

# RESEARCH ARTICLE

**Open Access** 

# The future of the city from Science to Science Fiction and back (and beyond)

Arnaldo Cecchini

# **Abstract**

There are many ways of imagining the future of the city. We can start with the growth of urbanisation, which envisages that in 2050 more than two-thirds of the world population will live in cities. And from there calculate the increase in the ecological footprint that urban life will determine, the increase in consumption of the land, and the possible rise in inequality and segregation. Or reflect on the new role of the city in globalisation and in the nation-state crisis. Or refer to the new lifestyles or homologation produced by globalisation. Or look at the city from the standpoint of the country, of territory being abandoned, its desertification and the loss of biodiversity. Or try to classify the many types of city and the semi-urban settlements irradiated by the city.

#### **Background**

There are many ways of imagining the future of the city. We can start with the growth of urbanisation, which envisages that in 2050 more than two-thirds of the world population will live in cities (http://esa.un.org/unpd/wup/unup/index\_panel1.html).

And from there calculate the increase in the ecological footprint that urban life will determine (http://www.foot-printnetwork.org/en/index.php/GFN/page/world\_footprint/), the increase in consumption of the land (Van Camp et al. 2004), and the possible rise in inequality (Wilkinson and Pickett 2009) and segregation (Glasze et al. 2006).

Or reflect on the new role of the city in globalisation and in the nation-state crisis (Sassen 2001; Sassen 2006).

Or refer to the new lifestyles or homologation produced by globalisation (Giddens 1991).

Or look at the city from the standpoint of the country, of territory being abandoned, its desertification (Geist 2005) and the loss of biodiversity (Pimm et al. 1995).

Or try to classify the many types of city and the semiurban settlements irradiated by the city.

We will try to reconstruct a somewhat atypical gaze over the future of the city, the one of the utopias linked with science fiction that picked out some doubts that the "scientific" utopias had put aside. These scientific utopias suggested – and did so, as we will mention, by two different methods – an ideal city, a "right" way to think of the organisation of society and the city, whereas these – in a cutting manner – describe the "real" ideal cities (in the sense that was given to the term when "real socialism" was referred to).

As we know, science and utopia have been intertwined since the birth of the urban studies discipline: the first urbanists were often also social reformers and of many different types, but their approach was that of the engineers (hygiene engineers rather than social engineers) and not so much that of future-builders; if the lament was often radical, the solutions proposed were just as peacefully reformist.

A summary of that position might be: science to cure the city and the utopia to imagine a new one.

Obviously, in this article I do not wish to reproduce the well-nurtured debate on the concept of Utopia, a rather controversial one even if we limit it to the utopias involving the city (Bloch 2000; Bloch 1986; Choay 1965; Jameson 2005; Marcuse 1970; Mumford 1962; Nozick 1974; Reiner 1963; Tafuri 1976)

I would just like to choose from a few science fiction works the traces of the evolution of urban utopias and above all those that refer to the aversion of the majority of utopians, with the partial exception of a share of

Correspondence: cecchini@uniss.it

Department of Architecture, Design, Urban Planning (DADU) Palazzo del Pou Salit, Alghero - University of Sassari, Sassari, Italy



modernists, towards the "big city" (*la ville mal aimée* [the unloved city] (http://www-ohp.univ-paris1.fr/TOC\_-Colloque/TOC\_Def.htm)).

There is an ancient tradition of urbaphobia, going back almost as far as the birth of the city, the place of physical and moral perdition. Science fiction utopias almost always belong to the urbaphobia trend.

### Two utopias

Before continuing, it is worth distinguishing between two different types of utopia, for the utopia has always proceeded in a dual dimension:- one that designs how the future should be - we might imagine it as a sort of "project-based utopia", in which the final objective is everything, while the route to reach it is not indicated or is vague; in these utopias the detailed description of the rules governing the future is obsessive and prescriptive (even though often, in defence of the utopians, we must say that their true motivation is that the present is unacceptable, it is the criticism of an unsustainable present and unfair to inspire it);- the other that does not design an ideal city but only gives references that should inspire the action of change, a horizon also hazy but an everyday practice, too, and a route that counts at least as much as the objective; among the latter those are particularly attractive that we might call, with Ursula Le Guin, "ambiguous utopias" (Le Guin 1974).

These non-teleological utopias have been described well by Calvino; one is Marozia (I do not know how much of a coincidence it is, but there is a well-known Marozia et al. 1969).

