planning - into praxis, was a proposal for a of fundamental restructuring of the centre of Paris in 1925: the (later to be called) "Plan Voisin".

He undertook a search for supporters from the areas of administration, politics and industry for his bold plan that involved the demolition of the historical centre north of the Seine. Instead - based on the model of the business and administration centre in the *Ville Contemporaine* - eighteen skyscrapers, housing international corporations, would be built and the old winding corridor streets - the '*capillaries*' typical for European cities - would be demolished to make room for a large, straight, broad highways - the '*arteries*'³⁰⁰ that were so urgently needed (FIG. 53).



FIG. 53

It comes as no surprise that Le Corbusier had a hard time finding followers for his idea. Wherever he presented his plan, he encountered incomprehension and disturbance (in the better case) or indignation (in the more likely case) - for instance in the city council of Paris, "*where he was called a barbarian*"³⁰¹. And this was not just about the impudent suggestion to raze a huge part of Paris' architectural and historical legacy to the ground, but also about the mere absurdity of Le Corbusier's conceptions - the preposterous scale, the empty spaces, the elimination of urban texture and of urban bustle.³⁰²

³⁰⁰ PINDER, *Visions of the City*, 63.

³⁰¹ HALL, *Cities of Tomorrow*, 222.

³⁰² FISHMAN, *Urban Utopias in the Twentieth Century*, 207.

Le Corbusier, however, seemed not to entirely understand the objections - he was of the opinion that a restructuring as he proposed it would most perfectly fit in line with Paris' urban planning history that, under the influence of Napoleon, Louis XIV and Baron Haussmann, had already undergone great changes.

As a planner - and one with a conspicuous affinity towards medical metaphors -, he assigned himself the role of a *"doctor of space"*, whose interventions would be *"healing the city"* and *"restoring its health"*. And it was Paris that was especially in need, that needed *"radical surgery"*³⁰³ because its *"heart and lungs are mortally sick"*³⁰⁴.

Le Corbusier failed at promoting his rescue mission at the administrative level, so he tried his luck with big French companies of the automotive industries (Michelin, Peugeot, Citroën,...), using the slogan *"The motor has killed the great city. The motor must save the great city."*³⁰⁵ His sales pitch was not an appeal to the moral obligations of a car company, but the argument that, in the case of the implementation of his urban planning idea, a lot of new cars would be needed. Gabriel Voisin, owner of the automobile and airplane company Voisin, was the first to show interest - he sponsored some publications and a pavilion at the „Exposition internationale des Arts Décoratifs et industriels modernes“, in which the plan was exhibited. However, the desired success was not forthcoming - by and by Le Corbusier figured that the recipients he targeted at were not the right counterparts. His faith in capitalism generally was shaken, not because he mistrusted the concept per se, but because in his opinion it was blocked by the greed and obstinacy of the capitalists (or, as malicious tongues claim, *"because [...] they had lost the capacity to fund him"*³⁰⁶).

As a consequence, he started putting out his feelers to alternative political movements. This way of proceeding leads to the assumption that Le Corbusier was not a very political person - throughout the literature, he is repeatedly referred to as *"politically naive"* and as an opportunist.³⁰⁷

So, on his quest for supporters, he turned to different groups that seemed to be suitable for advancing his cause. In 1928, he raised his voice against property in land and wrote an article on behalf of the Redressement français, a political group that advocated the strong position of an industrial elite, composed of representatives of large corporations. For this purpose, they demanded the support of a strong government - a postulation that Le Corbusier shared. He was particularly interested in the *"mobilisation of the soil"*, by which he meant that the government should intervene by buying land at a price according to its assessed value, hand it on to builders who then would realize projects such as the Plan Voisin.³⁰⁸

After the big stock market crash in the United States that definitely led him to the conclusion that capitalism in its current form rather encouraged chaos than order and that it is therefore unsuitable for the progressive Machine Age, he began showing interest in the French doctrine of syndicalism. In the 1930s, the movement was rather diffuse as it could neither be defined as politically left nor right and it didn't follow any theoretical political

³⁰³ PINDER, Visions of the City, 77.

³⁰⁴ Ibid, 63.

