Cities of the future: a great diversity of views.

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The city is one of the best ways of projecting oneself into the future. In fact, it has four «qualities» for this: it concerns almost all human activities, it is a major economic and technological challenge for the future, it continues to experience strong development in the world, and it is, at the same time, a concrete object that stimulates the imagination and can easily be represented by image. It is therefore no coincidence that the theme of the city of the future is today everywhere - from the curricula of colleges, to the statements of almost all the founders of GAFAS, to filmmakers, science fiction writers, the media, architects, town planners and public works companies, The Federation of Urban Planning Agencies (FNAU) has just, in 2020, organised its annual conference on the theme «Exploring our happy futures».

In spite of this great diversity, the discourse on the cities of the future is nevertheless very dominated by a very small number of themes: essentially the integration of digital technology («The smart city») and the ecological transition. The increasing number of consultations with residents at the local level does not really succeed in broadening the visions to other, more social or cultural themes. Above all, these visions do not, or only to a limited extent, take into account the very long-term developments in which the cities of the future will have to develop and the lives of those who live in them. For example, a world with three degrees more. There is little work on urban foresight in the very long term and, above all, this foresight remains too isolated in its specific field.

The contribution which follows does not, of course, aim to evaluate this great profusion of visions of the future city, but is limited to illustrating the multiplicity of views - each time giving a few examples or available resources

(among many others) ... These views, examples or resources are grouped in broad categories which include both types of actors and forms of exploration of the future.

1) Utopias and science fiction

- Dossier Futuribles sur les Utopies Urbaines (coordinated by Jean Haentjens), N°416, 2016.
- Olivier Jonas, Rêver la ville Utopies Urbaines, de la cité idéale à la ville numérique, Centre de Documentation de l'Urbanisme, Ministère de l'Équipement, 2003 (very rich but published in early 2000).
- J. Haentjens, *Urbatopies*, *ces villes qui inventent l'urbanisme au XXI ème siècle*, éditions de l'Aube, 2010.
- Thierry Paquot, *Utopies et utopistes*, collection Repères, seconde édition, 2018 (with a chapter on urban utopias).
- France Culture, Série Utopia: architecture et utopies urbaines (4 themes: The fairytale city Sillicon Valley by the sea Draw me a prison When architecture fades away), 2019.
- Uzbek et Rica, Les villes dans la science-fiction, 2 articles, 2013.
- Science Post : les villes du futur imaginées par le cinéma.
- Catherine Dufour, Les villes dans la science-fiction : de la ville morte à la ville douce, You Tube, 2020.

2) Architectural utopias and large futuristic projects.

It is part of the work of architects or schools of architecture to propose utopias on future cities and for public or private leaders to imagine with them big futuristic urban projects - Masdar, The Line, Neom (Saudi Arabia), Chengdu ... Floating or underground cities ... Biomimetic cities ... All this is strongly relayed by the media or social networks, for example, by You Tube or the media BRUT ...

- See all Callebaut's projects, for example: Demain Paris en 2050 (Babylon project for a green smart city)
- Chengdu, la ville chinoise de science-fiction, Brut (YouTube)
- Catalogues of the 2019 Venice Biennale of Architecture: « May you live in interesting times ».

- Exhibition on the City of the Future at the Futuroscope of Poitiers, 2018.

3) Competitions and imaginary vision factories - especially in the world of education

A lot of initiatives in secondary schools (6th grade), but also some aimed at students - grandes écoles, universities or schools of architecture (for example: Challenge on the city of tomorrow or the sustainable city of tomorrow - see Sydeka, the best «student challenges, challenge of the Strasbourg School of Architecture ...).

- CNET « cartographie au collège », La ville de l'avenir sous le crayon des collégiens (very imaginative designs)
- Work on the 'Urban future studio' of the University of Utrecht a university structure entirely dedicated to the city of the future. See in particular: Pelzer, Versteeg, Imagining for change, *The post fossil city contest*, Revue Futures, 2019 // 2050, an energetic Odyssée, Understanding techniques of Futuring // M. Hajer, Versteeg, Imagining the post fossil city: why is it so difficult to think of new possible worlds?
- Sites of structures that develop prospective design practices (Plurality University, Institut des futurs souhaitables ...).
- Forum Vie mobile, En 2061, que préféreront les jeunes, mobilité physique ou virtuelle ? Une enquête de 2019.

4) Consultation of the inhabitants

There is a great deal of consultation with the inhabitants on the future city they want, mainly up to 2030 (within the framework of town planning) and more rarely 205O - and this for all sizes of city ...

- Ville de Paris, Comment imaginez-vous Paris en 2030 ? Consultation launched in 2020.
- Ma ville demain, Nantes 2030.
- Rennes 2030 (dedicated site, with, for example, children's drawings, ect.)
- Le futur .org, participatory workshops to invent the city.

5) Visions of companies: Think Tanks, Smart city projects...

Nearly all major companies in the public works, energy, automotive and transport and digital sectors have think tanks (laboratories, think tanks) or projects concerning the cities of the future - with the smart city, the energy and environmental transition of cities as their main focus.

- See the websites of the Fabrique de la cité (Vinci's Think tank) and «La ville demain» (Bouygues)
- Proceedings and conclusions of the PUCA Seminar on the smart city (Urban Planning, Construction and Development Research Programme of the Ministry of Ecological Transition).
- Bouygues, Demain la ville, La ville du futur désirable et connectée
- Eiffage, Phosphore, Une vision de la ville de demain
- Groupe ARC, les villes de demain, série de 5 vidéos
- GDF Suez, Scénarios pour la ville du futur
- IBM, A vision of smart cities
- Projects of new cities of Microsoft (Belmont), Google (Sidewalk, Toronto).
- Visions of the city of the future and Elon Musk's projects, Jeff Bezos (« Amazon city of the future «), Zuckerberg (Facebook)
- Samsung, The city in 2116, Future living report.
- Projet de Toyota au pied du Mont Fuji : Woven City (la ville tissée).

