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**« Urbaging: Designing urban space for an ageing society »
Prof. Acebillo Josep, 405440-115149**

Final Scientific Report

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Signature

Please complete this form in French, German or English (except part “A. Summary” – see below):

A. Summary

Please, submit the summary separately as a Word-file by e-mail.

B. Objectives and relevance of the research project

The aim of the research project “Urbaging - Designing urban space for an ageing society¹” was to assess the adequacy of built environment and public space in two Swiss cities to the needs of the elderly generations, in order to develop strategies able to integrate these requirements in the urban planning and design processes.

The objective was to analyze the ageing issue in a systemic approach and in relationship with the built environment.

Identify the specific territorial and mobility needs of elders, based on depth knowledge of the communal territory and its intrinsic quality was one of the main challenge of the research.

Urbaging has permitted to study the urban space from an architectural and urban design approach taking in account the needs and the behaviour of elder through an interdisciplinary approach. The research has developed and deepens a procedure for the analysis of public space and the improvement of its quality. The organization of build environment and its quality have been investigated through architectural and geographical methods, showing the potentiality of the synergies between disciplines. The different methodological approaches were challenging as to put in perspective the collective and territorial issues with an individual and architectural dimension.

According to sustainable development methodology, beyond the participation, the social, ecological and economic impacts are central criteria to consider. The real improvement of suitability of the build space for elders is possible through their direct involvement and the commitment of local authorities.

Urbaging has analyzed the use of public places and his accessibility for elderly people in two Swiss cities. This knowledge was used to develop new ideas on planning and project in order to improve the adequacy of these spaces to the needs of elderly people.

The project pursues also the objective to investigate within a project-oriented research a contemporary field in urban studies, that put in direct dialogue social science with architecture.

The significance of the project lies in enabling Swiss cities to cope with the changing demographic structure of their population and the uninterrupted urban growth and urban sprawl. Indirectly, this scenario will bring substantial benefits in reducing costs for elderly services and care and improving the well-being of these groups. A new way of rethinking the

¹ «**UrbAging**: Designing urban space for an aging society». Prof. Josep Acebillo, Prof. Joachim Schöffel; geographer: Marcello Martinoni e Alma Sartoris (coordinators) and Gian Paolo Torricelli, architect: Enrico Sassi and Elena Molteni; <http://www.arch.unisi.ch/icup>

territorial organization will help to fight the urban sprawl and reduce transportation needs and environmental impacts of urban development.

The demographic scenario which foresees a strong increase of elderly population (1/4 of the Swiss population will have more than 65 years in 2040) put under strong pressure urban organization and spaces which have been designed for the needs of the working population and the families. In this context, the project goes beyond the punctual provision of specific services for elderly – for example homecare services, dedicated transportation, etc. – towards the integration of elderly needs in the urban planning.

The major focus placed on the adequacy of the public space, show the intention to deepen a single aspect of the urban territory crossing the different scientific approaches. Assessing an adequacy of the urban spaces, or the city, for older citizen require a more complete and systematic approach, which has to integrate the examination of the residential and commercial space and the availability of services. The relevance of the Urbaging research lies in its methodology and in the importance that play the public space in the assessment of the capacity of a city to generate, maintain and increase the well-being of the citizens.

Urban space faces many different challenges at the same time. The rapid growth of the “cities”, that generate the urban sprawl, the demographic shift and the quest for enhancement of quality of life are linked together. The network, linking residential area and public spaces is one of the aspect to be considered. The cities in the next decades will need solid criteria to improve the quality of public space and the efficiency of the urban system in terms of accessibility and intensity. The residential real estate market plays a major rule in the suitability of a urban space: how the urban system is built and where are located the different functions? Focus on ageing society means also the ability to respond to growing social and care service needs. The costs of care service, for instance, depend on the spread of the older population, which is tightly related to functional organization of the space. Focusing on quality of built environment means also to be aware of the importance of intergenerational relationships, that build a stronger and a socially equilibrate society. The build space can encourage those relations at certain conditions. Suitable mix of functions, accessibility to the same places for different social and generational groups are the keys criteria for a build space that participate to the social equilibrium of a society. All this aspects tends in different manners to a more sustainable urban space.

C. Research design, theoretical frame, methods and data used

In the first step, the project has provided an analysis of public spaces, public services and transportation systems, using geographical data, and matching them with data on the distribution of elderly population. Secondly, followed the assessment of needs, uses and satisfaction of elderly with public spaces based on interviews and participatory meetings. The results have been discussed together with representatives of the municipalities, planning authorities and elderly in order to identify the major needs and to evaluate the design options proposed by the project group. The dissemination of the results, thanks to the use of concrete approach and the direct contact with municipalities and interest groups has already started. The dissemination will be further developed after the conclusion of the research, trough publications, conferences and aimed consultancy for public administrations.

The project has followed four steps and linked research questions:

Step 1 - Localizations

- How are distributed the public spaces and the services and in the actual build environment?
- Where live the old and the oldest old?
- How is the accessibility of public spaces by the public transportation system?

Step 2 - Uses

- How are used the public spaces and leisure facilities?
- Is this use satisfactory for the elders (socialization and accessibility)?

Step 3 – Adequacy

- How adequate is the actual build environment (public spaces and its accessibility) for the elders?

Step 4 - Proposals

- Through which projects or management approaches may be improved the suitability of the urban space for elders?

Two main axes have driven the research:

1. architectural project: process and concept of public space (typologies, criteria of uses and project, healthy urban planning),
2. ageing process : needs and major health issue and its differentiation among elders, social integration and intergenerational relationship.

The interdisciplinary approach used in the research, insist on the necessity to maintain both the systemic and the sectorial perspective. Not only there was interaction of different disciplines on the theoretical aspects, but also on project proposal and during the involvement of inhabitants.

The different practical and theoretical approaches are inserted in the general frame of sustainable development. The age-friendly city means a strong commitment towards the major challenges of the sustainability in our society and in the urban systems. The applied research insists on the continuous confrontation with the reality and its changing needs. The concrete implementation of scientific findings means stronger relationship between science and society, in which participatory tools are helpful.

The multidisciplinary approach involves geographical, architectural and urban sociology methods. The methods used included both quantitative and qualitative approaches.

The research began with a **statistical** and a **geographical** overview of the two case studies. The geo-statistical and territorial data covered a wide amount of topics:

- **demographics analyses** were based on the Swiss national census of 2000 (individual, buildings and domestic economy), which permit a very refined spatial analysis since all

the data are geocoded. Variable mapped and analyzed: age, sex, social status, nationality, social or economic activities, recent move, composition of the domestic unit and type of building. With this data, using the IRAP's model of "communal demographic evolution scenario" based on the observed previous population development (birth rate and migrations), we have developed demographic scenario. For a more actual vision we also had access to the up-to-date (2006 and 2007) municipal data of population.

