

# The role of telecommunications in shaping the urban landscape

Olivier LEFEBVRE

Dr Olivier Lefebvre France Telecom Finance 6 Place d'Alleray 75505 Paris cedex 15 France , [olivier1.lefebvre@francetelecom.com](mailto:olivier1.lefebvre@francetelecom.com)

## INTRODUCTION .

ICTs (Information and Communication Technologies) shape the urban landscape in two very different ways . They are used to master the urban landscape . Architects, urban planners, archeologists use ICTs to embellish the inner city, the main goal being to preserve the historical heritage . People living or working in the inner city need ICTs . Telecommunications equipments are present, but discreetly . Even the « invisible landscape » (waves) is taken into account . Measures are taken to avoid fears about the effects of waves on health . At the opposite, ICTs are used in urban scenographies, and stimulate them . The urban landscape is changed into a decor, useful to parades, fairs etc ... Obviously, the urban landscape is a stake, and a conflict provoking one . Let us remember what Lewis Mumford said about the contrast between the inner city and the suburbs . The inner city is the place of political and social conflicts . Those living in the centre of the city, participate to the social life (often, struggles) . People living in the suburbs forget these conflicts, and seek a world of individual dreams and comfort . ICTs have changed that, but not so much . In the inner city, the urban landscape is rich of sense, and it is the reason why it is a very much disputed stake .

## ICTS ARE USED TO MASTER THE URBAN LANDSCAPE .

Architects use software to design buildings, obtain electronic mock-ups, and calculate the costs of the works . Urban planners realize electronic mock-ups of projects . It facilitates discussions on these projects . It allows comparisons between alternatives (for instance, concerning trees along a street) .

An interesting example of the use of ICTs to master the urban landscape is preventive archeology . When archeologists find remains in the centre of a city (in general, when a hole is dug in a building site) , there is a problem . Municipal authorities choose to stop building during some time, to explore the site, or to cancel the project, if the remains are of very great value . In the first case, archeologists have to explore the site in a limited time (it is stipulated by Law) , and they can use ICTs . Take the example of excavations in Alexandria (Egypt) <sup>(1)</sup> . An archeologist can show a find to a colleague who is far from the site, in 3D, using a webcam . This colleague gives an advice, and it is useful to decide where to excavate, quickly . The two archeologists can speak by phone (through Internet) . Videoconferencing (through Internet) is possible . The team uses a portal . Archeologists can use the GIS (Geographic Information Systems) techniques, to map a site .

As those living or working in the inner city need ICTs, measures are taken to avoid the sight of ugly telecommunications equipments . Wires are hidden (but in industrialized countries, this measure is taken anywhere except in the country) . Parabolic antennas are forbidden . Only rattle antennas are allowed . Cable is the preferred solution . Cable allows to provide TV programs to those living in large buildings (instead of antennas) . Soon TV through ADSL will be at disposal in the centre of cities . It allows providing TV programs through the phone line . People living in the centre of cities will be able to choose between two providers (cable or ADSL)<sup>(2)</sup> . Emitters for mobile phone are inside premises, or hidden by a fake decor (a chimney, a tree etc ...) . In the inner city, the demographic density is high, many emitters are needed, and the consequence is that many people fear the effects of waves on health . It seems that scientific experiments give results which are either optimistic (inocuity) either pessimistic (risk) . In many cities, an agreement between the municipal authorities and the mobile operators, exists . The location of emitters is declared (before the rolling out of the emitters) . Perhaps, a map is at disposal on Internet . Particular measures are taken concerning some sites (hospitals, schools) . Perhaps the threshold (of power) is under the legal value . The goal is to avoid that people living in the city fear the effects of waves on health . Clearly, there is no opposition to the use of mobile phones .

