**Dream City**
**Horizon 2030**
**Student work summarised by J.P. Orfeuil.**

## The survey: content, population and approach

First and second year Masters Degree students at the Paris Institute of Urban Planning Paris (Paris-East Créteil University) were asked to describe, in a few pages, their vision of the dream city in 2030. There were two explicit reasons for this timeframe. Firstly, in 2030 they will be aged between 40 and 45, right in the midst of their professional careers and family lives. Secondly, it is a sufficiently long timescale for significant changes to be imagined, without moving into the realms of science fiction. An analysis of the responses shows that the students took reasonable account of this second point (sensible utopia). On the other hand, they show few signs of projection into professional or family life, to the point that one wonders whether they are not talking about the ideal city for students in 2030. We will make sure that we avoid this pitfall in the next survey, in October 2011.

The respondents come from two educational fields, one focusing on urbanism, the other on transport and mobility. They were registered for classes on mobility, which is apparent in the fact that the question of transport was considered by almost all of them, though not to the exclusion of other topics. Most of the students are French (around 70%). The others come from Europe, North Africa, South America, China and Japan. Their background disciplines are varied (architects, engineers, geographers, sociologists, political scientists), but the largest group is French students in the planning sphere. This probably contributes to a certain difference between their perceptions and those of youngsters in general, inevitable at this stage of the course. There were 43 responses from urban planning students, 33 from students in transport and mobility. Overall, the differences between the two sets of responses are not very marked, except perhaps that the transport and mobility students provide more frequent and more complete ideas on urban freight transport. The length of the submissions was between 3 and 6 pages.

Most responded to the spirit of the question (your dream city), but a large minority (around 20%) took a less personal approach, instead describing the city as they think it will be in 2030. Conversely, a few students described their imagined future life with no very explicit reference to the framework within which it takes place. In addition, around 15% of the submissions lacked originality, simply repeating the basic elements of France's urban planning credo, i.e. a compact, mixed city, with fewer cars and more public transport.

I processed the survey responses myself. The approach is qualitative. It is based on a close reading of all the documents and the gradual establishment of a grid listing the characteristic features in terms of frequency of incidence (or absence), and elements which are both original and mentioned by a significant number of respondents. Below, the salient factors have been grouped into themes: the underlying explanatory values, the desired urban form, the conception of mobility and finally the proposed transport systems.

## Values of the city

*The environment top of determining factors and aspirations*

Almost 100% of the responses tackle the environmental question, either as a constraint – what we can expect (oil shortages, the need to avoid climate change with HEQ or low carbon buildings, the need for public transport and electric cars…) – or as a strong aspiration: public

space should have an atmosphere that encourages community, nature should be a strong presence in the city, whether as traditional green areas, garden estates and allotments, farming zones that offer "short-circuits", wall plantings, terrace plantings, city farms, ecological corridors… Close attention to the presence of streams and rivers, to their recreational or functional uses (in particular for transport), is also significant. This presence of the "nature question" in the city primarily reflects a personal aspiration, but a number of answers explain this focus by the need to adapt to climate change, although this issue of adaptation carries relatively little weight in France.

*A community-minded, friendly and international city, no longer just a container* A very large majority of the contributions tackle the question of social justice and cohesion, in different dimensions: rejection of segregation in housing, abundance of moderately priced public transport (even free in certain cases), urban and transport systems designed for people with reduced mobility or disabilities. The most original and frequently encountered proposal is that public transport fares (season-tickets) should be proportional to income.

The big city is seen as naturally cosmopolitan, and this is considered to be one of its advantages over other areas. This theme needs to be linked with that of the "city without boundaries", a city that is no longer just a container for day-to-day life. It is taken up by a large number of contributions, and is often the first priority: the city is perceived through its connections with the rest of the world, whether nearby areas, often allocated to local periurban agriculture as a means of reducing food miles, or more distant areas, French or foreign cities. In addition, a small number of contributions imagine a model where a significant proportion of the population is only temporarily in the city, living three months in one place, three months in another, etc. To a large degree, long-distance and international mobility does not seem to be inhibited, quite the contrary, although some contributions doubt whether air transport can survive oil shortages.

Finally – we will come back to this – the city of tomorrow will be sociable, whether through good neighbourhood relations or public space that is redesigned to encourage community.