- The **quality of the build environment** included distribution of the public spaces, of the services (Swiss enterprise census: 2001 – 2005) such as: health care, wellness centre, retail trade, sport facilities, restaurants and bars, shopping malls, theatres, cinemas, municipality, municipal libraries, schools. The localization of public spaces concerned places traditionally defined as public space (streets, square and parks). The public transport network crossed with demographic data gave maps of accessibility.

In parallel with the geographical overview an **architectural description** was made on the field on a selection of public spaces. The architectural analysis collected data on physical aspect of the territory (accessibility, comfort, services, playground, toilets, ...) and also some idea on the functionality of the different spaces.

Quantitative and qualitative facts have been collected through a written questionnaire sent to a representative sample of the elder population. The investigation permitted to collect data on the use of the build space, the perception of the neighbourhood and the use of the different transportation means.

Finally we had a large amount of data collected during the **participatory meetings** with the population. On one hand we could specify the information from the questionnaires, and on the other we gained new information about general topics or about single spaces and the foreseen possibilities to improve its quality through an architectural project.

D. Results and highlights

The two case studies

UrbAging is based on two case studies: the city of Lugano in the canton of Ticino (48'457 inhabitants in the 20,005 and 26 km²) and the city of Uster in the canton of Zurich (30'727 inhabitants in 2005 and 28 km²).

Uster has a demographic profile relatively "young", while that of Lugano is "old". In 2000, the seniority index was 78.2 in Uster and 136.6 and in Lugano, compared with a national average of 95.3. The progression of aging is also very different between the two municipalities: Lugano in late 2005 had an index of 157.3, while Uster of 84.1. The position of the two municipalities in the urban system helps to explain these differences. Lugano is the main city in Ticino, the canton with the highest rates of aging in Switzerland. Uster, is a suburban municipality, in the metropolitan area of Zurich, has a greater presence of families (and then more young people of school age) and, compared to Lugano, shows a better balance between age groups. In the town of Lugano 37% of elderly live alone, in Uster they are 31%. In both cities, 80% of elderly living alone are women.

The prospects for population growth have been calculated for the two cities. The city of Lugano will be able to maintain its population only if migration balances will be supported in the next twenty years and if the city will be able to attract mainly the young population in future. The

amount of elderly in the total population will increase from 5 to 12 percentage points, reaching in 2026 values between 22% and 29% compared to 17% in 2005.

If Uster will maintain positive migration balances and the young profile of new arrivals as in recent years will continue, the city population will increase over the next 20 years. In this case the share of elderly will increase from 12% of today to 19% in the next 20 years. Coming to miss the arrival of young people, or their decrease, the amount of elderly will increase to range between 23% and 27%.

The analysis of the distribution of daily use commodities, socio-health and leisure services indicates for Uster an almost exclusive concentration in the city center, in the area near the station. The residential neighborhoods offer few services. In the city of Lugano several neighborhoods, those most central and high-density urban area, offers a high number of services.

The analysis of accessibility of public transport for the elderly shows that in Lugano 61.3% and in Uster 66% of the elderly population has to walk less than 250 m to the nearest stop of public transport. For 93% of elders in Lugano and 96% in Uster, is enough walking less than 500 meters to reach a stop of public transport from their home. The access to public transportation for elderly population is in both cities generally good, however it should be taken in consideration, that a distance of 500 meters can be a major obstacle for some elderly. Furthermore, in some districts of Lugano, significant topographic height differences have to be overcome.

Surveys of the elderly population of Lugano on the use of outdoor public spaces

The survey in Lugano is representative for the elderly population.

Which outdoor places elderly frequent the most and for what reasons?

The favorite and most frequented places by interviewed people are Parco Ciani, the city center, the lakefront and Piazza della Riforma. These places are frequented several times a week and from a majority of people even every day. Parco Ciani is less frequented; more than half of interviewed people visit it once a week or less.

Favorite places attract particularly because they are very accessible and they offer a beautiful view, the presence of vegetation and tranquility. Some differences can be noticed according to the type of space: for example you search for a nice view at Parco Ciani, quiet, greenery and the possibility of a break on a bench, while in the center you want a lively environment, movement, animation activities and appreciate the easy accessibility. The elements that must be improved in these areas are the security feelings, and the presence of design elements like benches or fountains and dogs should be kept at the leash. Above all the possibility to rest on a bench is considered important and that is not only in outdoor locations, but also in stores.

Public spaces are frequented primarily for walking and depending on the sites, accompanied by encounters with acquaintances (in Piazza Riforma), the use of services (in the city, in Piazza Riforma), the observation and listening about what happens (in the city, on the lakefront) and resting on a bench (in particular the Parco Ciani).

In general, interviewed people, like to walk in places close to nature, along the waterways, in parks and in the city centre; the residential areas, own neighborhood and shopping centers have less or little importance for elderly. It appears that for people with poorer health, the city parks and residential areas are more important as places for walking in comparison to preferences of people in good health.

In which places people like to meet others?

In Lugano elderly citizens like to meet other people at outdoor and indoor sites. In general, the most important occasions for meeting other people, are during walking and at their own home, or with acquaintances. The meeting opportunities are at the bars and restaurants and at public places. For people who say they have a good health these preferences remain unchanged and in particular the parks and squares have a greater role as a meeting place. For single people, the arrangements in-house are less important, while shops as well as bars and restaurants play a major role in their social life.

It appears instead that the malls do not seem to fulfill an important social function: among the interviewed people only 7% said to visit the shopping malls in order to meet friends or relatives and 12% to see other people or movement.

Avoided places and sense of insecurity

The 62% of interviewed people don't avoid any place in particular. The 7% said to avoid Parco Ciani, the 3% subways and garages. People who avoid Parco Ciani were especially afraid of petty crime or feel disturbed by the presence of drug users or young people. Some people feel insecure and disturbed by the moving bicycles in the park. Some people don't frequent the park simply because they're not accustomed to. The subways and garages are avoided due to poor lighting and for fear of petty crime, but also because of the dirt and bad smells. Public spaces that are frequented with pleasure during the day are avoided by most people in the evening when it's dark. People who live alone feel more secure in public spaces than people living with partner.

The most important quality of a neighborhood

The most important quality in a neighborhood is its proximity to public transport, the presence of green areas, quiet and good air quality and good accessibility to the city center; follow the sense of security and proximity to food shops. For older people (over 80 years) the proximity to food shops and the generic doctor are more important in comparison to the 65-79-year old ones. Between 39% and 44% of interviewed said to perform their daily activities such as buying newspapers and visits to the doctor and pharmacy in the district; between 30% and 48% says to carry their errands out in the city center.

In addition to problems reported, such as points for unsafe crossings, the themes most heard in districts are the heavy traffic, noise, lack of green spaces and in some areas the lack of a meeting point or a district center. Many of the problems affect the urban population in general and they are not specific for the group of elderly.