"The inhabitants of Marozia consulted a prophetess on the future of their city, interpreting the phrase of the Oracle: "I see two cities: one of the rat, the other of the swallow" as an alternating succession in the course of time. Contemporary Marozia, with its harsh struggles for survival, represents capitalism and would therefore be the city of rats; the city of swallows, on the other hand, would be the Marozia of the future, a better society that is already beginning to be outlined and will bring freedom for everyone. Years later, the Inarrator goes back to the city: the revolution has taken place, a new era has begun, and many things have changed for the better...

"But the wings I have seen around are those of diffident umbrellas under which heavy eyelids hide are lowered over people's eyes: people who think they can fly do exist, but it's a lot if they get off the ground flapping bats' cloaks".

The swallows of utopia have turned into the bats of real socialism. A bitter vision, though not yet enough

to show a pure illusion in the promise of happiness of the utopia. The narrator, in effect, notes that to his great amazement sometimes, in the totalitarian order of bats, a "different city" unexpectedly appears.

(...)

The correct interpretation of the Oracle lies, therefore, in recognising that in actual fact the two cities exist simultaneously: the city of swallows will, of course, try without rest to escape from the prison of the city of rats, but will never manage to achieve becoming a pure city of freedom" (Kuon 2002a).

"In a situation in which imagination revolves only around the image of the catastrophe to be envisaged, avoided or managed, does it still have any sense, Calvino wonders, to give a positive value to the utopia? The affirmative reply to this rhetorical question presupposes clear detachment from the traditional relationship with the utopia. It is a case of no longer guiding intention over what appears realisable in it, but, rather, over what is contrary in it to "any compromise with the current situation or a probable tomorrow"

(...)

"I am fond of the autonomous logico-fantastic machine in that (and if) it serves for something irreplaceable: to widen the sphere of what we can represent to ourselves, introduce into the limited nature of our choices the "absolute rejection" of a world imagined in all its details according to different values and relationships. Briefly, the utopia as a city that could not be founded by us but founds itself in us, building itself bit by bit in our capacity to conceive it and imagine it to the heart, a city that claims to inhabit us, not to be inhabited, and therefore to make us the possible inhabitants of a third city, different from the utopia and different from all cities in one way or another habitable today, born from the clash between new internal and external conditioning." (Kuon 2002b).

#### Imaginary utopias descending on reality

But let us return to the real world; there was a moment in history when science and utopia seemed to converge: it happened in the country of the Soviets, in two distinct phases.

In effect, the true utopian phase was not that of the frenetic Twenties (Kopp 1970), in which science and utopia merged in the great innovation of Constructivism and the rational planning of the new cities (Piretto 2010), but was built by monumentalism and the construction of

virtual reality in the Stalin period, beginning with the Thirties.

(...) it would seem obvious to identify the "socialist space" of the kommunalka with the concept of non-place developed by Marc Augé: "devoid of relations, roots, history. Always repeated equally in any situation. Aseptic to the point of making impossible, for those frequenting it, any kind of identification or deep or personal relationship with it. But history and cultural testimonies have taken the reading of a non-place par excellence to pieces a little at a time, in favour of a very special, anomalous "place", with a very high degree of identitary specificity, which the actual roots of the culture of that people and that country mould and transform, still following a Lotman model, from "ne dom" (anti-house) into Dom (House to all effects).

*(...)* 

The Soviet citizens, Muscovites in particular, who declared that they did not deplore the discomfort of the personal living situation, were not a negligible number, given the grand investment in official, representative architecture, with respect to which they felt themselves co-owners and of which they were sincerely proud, in particular the Moscow underground, a true "heterotopia of compensation more than illusion".

*(...)* 

The underground railway, with its sumptuous stations - a sort of Zar's palace (modelled on patriarchal imagination) finally at the disposal of: people technically and aesthetically superior to any equivalent in the world, on the plane of discourse it also supplied a model of ideal city, in which the change of air was frequent and guaranteed, the preciosity of the materials amazing, the lighting brighter than natural light and air-conditioning excellent (...) As Boris Groys points out, the Moscow underground space was not a simple public transport means but the design for a real Communist city of the future. Its monumental-artistic architecture can only be explained by the function of linking up the kingdom of heaven with the empire beneath the ground. The massive investment in symbolic and narrative iconography was not negligible on a territory conceived for and dedicated to fast, frenetic transit, not contemplation or observation. (...) What remained fundamental for social-politic management of the "Muscovite underground" heterotopia was to have complete control over the entrances and exits, so

as to be able to close or open the way towards utopia at any moment: barring accesses and even flooding or burying the galleries.