*No reference to the city as a space "optimised for production"*
Almost no contributions refer to the quest to maximise the wealth produced by cities, although the idea that the megacity is today's ultimate productive form is (sometimes) present as a backdrop. We don't know whether this lack of interest in the contribution of spatial structures to economic growth is a sign of the times, a prejudice specific to students in these disciplines, or whether it reflects a lack of interest in this question in urban planning courses in France, which is where a large proportion of the students come from.

**Urban form: points of convergence and divergence**

*No consensus on an urban model…*
Some contributions are in favour of big cities, others of "human scale cities", a scale ranging between 300,000 and 3,000,000 inhabitants, and others (markedly rarer) bet on the dissolution of cities in favour of rural areas that are more conducive to autonomy and to the use of distributed energy, a model made possible by continuing progress in telecommunications.

There is no more consensus on urban morphologies and the nature of the built environment. True, a degree of agreement emerges around the notion of compactness, but beyond this there are the adherents of multifunctional towers and largely vertical development, often linked by bridges (e.g. Hong Kong) and those, conversely, who would like to prohibit skyscrapers and limit cities to a maximum of 3 or 5 storeys…

In this respect, it is interesting to observe that although there is no consensus on the aims, those who have clear aims argue for fairly radical rules. The most frequent propose minimum ground occupancy ratios, others drastic height regulation, others a ban on building on the edges of the city, and finally others advocate limiting housing space to a maximum of 35 m² per person…

*But nevertheless, areas of consensus…*
There is unanimity on some, more functional elements.

The "neighbourhood" must be a place of living and belonging ("The city must offer the same sense of community as the rural village" states one contribution), a "village in the city". This means that all the basic activities must be there (shops, schools, etc.), and that slowness must be the rule in the streets, whether because all car traffic has been eliminated, or because the "street code" giving priority to the slowest users ("Scandinavian" model) is applied.

The neighbourhood, or several adjacent neighbourhoods, communicates with the rest of the city through a "hub" (a term used more than the French "interchange point" or "node"), which provides access to a rapid transport system (Curitiba model). This hub is an intense location, and together the hubs sketch a multicentric city, a fairly widespread form in the contributions.

There is a strong consensus on public space in virtually all the contributions. The public space, the street, must be a place of sociability and community, a playful, modular space that can accommodate temporary activities, a shared space to be used and enjoyed, a comfortable space (reference to its exposure to sun and wind, to roofed and heated passageways), aesthetically pleasing (references to urban art),… Obviously, this proposal is accompanied by restrictions on the use of transport modes, in particular the car, a topic we will return to.

**Mobility in the city**
Numerous contributions "discourse" on the question of "mobility choice, mobility burden", discussing options to reduce the latter, but none of them turns its back on the city on the move and on urban mobility as a value and a right. In fact, "mobility for all" (disabled people, the poor) is a fairly widespread topic. The use of telecommunications as an alternative to movement (banking and administrative services, homeworking or remote working) is raised, but with the immediate proviso that it cannot replace all movement, although it can make a marginal contribution to quality of life.

Nonetheless, ICT is very present, but perceived in synergy with physical transport systems. Its role is to deliver the most accurate possible information to users of the systems, to manage payment transactions (public transport, car sharing, carpooling, parking, tolls), possibly (in a few contributions) for automatic driving systems on private vehicles, and to keep travellers occupied.

The fact is that there is more talk here of "journeys" than "movement" – journey time, whether on foot, in which case it is the city that provides stimulation, or in rapid transit, in which case it is for the transport company to fill the time. This can be in vehicles, with the possibility of reading, doing sport, looking at a screen or being prompted to chat by the right seat arrangement, but also in the "hubs" that provide connections between the different parts of the city, which need to be full of activities and enable people to remain connected to the world. The desired quality of service is not only to go from A to B in the minimum time, but

also to have a pleasant, comfortable, seamless and connected experience, with well-filled journey time.

**Transport systems and technologies**

*Decline of the traditional, privately-owned petrol car*

None of the contributions starts with the idea that today's dominant mobility mode, the privately-owned petrol car, will still be the dominant mode in 2030, although a few contributions consider technical advances. The degree to which cars disappear from the city is variable. Some contributions see them continuing to play an important role in the outskirts and restrict themselves to car-free centres, others eradicate them from primarily residential areas, whilst others still quite simply ban them. This ban may possibly not apply to electric cars or cars rented from car-sharing services. The reasons given may be technical (noise, fuel consumption more than pollution, which is rarely mentioned), but the predominant argument is elsewhere, in the strong commitment to a public space that encourages community, interchange and experiences aesthetic or otherwise.