Survey of the older population of Uster about the use of outdoor public spaces

The survey is not generally representative for the elderly population of Uster, but rather represents elderly with more difficulties (older old, people with a quite good or poor health, people who live alone or in residences for the elderly).

Which outdoor places elderly frequent the most and for what reasons?

The favorite and most frequented places in Uster are the woods, the lake of Greifensee, the city park "Stadtpark", nearby natural areas, sites near sheet of water or watercourses and the center of Uster. The 60% of interviewed frequent the center of Uster several times a week, only the 6%

attended it daily. Most of those who indicate the natural areas as favorite places, frequent them several times a week.

Accessibility is the most important criterion that makes a place particularly attractive. This is especially true for the Greifensee and natural areas. Other important factors are the presence of vegetation, benches and quiet and beautiful landscape. In the center of Uster and in the station area people enjoy offered services such as shops, bank and post office.

In general, the interviewed people love to walk in natural areas and along water courses. The parks and the city are not important as places to walk. In residential areas, the neighborhood assumes more importance as a place for walking especially for elderly and people with a quite or not very good health. For the more aged persons and those living alone, the city center and parks are, for walking, more important than for other people.

The share of people in Uster that mainly moves on foot is the same as in Lugano (35%); slightly higher than those traveling by public transport (27%) and lower than those who move with their own vehicle (16%).

Which are the places where people like to meet others?

In Uster places where people like to meet others are particularly shops and malls as well as their own house or friend's one. Unlike in case of Lugano squares, parks, bars and restaurants have in Uster secondary importance as meeting places.

For people over 80 years old and for those who claim to have a poor health, these preferences remain unchanged; moreover parks and squares have a greater role as a meeting point. Single people choose places, to meet other people, outside of their houses.

The social role of shopping centers in Uster (two of which of small dimensions are in the center of the city) is a little more important for the elderly in Uster than in Lugano (whose shopping centers are located outside the city). The 21% of interviewed frequent the malls to meet people and see the activities, the 13% in addition to meet friends or relatives. However the main function of these centers in Uster is to do shopping.

Avoided places and sense of insecurity

In Uster 62% of people don't avoid any place in particular. The 25% of people interviewed avoids the city park "Stadtpark" and 10% of these are only in the evening. The reasons for avoiding are: the fear of petty crime, or the presence of other groups of people from which they feel disturbed.

Interviewed people express a feeling of insecurity especially in the subways, but also in situations of overcrowding, such as getting on buses and trains during peak hours. During the evening, when is dark, the elderly avoid to come out. The group of older (> 80 years) feels disturbed and insecure by cyclists driving on the sidewalks.

The most important qualities of a neighborhood

In Uster the most important qualities in a neighborhood are considered, by order, proximity to public transports, good accessibility to the city center and proximity to recreational areas and activities. The distribution of responses suggests that the proximity to other services, or to the city center is important, but even more is their accessibility due to proximity to public transport.

Almost one quarter of people interviewed buy in the mobile bus "Milchexpress" (itinerant shop). The 36% had the opportunity to make daily purchases in their neighborhood.

For all interviewed groups, the proximity to public transport stops is the most important quality. By comparing the preferences of different groups, it results that the proximity to food shops is for 65-79 year old and for people in good health a little more important. The good accessibility to the city center is a little more important for the younger elderly. The result is different from Lugano.

From these answers we can read a concern for what might be important one day, or in less good health conditions.

The roads in moderate traffic, the presence of green, quiet and good air quality are considered more important from people in good health than older people. Older people and the one living in protected² apartments appreciate more the proximity to cultural and entertainment offers.

In some neighborhoods the growing number of new housing and strong traffic cause complains about the lack of a venue, the possibility of making purchases, or the lack of services.

The importance of pedestrian ways and the activity of walking

From the surveys conducted in both cities, it appears that walking is the main and most frequent activity outdoors in public spaces. In both cities the favorite places for walking are the natural environments, particularly around water elements like course or lake. Between the two cities there is one important difference: in Lugano the city center, with the 18% of respondents, has a significant important as place for walking, while in Uster this value is only the 8%. The surveys also show, how each district and residential areas assume greater importance as a place for walking, especially for people with mediocre to not good health conditions and for the category of older people with more than 80 years. Both in Uster and in Lugano walking is the most important means of transport for the elderly. This results confirm other studies that prove that the percentage of people who walk daily increases with the age.

Characteristics that promote the attendance of a square, or a public space by older people

The presence of movement of people and activities is an important pull factor for the elderly which encourages them to attend public spaces and contributes to their sense of security.

The attendance of the places change during the hours of the day mainly depending on the personal habits, for example at some hours the most crowded places are avoided.

A square is not attractive if we feel pushed to the margins or excluded by other dominant groups of people. An area that provides space for different users makes it a safe place at the eyes of the elderly.

An attractive public space is also free from traffic, from parked cars and therefore, from the noise. The noise is not disturbing for all; this is particularly due to the decrease of hearing by the elderly and also depends in relationship with the alternatives of quiet places that the city offers. Important is, for elderly, a secure access of public space which is functionally oriented to pedestrian mobility.

A square is not attractive, even if aesthetically beautiful, if it is not easily reachable position, unless it offers other opportunities like bars, shop or public services.

The infrastructure considered necessary in a square, respectively in a public space, is as follows:

- Games for children to promote the presence and intergenerational contact;
- Free access to dogs, although there are those who feel disturbed;

² Protected apartment are those residential spaces that benefits of special vigilances and daily services (domestic and care), that improve the possibility for dependant person to stay home avoiding to be admitted to care institutions.

These first two elements are considered important, because children and pets have a mediator function and often provide the excuse to start a chat.

It is also considered important the presence of:

- green vegetation, which provides a shadow, is a need for the elderly referred to all types of public spaces. It is recognized that in a historic square is often difficult to add the green and it is not always necessary if the surroundings there are alternatives;
- services such as food bars, restaurants, but also a kiosk and box office to buy something and then sit down;
- water;
- accessibility to toilets that offer a standard of hygiene and cleanliness;
- benches with characteristics ideal for the elderly (especially suitable sitting height, which is the highest of standards in use, and back and arm-rest).

Attractive and accessible pedestrian ways

In the city of Uster was taken in consideration the theme of attractiveness of the city center as a place for walking. Despite the importance of walking, Uster is not a place where older people walk, as opposite to the center of Lugano.

Interviewed older people consider that an attractive urban center is represented by the combination of a square, a pedestrian area and an area for walking.

The important elements are the same referred to public space (presence of activities and services, absence of traffic, attractive pedestrian ways).

Out of concerns, about the necessary infrastructure along the pedestrian ways, emerged the proposal of little oasis. The little oasis has been defined as nice and cozy corners offering the chance to sit in the green. These should be present along pedestrian ways, not at the fixed distance from each other, but on a regular and fairly frequent way. Each one may have its own specific character and provide, for example, a fountain, green, sun shelters or toilets. The elements that should always be present are benches, suitable for older people, and vegetation. In general, the number of resting places in both cities is considered poor. Nevertheless the presence of benches at a fixed and regular distance is not considered a priority. On the other hand the presence of toilets is very important.