*(...)* 

The trait common to all Soviet architecture of the second half of the Thirties, which more than others marked the detachment from the Spartan sobriety of Constructivism, was triumphalism. The new urban groups and single buildings emanated triumphalism. The problem of their habitability moved into second place.

Vladimir Papernyj showed that the primary function of the civil constructions in the Thirties was to provide yet another pedestal for yet another statue, before a living space for human beings.

An exception to this rule was the epic of a complex conceived in the late Twenties and built at the beginning of the Thirties, monumental in the dimensions of the structure but just as severe in its shapes, and even solemn in its dismal grandeur, known since 1976, thanks to the novel by Yuri Trifonov, as Dom na nabereinoj (The house on the embankment). The residence was conceived in 1926 to solve the residential problem, again, of the high spheres of government (...) A special house for special tenants (...). The design was entrusted to the architect most in fashion at the time, that same Boris Iofan, who in subsequent years was to win the competition to design the Palace of the Soviets and in 1937 would create the Soviet Pavilion for the Universal Exposition in Paris. The works were finished in 1931 and the Dom Pravitel'stva (House of the Government) opened its doors making more than 500 apartments available, some of which composed of five, six or even seven rooms, an unheard of luxury for those years. And this was not all: the house had a private surgery, children's nursery, crèche, recreational clubs, a hairdresser's, laundry, post office, savings bank, library and even a personal cinema (...)" (Piretto).

The architect quoted, Iofan, was the winner of the competition for the Palace of the Soviets of 1932, an impressive work but never built, 400 metres in height surmounted by a 100-metre statute of Lenin. An inexistent work, but for a long time it was part of the tour guides of Moscow and even the postcards, an example of virtual reality in perfect continuity with the Stalinist slogan of 1937, "living has become more beautiful, comrades, living has become more fun" (Piretto 2001); a

perfect slogan for the imaginary utopia superimposed on reality (it was the utopia, the virtual world in which it was beautiful and fun to live that many foreign travellers saw instead of reality), an unspeakable and unthinkable reality.

# Urbaphobia

As we have said, a large number of utopias are – more or less radically – urbanophobic. So, to a large extent, is science fiction.

Actually, from that border figure between the great trends of scientific science fiction and sociological science fiction that is Isaac Asimov, an interesting dialectic is proposed between the vision of refusal of the (large) city and that of a slightly terrified admiration of it.

An interesting trilogy based on the detective character Elijah Baley, with his robotic *alter ego* R. Daneel Olivaw, shows the multiple aspects of this dialectic.

We are talking about *The Caves of Steel* of 1953 (in which the environment-protagonist is a totally urbanised, overcrowded planet Earth), *The Naked Sun* of 1956 (in which the environment-protagonist is Solaria, a planet inhabited by a few thousand people - 20,000 - and by a very large number of robots - 200 million), and later *The Robots of Dawn* of 1983 (in which the environment-protagonist is Aurora, an extreme habitat, a planet inhabited by 200 million people and 10 billion robots).

The Earth, dotted with cities with millions of inhabitants and isolated from the outside world by domes, in the past colonised many planets in space, but is now locked up in its "caves of steel", diffident of technologies and robots; the spatial worlds look scornfully at their infected planet of origin, with its low densities and an easy life thanks to the large number of robots.

The following extracts speak of the earth; note the many worrying analogies with some of the presuppositions of the urban planning of the modern movement and with the Soviet one.

"It can just be made out in the gap between the two Brunswick Sectors. Low domes spread out. It's the difference between us and the Spacers. We reach high and crowd close. With them, each family has a dome for itself. One family: one house. And land between each dome. Have you ever spoken to any of the Spacers, Lije?" "A few times. About a month ago, I spoke to one right here on your intercom," Baley said, patiently. "Yes, I remember. But then, I'm just getting philosophical. We and they. Different ways of life". (Asimov 1953)

It could lay itself out scientifically. At the center was the enormous complex of administrative offices. In careful orientation to one another and to the whole were the large residential Sections connected and interlaced by the expressway and the local ways. Toward the outskirts were the factories, the hydroponic plants, the yeast-culture vats, the power plants. Through all the melee were the water pipes and sewage ducts, schools, prisons and shops, power lines and communication beams.