³⁰⁵ Antonio AMADO: The Automobile in Le Corbusier's Ideal Cities. In: MIT Press, <https://mitpress.mit.edu/sites/default/files/titles/content/9780262015363_sch_0001.pdf> (27.01.15) 4.

³⁰⁶ HALL, Cities of Tomorrow, 225.

³⁰⁷ Malcolm MILES, Urban Utopias: The Built and Social Architectures of Alternative Settlements (London/New York 2008) 69.

³⁰⁸ FISHMAN, Urban Utopias in the Twentieth Century, 218.

concept. It can rather be understood as a "pragmatic response to the needs of the moments rather than an expression of a pre-established social theory or plan".³⁰⁹

Roughly, however, three ideological principles can be identified as a lowest common denominator within the range of the different forms: 1.) opposition against the current capitalist order, 2.) the means of production and their administration shall be in the hands of the syndicats (trade unions, groups of workers) and 3.) the machineries of power shall be decentralised but without resorting to measures of violent class struggle - economic actions shall be taken instead of political ones, for instance: the general strike.³¹⁰

Le Corbusier's primary involvement with the movement consisted of editorial works of the journals "Plans" and "Prélude", two magazines voicing syndicalist ideas. He furthermore took the new ideological input as an incentive to busy himself with a new project: a revised version of his ideal city, expanded by his syndicalist experiences: the Radiant City.

IV.VI.III. RADIANT CITY

Le Corbusier's loss of confidence in capitalism and his shift towards alternative political ideas led him to the opinion that in the Radiant City - as opposed to the Ville Contemporaine - society must be based on egalitarian structures. His first paragraph in the publication on the Radiant City in 1935 referred to the "inalienable, unquestionable truth that is fundamental to all plans for social organization: individual liberty."³¹¹

His newly discovered faith in equality implied that segregated housing depending on class and rank should be abolished. Instead, housing and social life would take place in what Le Corbusier named "Unités", mass-produced (in contrast to his political inconstancy, he

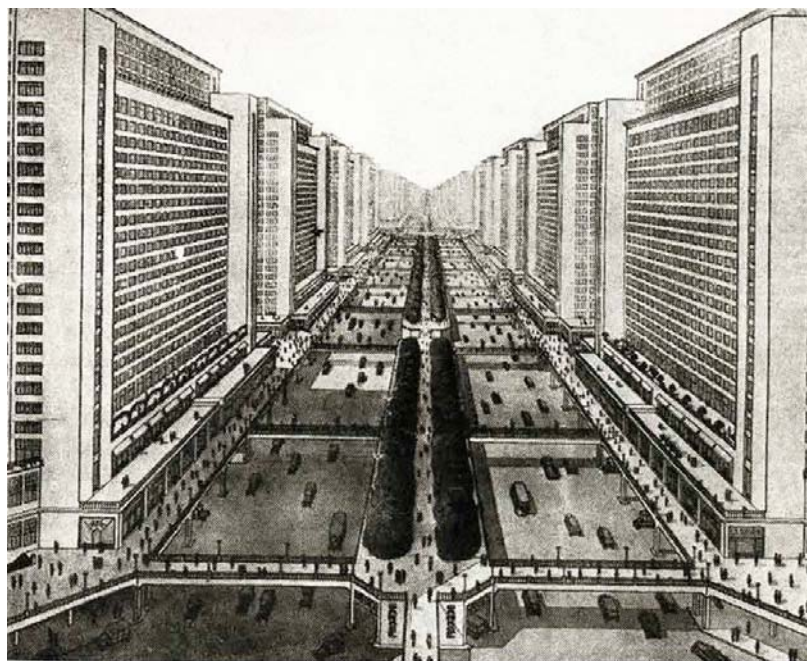


FIG. 54

remained faithful to his convictions in terms of technological and aesthetical questions) block-like high-rise apartment buildings (FIG. 54).

Housing space is distributed in consideration of the family size. Le Corbusier wanted to avoid both a lavish use of space and the orientation towards the subsistence minimum - he was of the opinion that space utilisation according to what he called a "human scale" must be feasible.³¹²

³⁰⁹ K. Michael HAYS (ed.), *Oppositions Reader: Selected Essays 1973-1984* (New York 1998) 490.

³¹⁰ *Ibid.*, 490.