The network of pedestrian paths should be a tight one. The routes must be wide enough and have a smooth pavement. The pedestrian ways serve recreation, exercise and conduction of daily activities.

The pedestrian ways between two points of attraction should be as direct as possible.

As for accessibility by public transport, should be given particular attention to the pedestrian path from the stop of public transport.

Factors of insecurity in the public space during the day

For the two case studies were collected information and represented on a map (ref. appendix A8) about the places that create insecurity for the elderly and further divided in places that cause insecurity gaps due to lack in the management and deficiencies of buildings and infrastructures. The problems of insecurity during the day are particularly linked to moving traffic and pedestrian mobility.

The movement of bicycles in pedestrian zones, as well as mixed routes (pedestrians and bicycles are allowed to move together) and the use of cyclists of paths reserved only for pedestrians such as trails and sidewalks, are factors that can create a sense of insecurity especially for the elderly.

Older people feel insecure crossing roads in the absence of pedestrian crossings. This situation is found in areas with moderate traffic at 30km/h in which "the installation of pedestrian crossings is prohibited"³ because a pedestrian has the right to cross at any point.

The paths or rough walking footpaths cause insecurity. Pavements and cobblestone (not only those with profile and marked irregularities, but also paved) and passages from one type of paving to other, increase the risk of tripping and create a sense of insecurity.

Regarding public transport, bus stops often do not provide safe conditions. The sidewalks are too high; often there is a lack of safe and comfortable waiting place, that should be away from the road. Older people often complain about the hasty driving style of many bus drivers. In addition, the crowded places, such as getting in a public transport during peak hours, create insecurity.

Last but not least, badly or poorly lit subways and lack of handrails, in particular in the presence of steps and slopes are other factors generating insecurity.

Strategic recommendations

Management

Governance: the city for the elderly is a city for all

UrbAging focuses on the needs and requirements of elderly people in public space, but the city for the elderly should remain a city for all. Consider the specific needs of older people in their diversity, taking particularly into consideration the range of needs of the weakest, benefits at the same time many other citizens, children, families and young people. The implementation of the needs of older people into projects, can improve the quality of life offered by a territory and at the same time should prevent the creation of segregation or exclusion. The parks and public spaces, should not be frequented exclusively by older people; in fact, their design and general qualities should encourage the attendance of different groups and encourage intergenerational encounters. The age group of older people includes three or more decades of life and every individual brings with him a story, different needs. Stereotypes and simplifications are counter-productive, and the designing solution should be as individual as possible.

Taking into account individual needs, during designing a project, means identifying the categories of persons (children, families, youth, workers, businessmen, retired couples, elderly) who are particularly affected and sensitive for this concrete space, evaluating also the potential benefits for different categories.

An analysis of the spatial segregation of particular groups of people and feelings of exclusion (social and/or spatial) is recommended. The potential benefits of a renewed use of the space has to be developed through a project.

³ Art. 4 Verordnung über die Tempo-30-Zonen und die Begegnungszonen

Participation: the city for the elderly is built with the elderly

The elderly, both if they are daily user or rare visitors of public space, are those who are most able to express their needs and, above all, know precisely the obstacles and difficulties that they have to face daily in their territory. An involvement of older people in defining needs and consequently the objectives of a project is essential. The city for the elderly is built with the elderly and they must be an active part of the definition of priorities and projects.

Basically there are different possible levels of involvement of stakeholders in different phases of a project, especially during the phase of analysis, and then in the design and the planning. The degree of an useful, desirable and feasible involvement has to be established at the beginning of the process. Depending on the type of analysis, is possible to involve elderly citizen for a simple collection of their needs up to an intensive sharing and discussion. In terms of design and planning exist forms of co-decision procedure and creation of projects and forms of consultation on the basis of concrete proposals. The choice of the right time of participation in the project and the actors who should be involved represents a central issue. Among actors, beyond citizens, should be included associations and public authorities as representatives of the elderly and guarantors of their interests. In case of the plurality of needs and requirements (socialization, mobility, availability of free time) the priority should be given, if proportional, to those with the greatest needs.

Mainstreaming

The factors that make a city or a public space suitable to the needs of the elderly are numerous: adequate offer of housing, goods and services of daily use in the neighborhoods, access to treatments, suitable places for meeting outdoor and indoor, ability to move independently and in particular a solid social network. If a urban space doesn't meet the needs of the elderly, or do not provide a sufficient quality of life, the replacement interventions are important to offer. There are numerous ways to meet these needs and cover transversally different sectors of public body: town planning, housing, social and health services. Create a city for older people require a comprehensive approach.

Consider an active cross-theme of "elderly" involves setting:

- working within various levels of government;
- partnership contracts among public, private and voluntary sector (for example transport);
- innovative ways of creating and/or management of parks and public spaces;
- incentives for private investors (for example increasing indices bounded with presence of services on the ground floor or apartments in the vicinity of attractive public space).

Urban context

Accessibility

In order to be attractive, public space must be easily and securely accessible within the district, through safe and nice walking trail from other areas of the city, particularly with public transport and bus stops nearby. The ideal path from the nearest public transport is direct and is short as possible. The dangers on the main routes and entrances to public spaces should be valued and mitigated if possible. The pedestrian crossings regulated by traffic lights must also take into account the longer crossing time by the elderly (such as by detecting the presence of pedestrians

that will ensure security by adjusting the length of the green), for instance in “secured ways” specifically signaled.

Direct access to the space must be characterized by the absence of physical barriers (architectural design elements). A focus only on major projects of urban redesign is not enough: any construction can and should be the occasion to remove obstacles, for example to a curb ramp or a public access. The construction or renovation of outdoor public spaces and buildings should respond to the specific needs of persons with reduced mobility (improvements of sidewalks, slopes, presence of ramps, type of pavement, handrails, pedestrian crossings) and respond to the needs of people with diminished sensory capacity (support through guidance materials, colors, signage for the visually impaired ...).

Finally, there should be adequate information on the problems and obstacles existing on paths for persons with reduced mobility, so that they can foresee and overcome these difficulties organizing their own means or with the help of other people (family, volunteers, public services).

Connectivity

The city must be perceived as a network of quality that links public spaces rather than a sum of sites suitable to different needs. A good connectivity between public spaces within a city allows appreciating individual sites and encourages walking.

The footpaths are attractive, if they are safe and not interrupted by barriers that cause insecurity and are not difficult to overcome (ladders, tunnels, dark alleys, poor lighting).

The design to ensure the continuity of paths, intervene in the quality and size of the area, on the recognition (orientation), and on signs and materials. The ideal is to create little oasis, pleasant places, welcoming and of quality that invite you to take a rest along existing, or new, pathways. The oasis is made up of a number of elements that are repeated throughout the network of footpaths (benches, water, vegetation, adequate lighting, trash containers, shelters against sun, rain and wind and toilets). Elements of furniture are not necessarily always the same and can express the specificity of individual places.