*(...)* 

Each City became a semiautonomous unit, economically all but self-sufficient. It could roof itself in, gird itself about, burrow itself under. It became a steel cave, a tremendous, self-contained cave of steel and concrete." (Asimov I)

In primitive times, individual population centers were virtually self-supporting, living on the produce of neighboring farms. Nothing but immediate disaster, a flood or a pestilence or crop failure, could harm them. As the centers grew and technology improved, localized disasters could be overcome by drawing on help from distant centers, but at the cost of making ever larger areas interdependent." (Asimov I)

A space between two trees revealed an expanse of lawn. For the first time, there was a sense of distance and on the horizon one could see a dwelling place: low-roofed, broad, and so green in color that it almost melted into the countryside.

"This is a residential area," said Fastolfe. "It might not seem so to you, since you are accustomed to Earth's tremendous hives, but we are in the Auroran city of Eos, which is actually the administrative center of the planet. There are twenty thousand human beings living here, which makes it the largest city, not only on Aurora but on all the Spacer worlds. There are as many people in Eos as on all of Solaria."

(...)

Aurora's population is two hundred million and that has remained stable for three centuries. It is the number desired. Surely you have read that in the books you viewed."." (Asimov 1983)

Aurora is mentioned in the following extract (and briefly Solaria); note the similarity with the "garden city" project:

We're passing through its center. The limits are seven kilometers away and our destination is nearly forty kilometers beyond that." "The center of the city? I see no structures."
"They are not meant to be seen from the road, but there's one you can make out between the trees.."
(Asimov)

What emerges from the three novels is a great ambiguity: neither urbanised Earth, hierarchical, obsessive, anxious, precarious and with high morbidity, nor Solaria with its few inhabitants who avoid all physical contact and have a long life, empty and boring, nor Aurora with its hedonistic, competitive society, namely the dystopia of the large city and the anti-urban utopia, represents an ideal society. The extremes do not work and nor does the extreme habitat.

# An ambiguous utopia

A step forward in this direction was made by two works almost simultaneously: The Dispossessed: An Ambiguous Utopia, by Ursula K. Le Guin (1974), already quoted, and Ecotopia, by Ernest Callenbach (1975). In both cases there is secession: in Le Guin's novel a group of anarchist rebels have agreed to colonise Annares, a moon with an atmosphere, much more inhospitable than the mother planet Urras, around the star Tau Ceti, following an uprising; in Urras there are various states, with very different social systems. Annares is an anarchical society. In Callenbach's novel, following a war, the states of Washington and Oregon and northern California have set up the nation Ecotopia, a radically ecologist social system. In both cases there is a journey that re-establishes relations, that of the physicist Shevek of Annares, and that of the journalist William Weston of the U.S.A. The "alternative" worlds are in both cases moderate, sympathetic and free, but by no means perfect, the "crooked wood of humanity" has not been planed: envy, small-mindedness, rivalry, prejudices and social control are present, influencing people's lives and happiness. The greatest charm of these utopias lies in their radical diversity from the society that has "expelled" them, but also in their obvious filiation. They are non anti-scientific utopias, non anti-urban, non pre-modern; one might say that in some way they are societies that are placed "beyond" (Le Guin's reference is to Murray Bookchin's "post scarcity anarchism" (Bookchin 1971)).

The following two extracts are from *The Dispossessed*, the first showing us Annares' educational system, and the second its values system (it is Shevek's speech at a proletariat demonstration on Urras).

"Learning centers taught all the skills that prepare for the practice of art: training in singing, metrics, dance, the use of brush, chisel, knife, lathe, and so on. It was all pragmatic: the children learned to see, speak, hear, move, handle. No distinction was drawn between the arts and the crafts; art was not considered as having a place in life, but as being a basic technique of life, like speech. Thus architecture had developed, early and freely, a consistent style, pure and plain, subtle in proportion. Painting and sculpture served largely as elements of architecture and town planning. As for the arts of words, poetry and storytelling tended to be ephemeral, to be linked with song and dancing; only the theater stood wholly alone, and only the theater was ever called "the Art"—a thing complete in itself." (Le Guin 136)

"We know that there is no help for us but from one another, that no hand will save us if we do not reach out our hand. And the hand that you reach out is empty, as mine is. You have nothing. You possess nothing. You own nothing. You are free. All you have is what you are, and what you give.