³¹¹ LE CORBUSIER, *La Ville Radieuse* (Boulogne-Seine 1935) 9, cited in: FISHMAN, *Urban Utopias in the Twentieth Century*, 236.

³¹² FISHMAN, *Urban Utopias in the Twentieth Century*, 231.

Shared leisure and recreational offers, similar to those already scheduled within the Ville Contemporaine, were included in the plans for the Radiant City as well. Domestic services, such as household works and child care, would be "outsourced" from the family to society - every Unité would contain the necessary facilities. In this way, the concept of the family as an economic unit with a clear allocation of roles - the woman in the household, the man earning the living - is dissolved: in the Radiant City, both would be able to perform full time jobs.³¹³

Altogether, the major differences between the Le Corbusier's two urban planning models rather relate to the respective functional mechanisms than to questions of appearance: on the whole, structures of segregation that have prevailed in the Ville Contemporaine should be decisively downsized in the case of the Radiant City - at least those visible and noticeable.

Le Corbusier, however, could not entirely detach himself from the thought of order through hierarchies. In his opinion - inspired by his experiences with and his perception of syndicalism - administration should be organised based on a "*pyramid of natural hierarchies*" with the syndicates, who would at the same time be owners and operators of their factories, on the bottom. They for their parts would elect a representative - the most capable amongst themselves - who would be dispatched to the regional trade council which in turn designates its best minds in order to set up a national council. The council would not only be in charge of overlooking trade issues, but also of the implementation of the "national plan", a protocol regulating construction, planning and distribution. This plan would be devised by a neutral panel of experts in urbanism, not subjected to directives, political obligations or opposition: the top of the pyramid³¹⁴.

By mingling his conception of a communal society with his omnipresent strive for organisation and strong leadership, Le Corbusier had drafted what he perceived as *the* urban type necessary for the "Second Machine Age" that in his sight was clearly imminent, *an age of harmony, in which the machine's potential for liberation would be realized*³¹⁵ as opposed to the First Machine Age, characterised by man's subjection to the machine.

When, however, he soon realized that the economic crisis of the 1930s showed no signs of dissolution and that thus the age of harmony might not be waiting around the corner, he underwent another change of ideological direction and recommenced his search for an "*omnipotent patron*", stating that "*France needs a Father. It doesn't matter who. It could be one man, two men, any number.*"³¹⁶

Through his editorial work for the journals "Plans" and "Prélude", whose board of editors included members fostering tight relations with the Italian Fascists, Le Corbusier received an invitation by Mussolini for discussing matters of urban planning in 1934.

He, who initially hadn't displayed any affinity towards fascism,

"quickly changed his position when Mussolini invited him to Italy to explore the possibility of designing buildings for his regime. Shortly thereafter, Le Corbusier writes in Marinetti's pro-Fascist publication, Stile futurista, 'The present spectacle of Italy, the state of her spiritual powers, announces the imminent dawn of the modern spirit. Her shining purity and force illuminate the paths which had been obscured by the cowardly and the profiteers.'"³¹⁷

³¹³ FISHMAN, Urban Utopias in the Twentieth Century, 232.

³¹⁴ Ibid, 227f.

³¹⁵ Ibid, 235.

³¹⁶ James HOLSTON, The Modernist City: An Anthropological Critique of Brasilia (Chicago 1989), 42.

³¹⁷ TAYLOR, Disfiguring: Art, Architecture and Religion, 113.

Quite soon, however, Mussolini lost his interest in the architect, therefore Le Corbusier's enthusiasm for Italian Fascism should only remain a short digression. Nevertheless, it only marked the beginning of his active involvement with the political far right: when, in 1940, the Vichy regime entered into force, he quickly succeeded in ingratiating himself with the authorities of the Pétain government and received a position as city planner in a study commission on housing and planning. But once again, these contributions should not prove too fruitful for Le Corbusier and he ended up as a frustrated,

"deeply disillusioned man"³¹⁸, "but never deeply troubled. One more regime had proved his unworthiness by rejecting him and his plans. [...] Although he was neither racist nor collaborationist, he gave his best talents to a regime that was both, and turned against it only after it had failed to support him."³¹⁹