A network of attractive paths, by the way, encourages attendance, not only for entertainment but also to deal with daily activities. The busier the place or route is, the greater the possibility of random meeting. The feeling of safety, under certain conditions, increases in addition a frequent attendance.

Intensity

Urban spaces and squares, in particular, must be living spaces, linked to the presence of people and activities of consumption and trade. The presence of bars, restaurants, shops, public services etc. favors the attractiveness and frequency of squares.

The intensity of use of different type of public spaces are not to the same degree, which results from its position in the urban fabric and the diversity of its functions. Some public spaces can be adapted to the needs offering peace of mind for example, which does not mean empty spaces at all, but has to be arranged for. In case of certain squares and streets, urban uses should be more intense. Inserting commercial activities on the ground floor (bar and small shops) and increasing the mixing function (housing, equipment, services) contribute to generate more intensity in the urban space.

Quality of space

Conviviality

To the convivial nature of a public space contribute different elements, for example the distribution and quality of urban furniture (see chap. comfort), vegetation and water elements, the perceived sense of security, diversity of uses etc.

From the perspective of older people, it is important that the public space encourages attendance by several generations. The possibility to socialize, partly linked to an intense use of public space, is the sign of a friendly place.

The public space has to be intergenerational and to support activities that promote the interaction.

The suitability of space for children and adults may be expressed through the architectural design as a reflection and a supports for this function of public space. Providing resting areas and seats for groups and not separate units can make easy socialization. The design of streets and public spaces should put emphasis on a functionality of areas as meeting place. This can be achieved by restructuring the existing pedestrian, or by designing a new space with better quality (eg little oasis).

Flexibility

Public spaces and their furnishings can be designed to allow flexibility in their use in order to ensure the possibilities to create temporary events (market, stall, screen, concert, show etc.). The attention to flexibility must clearly be balanced with other needs that exist around the public space. Flexibility involves the installation of the technical infrastructure (water, electricity) and the presence of sufficient spaces and accesses that allow the installation and dismantling.

Security

The use of public space is strongly influenced by the feeling of security. The feeling of fear or insecurities depends on the subjective perception of dangers, the presence of preventive measures and the actual situation as regards the acts of petty crime or the risks of falls and accidents.

The presence of bicycles on footpaths makes pedestrians insecure. Combination of walking and cycling on the same place must be reduced, possibly by separating the paths. On the other hand, where possible in public spaces, should be created substantial areas for encounter for pedestrian, for example by creation of pedestrian zone (20 km/h). The quality of the pavement is important to avoid the risk of falls. In addition the pavement and the cobbled paving can create difficulties for the elderly by increasing the risk of tripping over. In dark alleys, streets and subways is important to ensure an adequate lighting and along the main routes to ensure uniform illumination. The alternation of light, shadow and high-beams should be avoided. In some cases, placing windows or decorations in the subways can contribute to a greater attractiveness.

The subjective perception of security is very important on the practical uses of public space, therefore is useful to make inquiries among the population (places, times of day, patterns of

anxiety etc). In parallel with this collection of information, may be necessary to collect and provide accurate information on the existing real dangers.

Comfort

The concept of comfort concerns the material qualities of space, but is also influenced by environmental conditions and by the foresighted practices linked with a particular area. The appropriate use of public spaces, safety and pleasant, is influenced by several factors that should be considered in the design:

- the presence of shade especially with tall trees and the possibility to shelter in case of rain (roofing, canopies, pergolas, "sails");
- niches with different environmental conditions, through the use of vegetation designed to meet the needs of most users;
- visual and acoustic screens that separate the public space by roads with high traffic, while retaining the accessibility and visibility and avoiding the creation of secluded places;
- benches with backs and armrests and a seat not too inclined (difficulty in standing up);
- preferably wooden painted benches that allows a rapid drying, avoiding metal benches that are too cold or too hot;
- drinking water and jets of water at a height appropriate to the needs of children (and/or dogs);
- use of water for games and to create atmosphere;
- the presence in public spaces of public toilets, favoring models self-cleaning or made with materials easily washable;
- information on the location of public toilets;
- avoid the toilets underground (difficult to access and sense of insecurity).

Projects

On the basis of general recommendations that emerged during the research, have been developed six model design proposals, three for each case studies. The main criteria, adopted for the selection of places to be designed, emerged from the inquiry with the older population and are as follows:

- importance and willingness to walk and/or stand near water and nature;
- importance of the connection path between the most attractive and most interesting areas;
- importance of pedestrian movement within the city.

Two different scales and complementary projects have been developed in the two cities: path and site projects.

The proposed interventions are aimed to improve the quality of *Accessibility*, *Connectivity* and the *Intensity* to the scale of the context, while the scale of the quality of interventions improves *Conviviality*, *Flexibility*, *Security* and *Comfort*.

Route 1 - Uster, along the river Aabach

Current status: the current path along the river Aabach, which crosses the town, is characterized by the lack of continuity: it is not possible to walk along the river (no public land and buildings huddled to the levee).

Proposed interventions:

- restoration of recognizability of the path through the definition of the pavement;

- restoration of the continuity of the trail by building a bridge located into the riverbed;
- inclusion on the route of "little oasis" (offer of toilets, places to stop, fountains, benches, etc ...);
- construction of railings and handrails where necessary, to ensure greater safety for pedestrians.
- Route 2 - Lugano, along the river Cassarate

Current status: the current path along the river Cassarate (left bank) is oriented north-south and crosses the city from the periphery to the center. It is narrow, not very accessible, has low connectivity, isolated and it cause a high perception of insecurity. Public lighting is almost absent; along the route there aren't public toilets. It is sparsely attended.

Proposed interventions:

- inclusion of ramps on the iron bridge linking the left and the right banks to remove architectural barriers;
- enlargement of the section of the space for the pedestrian path (moving, where possible, of remind or hedge fencing);
- improvement and enhancement of lighting;
- placement of "Little Oasis" along the way (offer toilets, places to stop, fountains, benches, etc ...);
- planting of trees to provide shade and shelter.

Place 1 - Uster, Schiffände

Current status: the Schiffände is the pier, and it is at the end of the trail that leads to the lake (see Route 1 – Along the river Aabach). It hosts a stop of public transport and a small public exercise (bar). The public exercise practice irregular schedules; the lighting is low and there are no toilets. This is an area whose strong change in frequency is subject to seasonality and weather condition

Proposed interventions:

- increase the intensity of use in low season and by bad weather through better provision of services (bar, restaurant)
- equip the space with facilities for temporary events (festivals);
- improve the lighting;
- include a "Little Oasis" and increase the amount of sittings;
- strengthen the connection with the centre and improve the perception of space.