"I am here because you see in me the promise, the promise that we made two hundred years ago in this city —the promise kept. We have kept it, on Anarres. We have nothing but our freedom. We have nothing to give you but your own freedom. We have no law but the single principle of mutual aid between individuals. We have no government but the single principle of free association. We have no states, no nations, no presidents, no premiers, no chiefs, no generals, no bosses, no bankers, no landlords, no wages, no charity, no police, no soldiers, no wars. Nor do we have much else. We are sharers, not owners. We are not prosperous. None of us is rich. None of us is powerful." (Le Guin)

# **Ecotopia**

And two extracts from *Ecotopia*, in which deliberative democracy and architecture are dealt with (Colin Ward would have liked the latter).

"As these are discussed (often amid friendly laughter, as well as a few angry outbursts) general issues begin to take shape. But there are no Roberts' Rules of Order, no motions, no votes—instead, a gradual ventilation of feelings, some personal antagonisms worked through, and a gradual consensual focusing on what needs to be done. Once this consensus is achieved, people take pains to assuage the feelings of those members who have had to give ground in order to achieve the consensus. Only after this healing process takes place is there formal ratification of the decisions taken—the only action during three hours or so that has the feeling of ordinary political business as we know it." (Callenbach 1991)

"Such peculiarities aside, an extruded house has a comfortable feeling once you get used to it. The fact that walls and ceiling merge into one another can make for unease at first, yet it is snug and secure too. (...)

Like all plastics manufactured in Ecotopia, the extruded houses can be broken up and thrown into biovats, digested by micro-organisms into fertilizer sludge, and thus recycled onto the fields from whence their materials came. Oddly, the one serious problem encountered when they were first used was that they tended to blow away in high winds. But instead of our heavy, excavated foundations, they now use large adjustable corkscrew devices which anchor each corner but leave the earth surface undisturbed. (...)

Many Ecotopians are fond of these products of housing automation. But they are very unceremonious about them, and treat them with none of the almost religious respect they extend to wood structures. If a family member dies or leaves, his room may be sliced off and recycled. When a baby is born or a new person joins a group, a new room can be glued onto the existing constellation—a long room for an adult, a short one for a child. Any self-respecting architect would shiver at such a prospect, but it does make the houses a direct expression of the life inside them". (Callenbach)

# What is the point of the utopia

From this brief journey it will be understood why an urban studies professor cannot fail to like Calvino's *Invisible Cities*.

"Kubla Khan, which in his atlas was the symbol of complete knowledge of the world, did not just mark all the real cities of the past, present and future, but also all the imaginary cities – whether they be called New Atlantis, Utopia, the City of the Sun, Oceana, Tarnow, Harmony, New-Lanark, Icaria." Or Enoch, Babylon, Yahoo or Brave New World. He expects from Marco Polo a forecast on the probable developments hoped or feared: "You who explore around and see the signs, will be able to tell me towards which of these futures the winds are blowing us."

In the image of the winds, which invariably push the ship towards a port (but the question is: towards which port?), once more the idea is suggested of a linear course of history, which finds its own destination in a positive, "eu-topic" condition, or a negative, "dystopic" condition.

Against the determinism both of those who believe in progress and of the apocalyptics, Calvin erects his utopia of the present, founded on the subject's perceptive faculties. "Here and now, in the hell [...] that we are creating by being together (...), two possible kinds of behaviour are left for the individual: To accept the hell and become part of it to the point of no longer seeing it, or to try and be able to recognise who and what, in the middle of the hell, is not hell, and make it last, give it space."

*(...)* 

"Sometimes [Marco Polo observes] I only need a glimpse to open up right in the middle of an incongruous landscape, lights to crop up in the fog, the dialogue of two passers-by who meet in the to and fro, to think that on the basis of this I will put together bit by bit the perfect city, made of fragments mixed with the rest, of instants separated by intervals, of signals one sends and does not know who gathers them up. If I tell you that the city towards which my journey tends is discontinuous in time and space, sometimes sparser, sometimes denser, you should not think we can stop looking for it." (Kuon)

We cannot stop looking for it.

This might be a good summary of what we expect from planning and design work.

A city sometimes sparser and sometimes denser might be a good idea.