6) Vision of town planners or geographers and local prospects

Over the past twenty years at least, there has been a multiplication of normative visions of the future city, the 'sustainable', 'inclusive', 'intelligent', 'creative', 'sober', 'liveable', 'short distance', 'coherent', 'slow' city, «This has been accompanied by a strong development of foresight exercises at the level of cities, especially the largest ones, and has been accompanied by a strong development of foresight exercises at the level of cities, especially the largest ones ...

- FNAU, Explorer nos futurs heureux, colloque annuel de 2020.
- Jean Haentjens, La ville frugale, FYP éditions, 2011.

- Gilles Fumey, Thierry Paquot (dir), *Villes voraces et frugales*, CNRS éditions 2020 (11 city cases, Rosario, Detroit, Denver, Grande Synthe, Amiens, Lyon ...).
- La ville biomimétique, programme VIBIOM, IMU, Université de Lyon, 2014.
- Cyria Emelianoff, Durabilité urbaine, modes de vie et solidarités à long rayon d'action, in Ecologies Urbaines (sous la direction d'Olivier Coutard et JP Levy), Economica, 2010.
- Euro Cities, 30 Visions for cities, 2016 (par 30 auteurs différents).
- Eric Vidalenc et Jacques Theys (dir), N° spécial de Futuribles sur les villes post carbone, N°392, 2013 (with examples: Bristol, Hanover, Towers) updated in the most recent issue of the magazine Urbanism on low carbon cities, (« Scénarios pour une ville bas carbone, 2020).
- Local foresight exercises: Montpellier 2050, Paris 2050, Tours 2050, Lyon 2040, 3D Saint Nazaire ..., but also many cities around the world such as Gothenburg. (Göteborg 2050), New York (New York's adaptation to climate change by 2050), Tokyo (Tokyo Fibercity city greening project) ... ect ...
- Baratier, Beauvais, Métais, le facteur 4 dans les territoires, Trajectoires 2020, 2030, 2050 dans l'agglomération de Tours.
- Frédéric Lefevre et Nathalie Etahiri Cecutti, Programme de prospective urbaine de la fondation 2100.
- Rob Hopkins, Manuel pour les villes en transition.
- Cochet, Sinaï, Thevard, La biorégion lle de France en 2050 : l'Ile de France après l'effondrement, Forum Vie Mobile et Institut Momentum.

7) Foresight 1: Scenarios

At a non-local level, there is relatively little recent foresight work on cities in general - at least in France. But there is an obvious connection to be made with foresight exercises on other themes - which is not often done ...

- Government Office of Science, Grande Bretagne, The future of cities over the next fifty years, 2013- 2016
- Eric Vidalenc, Jacques Theys, Repenser les villes dans la société post carbone, Ministère de la Transition écologique et ADEME, 2014 see the 6 scenarios, including «Biopolis» and «Sober Urbanity».
- Société Française de Prospective, La Grande transition, FYP Éditions,

2018 (see, in particular the article by Fabienne Goux Baudiment)

- Thierry Gaudin (dir) 2100, Récit du prochain siècle, Payot, 1992 (one of the very few very long-term foresight exercises).
- Future IQ, The next industrial revolution, Towards a new era, 2018.
- AGORA 2020 vivre, habiter, se déplacer en 2020, Mission prospective du Ministère du développement durable, 2008.
- FING, 4 scénarios pour les villes du futur, 2015.
- ARUP (bureau d'études spécialisé sur la prospective des villes) Future of cities ...

8) Foresight 2: Reports and colloquia on the foresight of cities.

Several reflection groups on urban prospective were set up at the end of the first decade of 2000. They have the disadvantage of focusing more on the medium term and of not integrating the ruptures which occurred in the second decade ... Their advantage is that they take into account the political and social dimensions of the city - something which more recent work does less well ...

- Commission européenne, Les villes demain, rapport du groupe de prospective, DG Régions, 2011.
- Commission prospective du Senat, Villes du futur, futur des villes, rapport au Senat sous la direction de JP Sueur, 2011.
- Commission prospective du Comité 21 (sous la direction de Bettina Laville), La ville, nouvel écosystème du XXI ème siècle, 2012.
- Groupe Caisse des Dépôts, prospective de villes villes 2030 (outils de prospective pour la prospective urbaine)
- Thérèse Spector, J Theys (dir) *Villes du XXI ième siècle*, actes du Colloque International de la Rochelle, 2 tomes, 2000.
- Institute of Social sciences (Lisbonne), Institute of studies for integration of systems (Rome), Chinese University of Hong Kong, Conference Urban 2050 Futures Squaring Circles Europe, China, World, Lisbon, 2014.

9) The city of the future in (digital) media

In addition to articles in newspapers and magazines, the theme of future

cities has been frequently addressed by digital media and platforms, notably by ARTE, France Culture, France Bleue, BRUT, UZBEK and RICA ... There are also specialised blogs. We will limit ourselves to a few examples:

- Les villes du futur, ARTE, 2015 (série), le dessous des cartes
- La ville du futur sera t'elle durable ? France Culture, émission Planète Terre, 2015.
- Série de France Culture sur les utopies urbaines.
- Série du média BRUT sur les villes du futur.
- Several articles, rather critical, in the journal Urbanisme and the CITEGO website.

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