The ICTs are used to master the urban landscape . They are used by the people living in the inner city (and very much, as these people are in general rich) . It is compatible with the quality of the urban landscape . The historical heritage is preserved. This goal is achieved under the control of municipal authorities and professionals (architects, experts who are responsible of historic buildings etc ...) . These professionals make choices which are delicate, because it is often in a context of conflicts . They have to choose the colour of façades, the installations around the monuments, to allow or forbid car traffic etc ... The frequency of restorations is also a delicate choice (the historic buildings must be kept in a good state, but during the works people cannot see them) . Other examples are visitors paying for money or not, revamping museums etc ... That some of these choices are a constraint (for some people) is shown by the example of TV antennas and emitters . The mix of knowledge and power which has been described by Michel Foucault, concerning some professions (an example is the medical power) , exists in this case . These professionals have a doctrine . For instance, currently they extend the field of their interventions (preserving buildings dating from the industrial era, or later) . When they have to explain and justify their choices, they can use ICTs (electronic mock-ups, explanations on Internet) .

---

(1) This is described on the website [francetelecom.com](http://francetelecom.com) .

(2) Or more . The historical operator can provide TV through ADSL . Also, alternative operators could provide TV through ADSL thanks to unbundling .

## ICTS ARE USED IN URBAN SCENOGRAPHIES .

ICTs have pervaded scenography . It is clear in the case of theatre , but the same techniques are used in medias and in the streets . The « sono » is more sophisticated thanks to the techniques of digital sound . Illuminating technique benefits from computing . Projectors are oriented, and their light is adjusted, automatically . There is a program . New professions have appeared <sup>(3)</sup> .

## WHAT ARE THE EFFECTS OF URBAN SCENOGRAPHIES ON PEOPLE ?

Having to explain the effects of sounds and images on crowds, we have recourse to the theories on medias .

According to Vauchey, there are three kinds of theories on the effects of medias, the phenomenological ones, those coming from the « social control school » in the meaning of Michel Foucault, the theories at a social and macro-economic level . We shall insist on the theories of the « social control school » , then examine the economic aspects .

In the words of Vauchey, the effects of medias are described with three notions : solitude, confinement, dissymmetric influence . The listener (spectator) is locked in a room, lonely (or his behaviour is the behaviour of a lonely person) , passive while immersed in a flow of sounds and images . It is a long time, each week, without real human links . There is an analogy with the confinement which has been described by Michel Foucault in « Histoire de la folie à l'âge classique »<sup>(4)</sup> . To describe the dissymmetric influence, the metaphor which is used is « reverse telepanoptics » . In « Surveiller et punir » Michel Foucault has explained why the Bentham's panoptics is an architectural model, when the goal of Society is surveillance of people . Medias are a telepanoptics because the « guards » and the people they watch are not in the same physical place . It is a « reverse telepanoptics » because the signs go from the watchers to the watched people (in the Bentham's panoptics, visual signs and sounds go from the watched people to the watchers) . An other idea is that a radio (TV) station is an organization which is opaque to consumers . It is a complex organization, involving many professional specialties . It is located in many sites . The offices where are the administration and the programmers, the studios, the premises where technicians store and modify the programs, are in cities . For technical reasons, emitters and the premises near from them are (often) in the country. Thanks to telecommunications, all this work together . Technology is useful in an other way . It allows to guarantee that all these professionals speak about the same object (a program) . Techniques allow to control that the alteration of a program (recorded, stored, transmitted) remains bearable . The goal of this organization is to benefit from all the commercial opportunities : a recorded program is broadcast immediately or later, events are recorded in open air or in studios, anywhere, at any instant, programs come from the station itself or from providers etc ... The changes in the commercial goals of the station are decided quickly . If the enquiries about audience indicate a change in the consumers' tastes, programmation is quickly modified . The listener (spectator) does not understand how the radio (TV) station works . His reactions are watched through enquiries on audience . He is passive, conditioned to accept fashions, to consume new kinds of goods .