What the research work is based on, and what has for several years has been troubling the minds of many at the Architecture School in Alghero is what we might call the hypothesis of a "territorial and environmental city".

It is a case of a mean low-density, polycentric, spread city, with a modern relationship between city and country.

The hypothesis is that a "city" lifestyle - with the advantages of the city and with urban areas in the true sense also pervaded by the force of the country, but with sparse settlements, too, in some way connected with a revival of agriculture and with compact nuclei - may also be applied to territories like north-west Sardinia, with its relatively or decidedly small urban centres, and with an important rural settlement situation with a wide seasonal range in population.

# The challenges for the city (in our small way)

The world is becoming a world of cities; cities grow in number, they grow in the number of inhabitants, their extension and height, the quantity of goods produced and consumed, the quantity of refuse they produce, and in the energy they devour.

Cities consume the territory and often suffocate it.

An unending phenomenon that is taking place at a growing speed is that of urban explosion, often manifest as *sprawl*, namely, uncontrolled, uncivilised urbanisation, urban dispersion that is not being managed or is badly managed, with visible, heavy effects of waste, inefficiency, loss of quality and dissipation (The bibliography is endless et al. 2006; Indovina et al. 1990).

In the Mediterranean area, compactness and density were one of the main features of cities like Marseilles, Genoa, Naples and Barcelona, but now the dimensions and distances of the "urban regions" have grown enormously and all the city functions have been spread over a much wider territory than in the past. Defining the borders of the city has become very difficult and spatial organisation has changed and is very indistinct.

The compact city has exploded and become a low-density, urbanised territory, but overflowing and inconsistent, often combining the disadvantages of concentration and those of dispersion. It is not just *sprawl* but a true explosion of the city with many effects, direct and indirect, obvious and hidden. For example, the transformation of urban centres is another result of this process; people and activities have moved away from the city towards towns or rural areas, but other people and other activities, arriving perhaps from other very far-off cities or from country areas all over the world, have replaced them.

Planning for this type of territory means tackling this new form of city and metropolis; *sprawl* is uncontrolled and lacks complexity.

To cope with the urban explosion phenomenon is not simple, also because it is not a single phenomenon: it is a question of processes apparently similar to each other but with specific territorial and economic dynamics.

It is important to find out which are the local features of this transformation and which are the global tendencies.

For example, in the South of France urban regions like Montpellier and Aix-en-Provence have the highest rate of demographic and economic growth in the whole country. And this is taking place with the substantial stagnation of the urban centres.

In Italy the "widespread city" in the Veneto region has different dynamics from the enormous conurbation of Naples or the centripetal dispersion of Milan, or the seasonal megacities of the Adriatic, or the light dispersion of the "micropolitan" type of Sassari. Phenomena of these kinds, with their specificities and with many common elements are taking place in the whole of Europe.

They are phenomena that are different from the suburbanisation of the United States or the rur-urbanisation of Africa.

So there is not just one solution for controlling urban explosion, as the creed seems to repeat to us suggesting the mantra of the "compact city" as the only, somewhat vague, solution.

It is true that to put an end to urban explosion certainly means to increase density and concentrate the urbanised areas, but this can only be done by including the specificities of the various phenomena behind this common result, therefore identifying the right "cure", with a design-based attitude and far-sighted thinking.

Planning on this type of territory means tackling this new form of city and metropolis; uncontrolled *sprawl* lacks complexity and possible order.

Two project lines may be defined: what type of action should be engaged in to take into account the existing territory and this urban "archipelago", and make evolution possible towards greater complexity, higher density and better urban quality? How can a new way be planned to make the development of these territories possible, thinking of the interaction and ties between the different levels, the various functions and different populations, but also between plan and project?

- 1. New ways of inhabiting; the old city and the new forms of living. Families, single people, step-families, the elderly with carers, old couples and people living together, communities, residents, visitors, immigrants ask for and impose rethinking of the organisation of public and private spaces, squares and houses, starting with reorganisation of the old city. The old city is not made, as it stands, to welcome these diversities, but may be "fashioned" for these purposes, especially if its redevelopment is accompanied by the redesign and regeneration of the shapeless outskirts.
- 2. Scattered housing and the dream of life in the country

Not just because it costs less, but because it enables a different lifestyle. One of the causes of urban dispersion is: "I'm going to live in the country", a dream often paid for at a high price, but not just arising from urbaphobia, not merely regressive. We must accept that this style of life coexists with others, integrating it with others from the point of view of services and making a territorial facility of it and also a node of activities different from inhabiting, building up intelligent, low-impact mobility systems, and using the potential of the new communications technologies.