Place 2 - Lugano, garden Lanchetta

Current status: the "garden Lanchetta" is a public space near the lake where is also situated a pier for private boats. It is the only public space in Lugano which houses a bar/restaurant overlooking the lake, has great potential and could be more popular. It is a space equipped with a playground and an underground public bathroom.

Proposed interventions:

- creation of a "Little Oasis" and replacement of underground public bathroom (not used welcome) with a bathroom at ground floor;
- construction of a pergola to provide protection and shelter;
- creation of a "green barrier" to increase the sense of security, protect the area from the noise of traffic, while allowing free viewing of the lake from the road;
- placement of trees in special tubs designed to serve as benches;

- increase the connectivity of the pedestrian system linking more sensitive space to the network of existing paths.

Place 3 - Uster, Schulhausplatz

Current status: space that overlooks the school and a residence for the elderly. It is inserted along a pedestrian path connecting the center of the city to the cemetery. There is a restaurant but the intensity of use of the place is low.

Proposed interventions:

- increase the functional mix (housing, equipment, services) to develop business, life, animation;
- exploit the presence of the school and residence for the elderly to foster intergenerational space and activities that promote the meetings (include games for children and adults);
- increase the number of benches with sufficiently high seats and with back and arm-rest;
- insert a "Little Oasis" with a toilet, the presence of a tub of water, greenery and a pergola to provide protection and shelter;
- improve the quality and quantity of lighting.

Place 4 - Lugano, Piazza Molino Nuovo

Current status: Piazza Molino Nuovo is not perceived by the population as a real square. It is difficult to access, surrounded on three sides by roads with heavy traffic.

Under the fountain there is a public toilet (unused).

A huge fountain is in the middle of the square, its noisy and the position does not facilitate the conversation. The presence of benches and green areas are considered insufficient. Part of the surface is used as a parking, the presence of cars is perceived as a nuisance.

Proposed interventions:

- elimination of parking surface and construction of an underground car park and extension of the pedestrian area;
- elimination of the fountain, replaced by a plane surface of water that defines the space;
- different flooring (hardwood flooring/floor permeable) to characterize the space and allow various activities and construction of areas for the game (children + adults);
- creation of a "green barrier" to increase the sense of security and protect the area from traffic noise;
- replacing existing underground public bathroom with the services on the ground floor;
- arrange in order to allow realization of temporary events (market, shows ..);
- foster the intensity of use due to the presence of bars and small shops on the ground floor, with an intervention on the traffic system.

Experience with participation

The general lines of UrbAging, had expected to involve older people in different phases of the project, both in the definition of their needs in public space (questionnaire, in-depth of discussion group) and in the design phase.

During the progress of the research work there was a debate about the fairness of the combined terms of "design" and "participatory". From the perspective of the designer, in this case the architect, the first doubts are raised about the need to increase the "participation". A good project, in fact, responds to the needs of the customer and consequently, a good designer is able to understand and stimulate the expression of needs by the commissioners.

The public space however, presents different characteristics than the single building; in particular, the client (public body) does not always integrate users needs, even though he represents the user politically. In a certain sense the client is the community, but the relationship is very different than the traditional client-designer. To find out the needs of citizen we must use specific methods of animation and involvement (such as brain storming, visits of lands, ...).

Stimulating reflection and discussion with concerned citizens to their public space, even in the absence of technical expertise, is essential to increase the suitability to the needs and to suggest future vision.

For these reasons, the research group has favored the use of two concepts. The “shared analysis” represents the collection (by the designer and the planners) of key information about needs, problems and expectations of citizen. At this stage it is important to encourage discussion on the basis of some key issues that have been identified previously; in our case through the questionnaire and meetings with key players. The second concept, the "inclusive design", represents an attempt to strengthen and involve the stakeholders in different phases of the project, asking for example for concrete ideas and suggestions, or by taking positions on proposals outlined. The experiences of UrbAging in this sense are very positive. The participants expressed their views on different, concrete design proposals and also helped with design elements of the concept (for example, little oasis and pleasant places to stop along footpaths).

On the basis of simple observations and impressions of the people involved, in particular in discussion groups, we can say that in Lugano there was a greater involvement of people working professionally in the areas affected by the research, while in comparison, the involvement of interested, meant as older people in the role of users, was less strong. Whereas, in Uster there was a more significant involvement of older people.

In both cities, on the base of issues discussed in this debate, most of the people involved in the discussions, had already taken part in the written inquiry, which revealed to be an important channel to raise awareness in order to involve the elderly in following stages. The call for the afternoon discussion group that was started by the research group, partially in collaboration with the associations of senior citizens, proves to be very successful. In the afternoon of discussion the presence of people still very active and able to speak up for themselves also through other channels has been noticed. In the meantime, other people have find a suitable occasion to be heard.

E. Conclusions

From public space to the sustainable city

UrbAging, while focusing on public space, is interested in a larger discourse about the relationship between urban space and the ageing society.

The issue of ageing population put itself for the totality of society and territory. In the urban context (periurban areas included) the density of population on one hand and the possibilities of intervention on the built environment on the other influence the quality of life and raise the question of ageing under a particular perspective.

The urban space is:

- a place of concentration of different uses (residence, business, infrastructure etc.) where conflicts can be very sharp;
- a territory in which divergent interests are joined up, administrative space are not consistent with the living spaces and multiple players, which management systems must be complex and articulated;
- a context where the risk of social isolation is greater, in which cultures and different social practices meet, or collide;
- the network's node for exchanging goods, ideas and people, which is important to ensure the efficiency of the system taking into account all potential users.

Schematically we can say that public space plays a crucial role in the quality of a city or an urban space, however the quality of life of a person depends on several factors. From a territorial, planning and design aspect, outdoor public spaces must be definitely considered. In the meantime, a broader sense of "public space" that includes shops and services, residential area and private or semi-private spaces facilities as for example clubs and meeting points for older people, is to be reinforced.

Assessment of sustainability

The findings emerged from UrbAging can be summarized and evaluated through the provided key to sustainable development. In detail:

Society

A city also caring for elderly is:

- offering opportunities to meet and foster intergenerational relationships;
- strengthening the social network (help and socialization);
- activating participation, increasing sense of responsibility, sharing and co-decision;
- fighting the isolation and sense of loneliness;
- stimulating social cohesion through appropriate relations between public and private space (keep the place of residence during the different stage of life, ...);
- stimulating and enhancing sense of belonging to community;
- considering a role of civil society in the management of the territory;
- promoting the independence of the elderly;
- make use of the knowledge and life experience of elderly, seen as an active actor;
- paying attention to a security conditions (both in the perception and effective);
- having ability to mitigate architectural barriers and their effects on persons with reduced mobility;
- increasing equity of urban space by promoting freedom of movement and choose of place of residence to all citizens.