There is a radiophonic power, or influence, on consumers . It implies a radiophonic space, which is centralized . At the centre, the station and its emitters, at the periphery, the consumers . The architecture of the State TV and radio building in Paris reveals this structure of the radiophonic space (at the centre, a tower which symbolizes an antenna, and around a circular building as waves) . Often, in a big city, there is a district for the medias . Medias are part of the « visible city », but also part of the « invisible city » . We can see this part as a centralized space .

Briefly said, there is a dissymmetric influence of medias, and they use some means (fear, seduction) to obtain the adaptation of consumers to the new trends of consumption .

But we have described what is called by Tarde a « public », and not a crowd, as in the case of fairs and parades . According to this sociologist (who was writing a century ago) , technology (printing, railways, telegraph) has allowed the appearance of newspapers, therefore of publics and opinion . The readers of a newspaper constitute a public, which is influenced by a « publicist » (the person writing the articles which are read by the public) . Tarde has opposed publics and crowds . Public is more intellectual, but also is influenced by the publicist for a long time, each day, which gives a new, strong impetus to fashions . A crowd follows its emotions . Its behaviour is explained by contagion (between the individuals constituting it) . The kinds of behaviour are the same (expecting, attentive, demonstrating, acting) . Tarde was optimistic about the emerging role of public, and the declining role of crowd . His hope was newspapers provoking a spread of conversation, especially in the big cities where people have time for leisure, are diverse, and can easily find topics about which to speak (thanks to newspapers) . But this was before the consumption society (emerging in the twenties) and ICTs (radio, TV, and now Internet). We need an other theory, to describe the crowds, today . We have recourse to the Riesman's theory of the « peer group » .

According to David Riesman, three types of personalities correspond to three historical periods :

- The « tradition directed » personality corresponds to the traditional society, with its stagnant demography .
- The « inner directed » personality corresponds to a society becoming industrialized, with its growing population (because of progress, people live during a longer time) . An individual of this type accepts labour, effort, ambition and considers he is responsible for his own life .
- The « other directed » personality corresponds to the affluent society, with a stagnant demography again (less births) . For this type of personality, the guideline is to adapt oneself to the group . It is the goal, the norm and the best way to solve individual problems .

---

(3) Some explanations on the techniques of scenography are on the portal [voilà.fr](http://voilà.fr) .

(4) In the classic age, all those who were a problem for the proponents of Reason were confined (not only mad people) .

The « peer group » is constituted by young people with personalities of the « other directed » type, agreeing on fashions and choices of particular consumption goods . They meet together and speak about this kind of topics . Opinion leaders come from these groups . A leader in one of these groups is a young individual able to demonstrate that a particular product is the most satisfactory, and explain why . For instance, it concerns music, clothes, or new technologies . Nowadays young people are pioneers, when they use mobiles, surf on Internet, or even surf on Internet thanks to their mobile (mobile Internet) . Perhaps, the « peer group » does not need meeting in a room, today . The members of a « peer group » meet one another or use Internet and mobiles . The crowds during fairs and parades are like a large « peer group » . They meet to compare, measure, assess, their choices and tastes . If there is a confirmation (all those coming agree some choices, accepts some tastes) , there is also a test of new choices and tastes . Opinion leaders are there, observing people and their reactions . Often medias are present, because they are interested in the « event » . There are not direct human relations because the program is already chosen by the scenographer . All that people have to do is to listen and to look at the sight . Technology is used (loudspeakers and digital sound, projectors, screens) . There is a disymmetric influence, even if there is no confinement (as in the case of radio and TV) . People are like lonely people, the reason why they are there being not conversation, but the program .

In a consumption society, the « peer group », the fairs and parades in a big city, the medias have many features in common . People, who are « other directed » individuals, who want to adapt to the other, to behave as the other, demonstrate their choices and tastes, clearly and collectively . Obviously, it is useful to marketers, firms which sell consumption goods etc ... Consumers consider it is necessary, to know what are the most satisfactory choices, which are also made by the other .