Many ways of making it compact: concentration, delimitation, articulation and the network.

It is not easy to say what is meant by making an exploded city compact, when it has sometimes been born of several urban nuclei that were compact; compactness, in an age like ours, cannot simply be a physical "fact"; to give shape to the city, delimit it, construct

centralities, services and communications systems, reduce the environmental impact, create harmony between it and the territory, enhance the landscape and respect the choices of individuals, namely, build up compactness with many meanings; this is all that is needed.

4. The challenges and opportunities of the low-density city

There are territories that will always be low-density. The challenge is: to give these territories city "quality", as regards services and accessibility first of all, maintaining environmental quality and enabling a relaxed, intimate lifestyle, enable balanced, sustainable development (with various activities with high added value and high employment, a low ecological footprint and a great "kilometre zero" sector, with tourism that is widespread but loyal and friendly); a challenge that is focused on real opportunities and the diversity of these "environmental cities" from other types of city.

5. In a network with the world: the end of the tie of spatial proximity

The city, above all the modern city, was able to do without the tie of spatial contiguity for supplies; the contemporary city has had to give it up, also for production and consumption; networks of cities have always existed in a certain sense (cities look for each other and are aware of each other's scent even at great distances), but cities made of networks are a possibility of our times. How can we think of organising production systems (in the wide sense, like the social organisation of production and creation of social value), in a key not so much of so-called "competitiveness", as of resilience of quality of life levels and environmental sustainability(?)

### In praise of harmony

As we have seen, neither the dense, compact, closed city nor the dispersion, isolation, privacy of the high technology bucolic idyll, nor even the alleged fair medium, represented by the new modalities of the garden city, will save us.

To prefigure the future what we have called the ambiguous utopias will help us a bit, those rather dirty, gangling cities but vital, with a highly ideological life, sometimes libertarian, sometimes collectivist, as described by Le Guin and Callenbach, moderate societies, prefigurations of a possible decrease, with the economic and social handbrake on. But also in the ambiguous utopias, like the hyper-crowded cities or the rarefied civilisations without contacts, the conflict – though perceived only as a nuisance – is not absent.

What cannot be expelled from the city is the conflict aspect.

Actually, the conflict is the engine of transformations; if it is true that the city is the place of encounter between different elements, a differentiated set of conflicts is inherent in cohabiting and in the interaction of different populations; conflicts in the use of space between generations, residents and visitors or users, cultural conflicts, economic conflicts, fiscal conflicts and aesthetic conflicts.

Not all conflicts can be resolved and not all are productive; the role of politics is to try to prevent the first and avoid necessary conflicts going into gangrene; the role of planning is to build spaces and opportunities so that the different populations may interact, make housing segregation and fruition difficult, and counter speculation.

This is what I call the quest for harmony.

Not an irenical vision, while the conflict is stable, harmony is temporary, but in the past it was given: at the great civil and religious feasts, for example, in which the whole city found a role and dignity in the shared construction of great public spaces and collective services (I am thinking of many of them, but above all I am struck for many reasons by libraries (Agnoli 2009)).

In thinking of a harmonious city some contrasts come to mind that must be managed: city/country, rich/poor, centre/outskirts, past/contemporary, density/rarefaction, segregation/*mixit*é, residents/visitors; to be managed, not eliminated.

Harmony is not static, not each thing in its place, but the unending negotiation to change places and gain new spaces.

It has to do with design.

#### Competing interest

The author declare that he has no competing interests.

Received: 30 September 2013 Accepted: 15 January 2014 Published: 16 May 2014

#### References

Agnoli A (2009) Le Piazze del Sapere. Biblioteche e Libertà, Laterza, Rome Asimov I (1953) Abissi d'acciaio. Mondadori, Milan 1986:23

Asimov I (1983) I Robot dell'alba. Urania-Mondadori, Milan 1985:74–75

Asimov op. cit. p 76 Asimov I cit. p 36

Asimov I cit. pp 125–126

Bloch E (1986) The Principle of Hope. MIT Press, London, orig, pp 1936–1947 Bloch E (2000) The Spirit of Utopia. Stanford University Press, Stanford, CA, orig,

p 1918

Bookchin M (1971) Post-Scarcity Anarchism. Ramparts Press, Berkeley Callenbach E (1991) Ecotopia. Interno Giallo, Milan 1975:102