Environment

A city also caring for elderly persons is:

- reducing the environmental pollution due to the efforts to ensure comfort (control/mitigation);
- increasing the quantity and quality of urban green spaces to ensure adequate public space, through the creation of new spaces or restoration and enhancement of natural compartments;
- developing integrated city and neighborhood that allows short paths due to proximity;
- creating space easily traveled on foot or by bike through a dense network of attractive pedestrian pathways;
- developing new buildings with mixed uses and integrated into the urban fabric, which reduces the polarization of the area and consequent traffic generated;
- improving the accessibility of services, public space and residence without having to resort to private transport.

Economy

A city also caring for elderly persons is:

- increasing collaboration between private and public sector to respond efficiently to the needs of care, residential needs, and services related;
- involving a greater interconnection between space and a higher intensity, resulting in lower costs of urbanization;
- paving the way for a better quality of life and aging in good health with fewer health care costs;
- increasing the efficiency through the residential area qualities, better connectivity and appropriate use of space (average size apartments, adequacy of space or neighborhoods for different stages of life);
- building a social context in which it recognizes and enhances the potential value and the resources represented by the elderly in terms of competence, wisdom and time available;
- ensuring an efficient use of space (public and private) with consequent increased sustainability of investments (fight the problem of districts villa converted into new dismissed urban areas);
- improving the ability to provide adequate responses to the various available fund by ensuring the diversity of the economy fabric and its strength.

Meaning and relevance of interdisciplinary work

Urban studies are basically an interdisciplinary science, although the different discipline tends somehow to isolate specific scientific disciplinary approaches. Shakespeare said “City is the people”, which means, at least, that without people it is not possible to build and to manage a city. Any urban space is mainly driven by the constant input of its inhabitants, in parallel with the authorities that, in the best figure, represent them. Technician and scientist have certainly a role to play in the assessment and in the technical advisory, but the attention to the needs of the “clients/users/citizens” is more and more important (at least in Switzerland).

It is a matter of cultural approach concerning the ability and the readiness to enter into a dialogue. It's all about attitude. Architects have to do architecture, if they manage to define the place and the objectives; social scientist have to study society, if they are able to find a serious theme to be addressed; citizens will still have to be the backbone of the city, whichever age they have.

F. Major target audiences addressed by your project

With target audiences, all of the institutions concerned by the research results are meant. They are interlocutors in the domain of NRP 54 active in politics, practice, education or communication (federal, cantonal or municipal administration, private or public institutions, companies etc.).

The information to be stated below will allow the Steering Committee a better focus on the implementation and transfer-activities.

Institution / contact person / address
Città di Lugano, Dicastero integrazione e informazione sociale / Nicoletta Mariolini (Municipale) / Lugano / Piazza della Riforma 1, 6900 Lugano
Canton Ticino / DSS - Ufficio prevenzione e valutazione sanitaria / Antoine Casabianca / Orico 6, 6500 Bellinzona
Canton Ticino / DT - sezione sviluppo territoriale / Andrea Felicioni / Franscini 17, 6500 Bellinzona
Leiterin Heime der Stadt Uster / Marianne Dobler / Dietenrainweg 15, 8613 Riedikon
Stadt Uster / Esther Rickenbacher (Stadträtin, Abteilungsvorsteherin Gesundheit) / Stadthaus, 8610 Uster
Uster, Thomas Rentsch, Abteilungsleiter Gesundheit, Bahnhofstr. 17, 8610 Uster Stadt
Associazione Ticinese Terza Età (ATTE) / Pietro Martinelli (Presidente) / 6946 Ponte Capriasca
Associazione Ticinese Terza Età (ATTE) / Stefano Motta (segretario) / Viale Olgiati, 38b / 6512 Giubiasco
PIPA - prevenzione incidenti persone anziane / Raquel Zirpoli (Coordinatrice) / Viale Olgiati 38b, 6512 Giubiasco
Leiterin Pro Senectute Ortsvertretung Uster / Ursula Aebersold / Gerbestrasse 5, 8610 Uster
Leiterin Spitex Dienste Uster / Silvia Tavaretti / Seestr. 7, 8610 Uster
Benabita Stiftung, Uster / Hans Thalmann (Präsident) / Bankstrasse 8, 8610 Uster
Gruppo Moderazione del Traffico / Cristina Terrani/ Gaggio, 6439 Bioggio
FTIA (Federazione Ticinese Integrazione Andicap) / Luca Bertoni / Berta 28, CP 834, 6512 Giubiasco
Stadtplaner Uster / Walter Ulmann / Abteilung Bau, Stadtraum und Natur, Oberlandstr. 78, 8610 Uster
Joseph Schlegel, Abteilungssekretär Bau, zuständig für behindertengerechtes Bauen / Oberlandstr. 78, 8610 Uster
Servizio geriatrico dell'Ospedale Beata Vergine di Mendrisio / Rita Pezzati (psicologa e psicoterapeuta) / Mendrisio
Città di Lugano / Dicastero servizi urbani / Sezione Verde Pubblico cittadina / Rudolf Blauenstein (Responsabile) / Via Sonvico 4 A / 6900 Lugano
Istituti sociali della città di Lugano / Luca Cao / Via Marco da Carona 10, 6900 Lugano
Servizio cure a domicilio del Luganese (SCuDo) / Marco Treichler / Via Brentani 11, CP 4543, 6904 Lugano
Pro Senectute (centro diurno anziani) / Via Vanoni 8/10, CP 4664, 6904 Lugano
Città di Lugano / Dicastero Territorio / Mobilità lenta / Roberto Poggiati / Via della Posta 8 / 6900 Lugano
Croce rossa svizzera - Sezione del Luganese - Il mondo dell'anziano / Via alla Campagna 9, 6900 Lugano
Associazione luganese trasporto handicappati e invalidi nella regione (ALTAIR) / Via Loreto 8, CP 41, 6907 Lugano