### THE ECONOMIC ASPECTS OF URBAN SCENOGRAPHIES .

In some cases, urban scenographies allow economies . Take the example of fairs in the streets, with many stands selling goods . It is cheap as only some loudspeakers, streamers and posters are needed . But often it is expensive . The scenography must be paid . Decors, devices illuminated and diffusing sound, are used a single time . For example, floats with mobile decors, lighting, sound are costly . Perhaps there are proceeds, if a Carnival in a big city attracts visitors . Or it is a complement of medias, which are also costly (the complex chain, production, programming, transmission, is costly) . The same goal is achieved by an other mean, because people who are together in a place are observed and it is a test of their choices and tastes . Moreover, medias are often present, and when the scenography is decided, it is taken into account . Medias still need « events » (to produce programs in the studios is not sufficient) . Technology allows medias to show « events » more easily . Take the example of a photographer making photos of an event, and transmitting them through WiFi (Wireless Fidelity) antennas, which have been rolled out for this purpose, to a colleague who selects them (and they are sent to the newspaper immediately) . We have all the characteristics of medias : technology is used to benefit from the best commercial opportunities, very quickly .

The crowds at fairs and parades are not ordinary crowds . People coming to fairs and parades are informed on the program, its themes, how it unfolds, and accept it (here we describe the « events » which are really organized, only) . The goal of this crowd is fixed before it gathers and not chosen by itself, when it is gathered . There is a role of medias . Medias professionals are supposed to know the consumers' tastes very well, and when they inform people on an « event » they are sure of the kind of program which is announced . There is also a control, as streets and public places are used . Tarde has remarked that publics generate crowds . In principle, a crowd generated by a public (the readers of a newspaper gathering in the streets) is more oriented by ideas, less subject to the contagion of emotions (but it is not always the case) . It is the same for the crowds in fairs and parades .

When the consumers' choices and their tastes have been observed and tested, how this is interpreted ? Either the accurate techniques of marketing are used . Either it is more empirical, many attempts are made, and when there are some of these attempts which are successes, it is considered sufficient . Fashions, styles (for instance of music, clothes) are concerned . In general a « system of actors » is involved . Here there are, in the « system of actors », marketers, opinion leaders, medias, the scenographer, firms producing consumption goods etc ... From the point of view of the « system of actors » the urban landscape is a useful decor . The scenographer highlights and magnifies a single aspect of the urban landscape, changing it into a decor which is adequate to the tastes of the people coming to the parade .

At the opposite, the urban landscape can be considered with an experimental stance, or an aesthetic point of view . In this approach, the quality of the urban landscape is a public good . But even at this stage, there is a question to answer . Either many projects are accepted, and the urban landscape is a patchwork, with a trend of modern art in this place, an other trend in an other place, experiments etc ... Either there is a unity of the urban landscape, in a big city .

### THE SOCIAL MEANING OF THE URBAN LANDSCAPE .

This point of view, or stake has been described very well by Marcel Poete . He is the most famous historian of the city of Paris, and a theorician of urban planning . According to this author, a city follows a « curve », like a living being, from birth to decline . Paramount are the commercial opportunities, which depend on communication . Often a city is located at a crossroads . Not only material exchanges, but also intellectual and spiritual ones, matter . In the occidental countries, a structure of the city (visible in its plan) , coming from ancient Greece, has allowed the location and success of cities in various situations . The monuments of the cities are of paramount importance . They display the choices of the city, concerning the existing stakes . According to Marcel Poete, the « curve » is dramatic, and requires a volunteer stance . The memory and the experience of the City are resources, and they are expressed in the monuments . Marcel Poete uses the word « mysticism » . The « mysticism » displayed by the monuments of a city can be the Nation, the King, the Religion, the Progress, the Science etc ... Writing in the twenties, Poete believed that the « mysticism » of the city at this time should be the social stake (Society using its resources to solve social problems efficiently) . He was a proponent of innovative solutions for the city of Paris, which were proposed at this time (to organize the growth of this city thanks to urban planning in the peripheral towns) .