This episode of Le Corbusier's life may not be the adequate initial point of drawing implications on his works, but what has to be concluded is that he, whenever it came to the remote possibility of proving himself by realising his urban visions, he has clearly demonstrated an ideological randomness and volatility. Certainly, this casts a shadow on his ideas, plans and proposals that - whether one approves of them or not - were bold, unprecedented and provoking discussions. In any case, his influence on modern urban planning and architecture is, also due to his leadership in the course of the CIAM that should determine the basic rules of European city planning for centuries, enormous. More than that, his role in utopian urban planning deserves particular attention, not despite, but exactly due to its controversial and questionable nature - to conclude with Peter Hall: *"The evil that Le Corbusier did lives after him."*³²⁰

IV.VII. THE VERTICAL CITY

High-rise utopias are a very natural development of their time, almost a logical step. The numerous skyscrapers built in Chicago and especially in New York at the turn of the century, combined with technologic-romantic ideas of transport facilities, fired the imagination of architects and illustrators, thereby triggering a mechanism that developed its own dynamics and captivated the public. Projections of the urban future were widely published, both in text and graphic form.

Concerning the actual progression in urban development, the challenge was to sound out the realms of the possible and, in the next step, to extend the limits. This process of "utopia in the making" not only brought forth a new aesthetic delighting beholders still today, but it also contributed to forging an own urban and at the same time very American identity.

The role of size is of particular interest in this context because it can be seen at different levels: firstly, as the pure manifestation of height to an entirely new and surprising extent: within only a few years, the height of buildings increased absurdly - size changed the cityscapes and (for the first time in history) created skylines serving as distinct trademarks of cities. Starting from New York, size itself turned into a utopian category - the vertical city not only represented the transcending of technological boundaries, it also meant the realisation of something that until very recently was an absolute inconceivability, thus enabling an entirely new form of urban development and planning.

Secondly, with regards to the new way of using plots by reallocating usable floor space from width to height, thereby generating more space accommodating a much higher number of

³¹⁸ HALL, *Cities of Tomorrow*, 227.

³¹⁹ FISHMAN, *Urban Utopias in the Twentieth Century*, 251.

³²⁰ HALL, *Cities of Tomorrow*, 219.

people. The paradoxical interaction between densification and de-densification resulting from this can be perfectly observed in the business centre of any skyscraper city in the world: at 11:00 am, the streets are deserted, but just an hour later, crowds of people pour into the streets, the cafes and bars to grab lunch.

Thirdly, size is an issue in the sense of scale. The very possibility of building skyscrapers has not only moved the spectrum of technological feasibility, but it has also by and by extended the ratio of what is normal, maybe even comfortable, but at least acceptable for the inhabitants (though this certainly remains a factor that is subjected to individual perceptions and constant debate). In any case, the distribution of skyscrapers pushed the "human scale"³²¹ into the background.

For instance, Corbett and Hood, but more than anyone else Le Corbusier were accused of ignoring the human scale (and thus the human needs) with their plans of excessive verticality, with streets empty of people but crowded with cars. Similarly, Sant'Elia, who had transferred the dream of a vertical city to Europe, was criticised for subordinating humans to technology and transportation.

Those are obviously rather philosophical considerations on the matter of size, however, they have to be made in order to touch on the psychological mechanisms that provide the background for the fascination with the city in the sky and for the delight and excitement with which illustrations like those of Rummell, Pettit, Biedermann or Ferriss were received, but also for the rejection with which many people met the new developments.

³²¹ The term "*the human scale*" is borrowed from the architect Jan Gehl, who means "*a scale adapted to the senses and potential of human beings*". In: Jan GEHL, *Cities for People* (Washington/Covelo/London 2013) 55. It serves to clarify the relation of people to their surroundings and their localisation within a physical environment.

V. CONCLUDING REMARKS + OUTLOOK

Retrospectively, the factor *size* in its various meanings plays significant, but very different roles in the context of urban utopianism. Both its limitation and its expansion served as approaches towards solving the problem of the turn from the 19th to the 20th century: massive and rapid overcrowding. This indicates that the discomfort regarding spatial parameters was not so much an implication of size per se, but of the ratio between the space available and the extent of its occupation by humans and buildings - density.

