

## **Urban planning and accessibility of urban spaces.**

Isabella Tiziana Steffan (STUDIO STEFFAN)

Certified European Ergonomics Architect (Eur/Erg), expert in environmental usability and Design for All

The subject of accessibility is a complicated one, that falls within a larger issue, an issue that also relates to the **usability of the geographical territory and the mobility of the users**: the latter includes urban parameters connected to the **organisation and management of urban spaces and road traffic**. This theme has since many years taken on a strategic importance at international level: to consider the pedestrian citizen as the main actor of the urban scene, and therefore to plan a city around his needs.

To be able to use public spaces and to have **safe, easy and pleasant pedestrian routes**, is important for all pedestrians, whose interests vary according to their age, physical and sensorial abilities, psychological and cultural personal approach: it is therefore important to realise public spaces that can guarantee usability and autonomous mobility to the highest possible number of people. With autonomous mobility we mean the possibility to move within the environment without escort and without having to make a psycho-physical effort for adaptation that is too much not only in terms of human thresholds, but in terms of human abilities that can highly differ: therefore, the possibility to walk becomes the common denominator for different users and urban quality should be evaluated according to how compatible is with this parameter. For children but also for blind or visually impaired people, it also means to have the possibility to be able to orientate oneself, i.e. to have the subjective ability to know one's own position within the environment both in general and in relation to the starting and arrival points: the urban planning should facilitate the process of gathering and elaboration of the sensorial information that are useful in order to orientate oneself.

### **(POLIS/BAS 2006)**

During the international POLIS/BAS conference "Universal Design of Buildings: Tools and Policy", that has taken place at Bruges on 16-17 November 2006, the results of the European POLIS and BAS researches have been presented: although both European researches aimed at identifying tools, initiatives and support policies for the development of Universal Design in buildings, during the final conferences it has become clear that there are some aspects of accessibility and organisation of urban spaces that cannot be ignored. In particular, I myself have spoken about Italian tools and policies, among which the development in the past 20 years of the PEBA (Plans for the Elimination of Architectural Barriers, both for public building and for urban pedestrian routes), describing their methods, criteria, practical examples and future developments of urban ergonomics. In fact, in order to start a positive change in the field of urban planning, human changeability should be more conscientiously used as the most important variable in the relation between man and the built environment; the project solutions should be made compatible with the different needs, guaranteeing usability, safety, autonomy, easiness of perception and use, alternative ways of use, according to changeable and diverse needs. The routes should be thought so as to be easy to use also by weak pedestrians, people with reduced mobility, but also with different ability in perception and orientation such as elderly, children, occasional users and foreigners, that need references in order to orientate themselves (the so-called landmarks and road signs), that are relate to different cognitive and cultural backgrounds. The issue of the orientation and perceptibility of the urban space, used by weak users even on occasional basis, is still underestimated and very critical: in order to understand how difficult it is for a visually impaired person to move around and orientate himself freely, we can just say that when we move around we use the sight in order to gather around 90% of the environmental information. This element should influence also the choices in urban planning: for example let's think about all the roundabouts that are taking the place of the normal intersections both in the States and in many parts of Europe: this free flow of vehicles does not seem to be compatible with the needs of many a weak pedestrian.

An important theme is that of the **road safety of pedestrians**, and in fact in order to increase it strategies, laws and building standard are since long time being identified, that also favour a better **organisation, liveability and safety of urban spaces**. Many initiatives

have been developed at international level in favour of children, mostly in order to guarantee safe home-school pathways, that can be walked autonomously, also because this theme represents an important element under the educational point of view for the growth of the young people's personality and sociality. Such policies also facilitate the mobility of weak users, but not always do these interventions manage to provide adequate answers to the needs of the various users through adequate projects.

### **(Mobility Show 2006)**

The theme of the pleasantness of public spaces cannot be codified, since it is linked to individual perception; the ergonomics is devoting more and more attention to this aspect, which is fully considered an indicator of comfort and studied by environmental psychologists. I have myself spoken about these issues during the Mobility Show, the first conference and exhibition on sustainable mobility that took place from the 21st to the 23rd of September 2006 at Carrara, and that has seen the participation of about one hundred companies and organisations presenting highly specialised products and services to a highly selected public. The conference on "The right to mobility, governance, regulations and management" aimed to face the problem of the management of urban traffic through four different topics around which, in the latest years, researchers have concentrated their studies and debate has developed. Among the issues that have been discussed, the use of tracks within an urban area, traffic moderation, managing access to city centres through "road pricing". The results of the research that have been presented during the conference relate to – and this is an important element of innovation – a web portal for the necessary integration and for constant updating of knowledge and competences, with the perspective to build within Carrara Fiere a permanent show displaying the experiences on the theme.

At world level, it is becoming more and more urgent the need to implement policies of **environmental sustainability** and municipal administrations are asked to give their contribution. In order to have quality results, their contributions need to be economically and socially sustainable (also in terms of accessibility, safety, comfort). It is important to realise **sustainable environments** that can guarantee not only safety, but also usability and autonomous mobility to the highest possible number of people. To make long pathways can be made easier with the help of wheeled aids for people and loads, with new solutions: not only bicycles, pushchairs for children and wheelchairs, trolleys, wheeled suitcases, but also skates, scooters, segways. If the mobility of people within the city changes, the quality of mobility needs to be rethought, and should be "for All".

The potentiality to walk and orientate oneself within public spaces can therefore become the common denominator for different users, also with the help of the new information technologies. An intervention proposal that can be fair for Local Authorities could be the following. To identify an area, in which to test some pilot projects, by using methodologies and strategies that pay particular attention to weak users, namely:

- to identify an area of intervention, or a group of priority pedestrian pathways - in terms of connection to important nodes, in relation to the aims of the project: services, places of tourist interest and dedicated to leisure activities, resting areas, green areas – in order to be able to realise a possible network that is continuous, safe, accessible, comfortable, recognisable and attractive;
- to remove from these pathways the elements of inconvenience due to the discontinuity of the pathway, to big difficulties in using it, to the physical, visual and psychological threat represented by the motor means of transport;
- to assess the connections with public transports, with parking spaces, with places of interchange in terms of comfort and accessibility, to optimise the communication systems, the road signs and the connected urban furniture;
- to assess the possibility to keep together or separate pedestrian flows from other motorised or non-motorised flows.

The urban complexity, in order to be accessible, can be managed with those tools and methods that are typical of **Design for All** and **Ergonomics**, disciplines whose parameters are usability and compatibility, referred to *User Centred Design*, the user-focussed project; these disciplines, that foresee the participation of final users and all stakeholders since the very beginning of the project, can give a significant contribution to the management of a quality urban project useable, enjoyable by everybody.