Callenbach E op. cit, pp 146–147

Choay F (1965) L'urbanisme, utopies et réalités: Une anthologie. Editions du Seuil, Paris

Geist H (2005) The causes and progression of desertification. Ashgate Publishing, Aldershot

Giddens A (1991) Modernity and self-identity: self and society in the late modern age. Polity Press, Cambridge

Glasze G, Webster C, Frantz K (ed) (2006) Private Cities. Global and local perspectives, Routledge, London

Chamberlin ER (1969) The Bad Popes. Dial Press, New York

Indovina F, Fregolent L, Savino (a cura di) M (1990) La città diffusa. Marsilio, Venice

Jameson F (2005) Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions, Verso, London and New York

Kopp A (1970) Town and Revolution: Soviet Architecture and City Planning, 1917–1935. Braziller, New York

Kuon P (2002a) "Critica e progetto dell'utopia. Le città invisibili di Italo Calvino". In: Various Authors La visione dell'invisibile: le città Invisibili di Italo Calvino. Mondadori, Milan, p 30. The quotation from Calvino is from his Una pietra sopra: Discorsi di letteratura e società (1980) Einaudi, Turin

Kuon P (2002b) "Critica e progetto dell'utopia. Le città invisibili di Italo Calvino". In: Various Authors La visione dell'invisibile: le città Invisibili di Italo Calvino. Mondadori, Milan, p 33. 3, The quotations from Calvino are from his Le città invisibili (1972) Einaudi, Turin

Kuon P op. cit. p 35

Le Guin U op. cit. p 136

Le Guin U (1974) The Dispossessed: an Ambiguous Utopia. Harper & Row, New York

Le Guin U op.cit. p 259

Marcuse H (1970) "The End of Utopia" in Five Lessons. Penguin, London Mumford L (1962) The Story of Utopias. Viking Press, New York. orig 1922 Nozick R (1974) Anarchy, State, and Utopia. Basic Books, New York

Pimm SL, Russell GJ, Gittleman JL, Brooks TM (1995) "The Future of Biodiversity" (PDF). Science 269(5222):347–350

Piretto GP (2001) Il radioso avvenire. Mitologie culturali sovietiche, Einaudi, Turin Piretto GP (2010) Gli occhi di Stalin: la cultura visuale nell'era staliniana. Cortina, Milan

Piretto GP op. cit. pp 134-137

Reiner TA (1963) The Place of the Ideal Community in Urban Planning. University of Pennsylvania Press, Philadelphia

Sassen S (2001) The global city: New York, London, Tokyo, updated 2nd ed. Princeton University Press, Princeton

Sassen S (2006) Authority, Rights: Territory From Medieval to Global Assemblages. Princeton University Press, Princeton

Tafuri M (1976) Architecture and Utopia. Design and Capitalist Development, MIT Press, Cambridge-London

Ingersoll R (2006) Sprawltown. Looking for the City on Its Edges. Princeton Architectural Press, New York

Van Camp L, Bujarrabal B, Gentile AR, Jones RJA, Montanarella L, Olazabal C, Selvaradjou SK (2004) of the Technical Working Groups Established under the Thematic Strategy for Soil Protection. EUR 201319 EN/6 Office for Official Publications of the European Communities

Wilkinson R, Pickett K (2009) The Spirit Level. Why More Equal Societies Almost Always Do Better. Allen Lane, London

Urban and rural population. http://esa.un.org/unpd/wup/unup/index\_panel1.html Ecological footprint. http://www.footprintnetwork.org/en/index.php/GFN/page/world\_footprint/

Ville mal aimée. http://www-ohp.univ-paris1.fr/TOC\_Colloque/TOC\_Def.htm

# doi:10.1186/2195-2701-1-5

Cite this article as: Cecchini: The future of the city from Science to Science Fiction and back (and beyond). City, Territory and Architecture 2014 1:5.

# Submit your manuscript to a SpringerOpen journal and benefit from:

- ► Convenient online submission
- ► Rigorous peer review
- ► Immediate publication on acceptance
- ► Open access: articles freely available online
- ► High visibility within the field
- ► Retaining the copyright to your article

Submit your next manuscript at ▶ springeropen.com