As can be seen from the analysis of the various utopian models and ideas, the perceptions of the "proper" density and amount of space vary, based on individual characteristics, on the respective purpose (if, for instance, aesthetic or social requirements should be met) and, as it seems, also on geographical and cultural affiliation. This point would require further research efforts, however, it is quite striking that American utopian ideas present an optical contrast to their European counterparts.

There is a strong consensus that the preferable size is a relational category, depending on the amount of people in a city, its social structure and a range of other factors, for instance, the question which scale is the decisive benchmark of a conglomeration - the car (as for Wright) or the human feet (as for Howard).

Lewis Mumford, who put much thought into this question, aptly stated that it is *"important to express size always as a function of the social relationships to be served."*³²² As trivial as it may sound, but the analysis of both cities and utopias - as human constructs - requires to always pay attention to the fact that those humans who inhabit spaces and conceive utopian visions are part of the environments they wish to shape or change - and this is clearly reflected in their behaviour and their ideas.

In accordance with my initial assumption, it has indeed shown that most utopian projects have been the brainchilds of individuals, not of groups or organised initiatives. (However, this is not to say that the further evolution of an idea didn't involve groups of people.) Interestingly enough, it has mostly been eccentric - not to say quirky - characters, who occupied themselves with the question of how to improve urban life, how to make it more effective, more liveable or aesthetically pleasing.

It would be bold to deduce that Utopia belongs to the freaks. It would, moreover and especially in times like ours, be shortsighted to believe that utopian thinking is an outdated minority issue for the overambitious.

Quite on the contrary, the urban age that had been kicked off in the 19th century inevitably heads for a historic climax, again without precedence. Unlike in the late 19th and early 20th centuries, this doesn't solely concern highly industrialised areas in the United States and Europe, but exceedingly Africa and Asia, involving emerging challenges regarding population pressure, supply, housing, infrastructure, transportation and environmental issues. Those will necessitate new solutions and creative - maybe utopian - thinking.

*"The megacities are reality. And it looks a lot like the vision of science fiction films. Gigacities are soon to be. In the midst of this cold, bleak vision of the future, we have the human being. It is personal, warm, social."*³²³

This must be kept in mind. As yesterday so today: if visionary thinking is targeted at reaching people and at effecting actual changes, it has to find its way back from Cloude cuckooland to earth. However, the detour is essential.

³²² Richard T. LEGATES, Frederick STOUT (ed.), City Reader (Abingdon/New York 2011) 94.

³²³ Andreas DALSGAARD, The Human Scale (Documentary), Trailer. In: Youtube, <<https://www.youtube.com/watch?v=r3q9ifNfd1Y>> (01.02.15).

ANNEX

ABSTRACT

Cities – as opposed to rural areas – are spatial configurations that are characterised by concrete features such as higher densities, the presence of more extensive infrastructures and more heterogenous social structures. Moreover, however, they seem to be strongly overrepresented when it comes to exerting fascination and rejection, to triggering emotions and controversies and, as a consequence, to promoting utopian thinking and planning.

The late 19th and the early 20th centuries – a period of radical changes in technological, urban and social development – constitute the temporal scale for the present analysis on urban utopianism which was expressed in written and in pictorial form, but also found its way into everyday discourses (for instance, in terms of predictions of the future which were very popular at the turn of the century). After a short introduction on the historical framework conditions of a time that is very strongly marked by industrialisation and urbanisation, special attention is paid to the personalities involved – among others Ebenezer Howard, Frank Lloyd Wright, Tony Garnier, Le Corbusier and Antonio Sant’Elia –, their respective backgrounds and to the question how their experiences with cities shaped their approaches towards urban utopias. Those approaches include attempts of restoring smaller urban units, of dissolving cities, of increasing or reducing densities of buildings and inhabitants, of constructing cities closer to the sky and of designing cities as functional as machines. In almost all cases, the factor ‘size’ plays a role in one way or another, for instance with regards to the determination of the “proper” size of cities, the feasible and desirable height of buildings or the degree of density that is perceived as pleasant. This matter of size – as a recurring motif in utopian considerations – is illuminated in its various facets.