*Nonetheless, no blind worship of public transport*

Most of the contributions propose increases in public transport provision, without neglecting the problems of discomfort, unreliability, difficulties in switching between modes, even excessive cost (the student population is on a tight budget).

*A preference for green modes, but a clear awareness of their limitations*

Conversely, walking and cycling are popular, and numerous traditional proposals are developed, from wider pavements to bicycle parking in the city and at the hubs, but in all the contributions there is clear awareness of their limitations, in terms of range and practicality in traffic.

*Technologies contributing to "enhanced green mobility"*

It is from here on that we find the most original proposals. On average, they are present in 10 to 20% of the contributions.

What might be called "enhanced walking" is based on the development, in urban public space, of rolling sidewalks, to increase range and make foot travel easier for people with reduced mobility. Another idea is "drag lifts" (like those found in ski resorts) for sloping streets, to help people travel uphill on rollerblades or rollerskates.

What might be called "enhanced cycling" is based on the use of (private or self-service) electric bicycles and electric scooters with built-in speed limits, or higher-speed bicycle rail systems.

*Public transport technologies and functions*

The contributions generally propose a model that is hierarchical, connected and more decentralised than at present, based on local bus services connecting to rapid transit hubs, which link the different centres together and to the main centre.

The originality lies in the very widespread advocacy of automation, a guarantee of speed and quality of service, whether this automation is used for traditional heavy transport infrastructures (e.g. underground systems), or guided systems carrying small capacity vehicles, on the model of France's stillborn Aramis system.

Another original proposal is in the use of public transport for merchandise. Specially designed containers, fitted with merchandise tracking chips, are carried in the hold of passenger transport vehicles.

*System space: subterranean and in the air, not on the ground*
Numerous contributions imagine the city not in two dimensions, but in three, and this is probably the most original point to emerge from the exercise. The majority focus on the subterranean. It is the subterranean that is the locus of urban speed, whether in automated public transport or individual electric vehicles, with significant use of safety automation (automatic or very highly protected driving). It reflects the need for "invisible and imperceptible" transport between neighbourhoods. Conversely, a few contributions explore transport systems that make the city visible. In this case, we find networks situated at second storey height, operating in transparent tubes to eradicate any external noise. And finally, a few very cinema-inspired contributions propose systems derived from flying cars, possibly rechristened personal dirigibles or suchlike. In all cases, the imaginative focus is exclusively on the use of green, slow and active modes, the only exception being a tolerance for emergency and safety vehicles.

*Speed: between zero and infinite*
This is how one contribution begins, and this is how we will end our summary. The public space is a locus of green, slow and active modes, because it is this space that needs to encourage sociability, community, the urban experience, and this function is not compatible with fast transport systems, whether individual or collective. Nevertheless, speed and the ability to move fast are necessary for cities to function. These systems need to have their own space (underground in most propositions, the river in some, the air for a few) and automated control methods which ensure that they operate perfectly.

*Concluding remarks*
The author of the summary cannot help but notice that the students show a certain interest, expressed through their focus on the subterranean and the automatic, in an argument developed by the promoters of urban toll motorways in the early 1980s and vigourously resisted at the time.

Also significant is the wish for invisible and imperceptible inter-district transport. It runs counter to the ideas that governed the much heralded revival of the tram in French cities, based on a certain osmosis between mode and urban space, entailing surface transport, moderate speed and "human" behaviour. We can therefore not rule out the possibility that there are "cycles" in the values and representations of good and bad and of utopias, or simply that certain models have run out of steam in their function as utopian ideals.

The tendency to imagine fusions and hybrids of existing technologies, and even to import the terms describing them, is very strong. ICT is present in everyone's world, and it is inconceivable that it should not contribute to the improvement of mobility services in physical space, whether by improving the organisation of transport or filling time. Hybridisation is apparent in the terms used, some of which come from air transport (hubs, holds), but also in the success of the shared use of public and private vehicles, in the use of infrastructures dedicated to individual vehicle traffic (bicycles, small public transport vehicles) and in the

invariable presence of electric bicycles, clearly conceived of here as an extension to the pedal bike.

Finally, we note that what structures the ideas are nonmaterial values:  comfort, community, aesthetics, etc.