This kind of theory puts the stress on the preservation of historical heritage, in the inner city . Even if modern projects are accepted, the quality of the urban landscape is of paramount importance . These projects should reflect the choices of the City, concerning the major stakes and its destiny .

## CONCLUSION .

Now we can display the framework of this text, clearly . Our opinion is that when ICTs pervade the society, there are many effects : ancient equilibria and disequilibria remain, new equilibria appear (re-equilibrating) , new disequilibria appear . No wonder that we find ICTs on the two sides (concerning the urban landscape) . There was an ancient conflict (either the quality of the urban landscape, either a decor) , which remains when ICTs pervade the society . In general, in a big city, the quarters which are dedicated to entertainment are not in historical sites, but it is not always the case, and coexistence is difficult when it occurs (because of crowd during the daytime and nighttime, noise, lightings etc ...) . On Internet, websites dedicated to entertainment, and history or aesthetics, are separate, but physical spaces have still a role .

Finally, the question of the limits (of the change of the urban landscape into a decor) is posed . In the case of Eurodisneyland, the urban landscape is totally a decor, but it is not a city (it seems that it is a resort) .

Certainly ICTs have changed this conflict . In the past, crowds in the city were making history . As it has been highlighted by Tarde, the press has changed that (the public appears, the crowd has a less important role) . Then this changes again, because of the consumption society (in the twenties) and ICTs (medias) . Nowadays crowds in the city are like « peer groups » according to Riesman . When people meet in the streets, it is an other mean (than medias) to be immersed in a flow of sounds and images . The goal is to achieve an agreement on consumers' choices and tastes . These choices and tastes are confirmed, or they are tested, as people can easily display that the sight is pleasant or that they are frustrated, using signs (or they give their opinion after the « event ») . In exceptional times, the ancient role of crowds in the city, remains, but now medias are involved . During protests, crowds use the streets and public places as a decor, to send messages to the opinion, and they want to confiscate the use of medias (they want to fix the content of the « channel » in the place of the medias professionals).

The existence of these agile tactics confirms that the social meaning of urban landscape is at stake .

According to some authors, the « post modern city » is a kind of model . The goal is not to allow production, but to promote consumption . In architecture, the post modern style displays details coming from the ancient features of architecture in the city . It is to obtain a visual identity, with a commercial purpose . This kind of city requires many malls, showcases along the sidewalks, streets allowing the car traffic etc ... The quality of urban landscape is not necessarily taken into account . The preservation of historical heritage is not necessarily a goal .

The crucial point is participation . According to the proponents of the social meaning of the urban landscape, it allows and stimulates participation . The places where there is a social meaning of the urban landscape, as historical sites, are visited, have a presence for the inhabitants, have an aesthetic value, are favourable to the local social life . Some people support these choices (intellectuals, artists, creative professions) . At the opposite, those who want to use the urban landscape as a decor, have commercial purposes .

## REFERENCES .

- FOUCAULT MICHEL . Histoire de la folie à l'âge classique . Gallimard . 1992 .  
FOUCAULT MICHEL . Surveiller et punir . Gallimard . 1992 .  
POETE MARCEL . Introduction à l'urbanisme . Anthropos . 1967 .  
RIESMAN DAVID . La foule solitaire . Arthaud . 1964 .  
VAUCHEY JEAN PASCAL . Pour une géographie critique des espaces sonores . Netcom (Notes et Etudes sur la Communication) . Vol n°2 . 1987 .  
VAUCHEY JEAN PASCAL . Les mutations de l'espace sonore ou la destruction de la communication sociale territorialisée . Netcom . Vol n°1 . 1987 .
- WEBSITES :  
voilà.fr Encyclopédie Hachette . Articles « Scénographie » , « Monuments historiques » .  
francetelecom.com Recherche, then « archéologie » .