Verglichen mit ländlichen Gegenden sind Städte räumliche Konfigurationen, die durch konkrete Eigenschaften wie höhere Dichten, das Vorhandensein umfangreicherer Infrastrukturen und durch heterogenere Gesellschaftsstrukturen gekennzeichnet sind. Sie sind darüber hinaus allerdings auch stark überrepräsentiert, wenn es um die Auslösung von Faszination, Ablehnung, Emotionen und Kontroversen und – als Folge dessen – die Begünstigung utopischen Denkens und Planens geht. Das späte 19. und frühe 20. Jahrhunderts – eine Zeit der radikalen Umwälzungen in technologischer, städtischer und sozialer Hinsicht – bildet den Zeitrahmen für die vorliegende Analyse über urbanen Utopismus, der in schriftlicher und bildhafter Form zum Ausdruck kam, allerdings ebenso seinen Weg in den Alltagsdiskurs fand (etwa in der Form von Zukunftsvorhersagen, die um die Jahrhundertwende sehr populär waren). Nach einem kurzen Einblick in die historischen Rahmenbedingungen einer Zeit, die sehr stark von Industrialisierung und Urbanisierung geprägt war, wird den involvierten Persönlichkeiten – unter anderem Ebenezer Howard, Frank Lloyd Wright, Tony Garnier, Le Corbusier und Antonio Sant’Elia –, ihren Hintergründen und der Frage, wie ihre Erfahrungen mit Städten ihre Herangehensweise an urbane Utopien formten, besondere Aufmerksamkeit gewidmet.

Derartige Herangehensweisen umfassen Bestrebungen, kleinere städtische Einheiten wiederherzustellen, Städte aufzulösen, Dichten von Gebäuden und Bewohnern zu vergrößern oder zu verkleinern, Städte in den Himmel zu bauen oder maschinenartige zu entwerfen. In beinahe allen Fällen spielt der Faktor ‘size’ auf die eine oder andere Weise eine Rolle, etwa hinsichtlich der Determinierung der „richtigen“ Größe von Städten, der machbaren und wünschbaren Höhe von Gebäuden oder des Grades an Dichte, der als angenehm empfunden wird. Diese Frage des „Formats“ – als wiederkehrendes Motiv in utopischen Überlegungen – wird in der Bandbreite seiner Facetten betrachtet.

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FIG. 5: Boston Globe, Bird's Eye Views of the City

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FIG. 6: County Democrat, No One Will Walk

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FIG. 7: Gustave Doré, London, A Pilgrimage

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FIG. 8: Gustave Doré, London, Over the City by Railway

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FIG. 9: Charles Booth, Poverty Map

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FIG. 10: Robert Owen, New Harmony

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FIG. 13: The Three Magnets

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FIG. 14: The Social City

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FIG. 15: Welwyn Garden City

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FIG. 16: Broadacre City Model

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FIG. 17: Broadacre City Perspective View

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FIG. 18: Broadacre City Apprentices

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FIG. 19: Cité Industrielle, Assembly Hall

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FIG. 20: Cité Industrielle, Map

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FIG. 21: Cité Industrielle, Housing

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FIG. 22: Cité Industrielle, Clock Tower

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FIG. 23: Cité Industrielle, Bird's Eye View

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FIG. 25: Singer Building

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FIG. 27: Equitable Building

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FIG. 31: From New York to Boston in 40 Minutes

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FIG. 32: New York Tribune, Thoroughfare

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FIG. 33: Cosmopolitan Magazine, Man's Made Machine Millenium

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FIG. 34: Popular Science Monthly, May Live to See

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FIG. 35: Louis Biedermann, New York in 1999

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FIG. 36: Hugh Ferriss, The Four Stages

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FIG. 42: Anton Furst, Gotham City

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FIG. 43: Harvey Wiley Corbett, Traffic Separation

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FIG. 44: Raymond Hood, City of Towers

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FIG. 45: Antonio Sant'Elia, Building

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FIG. 46: Antonio Sant'Elia, Centrale Electrica

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FIG. 48: Le Corbusier, Dom-ino

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FIG. 49: Le Corbusier, Ville Contemporaine

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FIG. 51: Le Corbusier, Green Spaces

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FIG. 54: Le Corbusier, Ville Radieuse

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2009 - 2010 **Gmeiner-Verlag, Meßkirch:** diverse Lektoratstätigkeiten
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Final Cut Pro (Grundkenntnisse)

PUBLIKATIONEN

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