Zürcher Hochschule Winterthur ZHW, Center for Urban Landscape / Prof. Dr. Max Bosshard / Tössfeldstrasse 11, CH-8401 Winterthur
Geografisches Institut Universität Zürich / Dr. Elisabeth Bühler-Conrad / Winterthurerstrasse 190, CH-8057 Zürich
Département de géographie - Faculté des sciences économiques et sociales UNIMAIL / Prof. Dr. Bernard Debarbieux / Boulevard du Pont-d'Arve 40, CH-1211 Genève 4
Institut de Géographie - Université de Neuchâtel / Prof. Dr. Etienne Piguet / Espace Louis-Agassiz 1, CH-2000 Neuchâtel
FNP Sottostazione Sud delle Alpi / Dr. Marco Moretti / Via Belsoggiorno 22, P.O. Box 57, CH-6504 Bellinzona
Basler Institut für Sozialforschung und Sozialplanung der Hochschule für Pädagogik und Soziale Arbeit beider Basel / Prof. Dr. Matthias Drilling / Thiersteinerallee 57, CH- 4053 Basel
Stand der Dinge: Leben in der s5-Stadt / Prof. Johanna Rolshoven / www.s5-stadt.ch
Institut für Städtebau - ETH Höggerberg, HIL H 46.3 / Christoph Blaser / Wolfgang-Pauli-Str. 15, CH-8093 Zürich
Verein benabita / Bankstrasse 8, CH-8610 Uster
SUPSI / Dr. Cristina Kopreinig Guzzi / C.P. 72, CH-6952 Canobbio
Architect and antropologist / Dr. Franco La Cecla / Milano, Parigi
Dipartimento di Sociologia - Facoltà di Scienze Politiche - Università di Bologna / Prof. Dr. Giovanni Pieretti / Strada Maggiore 45, I-40125 Bologna
"Villes-amies des aînés" – OMS / Dr. Charles Petitot / Bruxelles
Coordinatore del progetto WELHOPS / Dr. Arch. Alessandro Tugnoli / Emilia Romana
Département Géographie et aménagement - Université de Toulouse II - Le Mirail / Alice Rouyer / 5 allées Antonio Machado, F-31058 TOULOUSE Cedex 9
Urbact 2 / Giuseppe Panebianco / Comune di Roma - Department XIV Local Development, Training and Labour Policies
HCU Hamburg Department Stadtplanung - Institut für Stadt- und Regionalökonomie/-soziologie / Prof. Dr. Ingrid Breckner / c/o TUHH, Schwarzenbergstr. 95 D, D-21073 Hamburg
ISW Institut für Städtebau und Wohnungswesen / Dr. Katja Beaujean / Steinheilstraße 1, D-80333 München
Schader-Stiftung / Geschäftsstelle / Karlstraße 85, 64285 Darmstadt

G. Three main messages

1. The high quality of public space makes a “good city”. The city of the future will be built around an efficient network of public spaces of different nature, responding to the various needs of the contemporary society. For elders, public space play different role: socialization places and intergenerational relationship on one hand, and place of calmness and relaxation on the other. In both cases, public space have to give a sense of security and offer a high standard of environmental comfort. Public spaces have to be accessible and connected through a tight network of pedestrian path that can ensure a pleasant walking use of the space.
2. The city of the future is inclusive and pluralist and encourages intergenerational coexistence. The “city for the elderly” should not exist. Instead, it should be built the city for all, a city in which all generations will recognize them and feel comfortable, including the elderly. A special attention will be given to the weakest part of our society, and we think especially to the “physically disabled” people, also called in French “personnes à mobilité réduite” (person with reduced mobility). Those needs have to be gathered directly from the users of the public space trough participatory process. The idea of an integrated city results in improving the transversal approach and the interaction between different actors as administrative, private, association, users, politicians, ... Being attentive to the weakest user of the urban space means to perform a balance act among all the actors. It is not just a matter of eliminating the “architectural barriers”, but the abilities to respond to different actors without compromise a ordered operation of the city.
3. Quality of life implies also the strengthening of cohabitation between the different generations. The built environment (public space and residential space) contributes to a better social cohesion at certain conditions. First: the refusal of ghettos generated by economical, social and non-systemic way of thinking. Second: moving away from the misleading thinking patterns in single disciplines and technical approaches, towards an interdisciplinary attitude. In the contemporary society and cities, standardized solutions are not possible. In our society the different age groups, elders as well as young people or other social groups, are very heterogeneous and require different responses. In the city of the future the elders should be considered a fundamental resource with proactive attitude, instead of a passive actor.

H. Changes regarding the original research plan and explanations

No major changes have been introduced regarding the research plan, if not in the timetable that had to be adjusted constantly.

During the last two phases (projects and recommendation) the amount of general data collected in the first phase (distribution of elderly, accessibility and service distribution and also intrinsic quality of public spaces) have been used less than planned. We can explain this change with three factors:

- the overestimation of basis information for the concrete proposal phases;
- the difficulties to integrate general data into local project;
- the little interest expressed by authorities for concrete project and the choice to make more abstract proposition;

I. Strengths and weaknesses

Strengths:

- Cooperation between architectural, planning and human science researcher have permitted a deep analysis of the public space seen from different perspectives.
- Active participation of elderly and their association, linked with cooperation with the local authorities have permitted constant feedback on the research design and the objective of the research.
- Interdisciplinary discussions about the concept of participation have permitted, from different position, to focus on the concrete way on how to integrate the opinion of the involved people.
- The extensions of the network of specialist and professionals that have expressed interest for the research has permit a strong involvement of civil society, the media and the elders themselves.
- The concrete objective of the research - define practical recommendation towards an increase of the suitability of public space for an ageing society – has permitted to define quicker the main issue that had to be addressed.
- Proposal of project made on existing public space as concrete confrontation with the reality, seen from a researcher perspective and not the more bounded activity of project, enable more experimentation and stronger exemplarities.

Weaknesses:

- The commitment during the design phase of the research by the two local authorities, although it never fails, was not so strong to ensure practical influences of the applied research developed on the field, in particular concerning the projects. The lack of concrete application on the field was clearly explained to all the participants, to avoid frustration to the persons involved in the participatory process.
- Duration of the research was too short to really enter in a territorial dynamics (building the network, first applications of findings, project mandate, etc).
- Tendencies of over-specialization of discourses and professional interventions in conflict with the systemic approach promoted by the research project Urbaging.

J. Please outline the expected contribution of your project to the most relevant key questions of NRP 54

Find the key questions below, choose the ones that are relevant for your project and state your contributions to these questions:

Space

How can the functioning and development of the built environment be described, explained, understood and modelled?

The public space has to be studied in a more complex way. The increasing attention to eliminating the architectural barriers, must be accompanied by an awareness of socio-psychological needs, mobility and accessibility systems (ex. pedestrian routes).

How does the existing development process, including the roles and strategies of architects, developers, planners, the construction sector and infrastructure providers, shape the built environment?

Test new instruments (legal, governmental or project), considering that physical qualities of an area are not sufficient to determine the perceived quality and the level of user satisfaction. Assessing the level of user satisfaction is not a „simply“ matter of physical space but is much more complex.

How should organisations (at the institutional, legislative and informal levels) integrate aspects of sustainability in the design and planning of the built environment?

The design and planning process should integrate a public participation of the inhabitants and open to a new concept of the future city. The role of public space, the functions of the city and its spaces, flow and density, energy and mobility are some central issues that contribute to the quality of the built environment and should be studied and integrated in planning process in the future of city's management.

Infrastructure

How can aspects of sustainability be taken into consideration while operating and managing the structures and infrastructure of the built environment?

How should the built environment be adapted to changing requirements of well-being?

The well-being should be based on the consideration of the people's life experiences. The design of built environment should therefore encourage social classes and different ages groups to feel at ease with each other in public spaces. There should be enough adequate physical space for multicultural society. The way of adapting places has to be always attended locally and developed to the specific needs of inhabitants. The elders massively use the public space. Multiple city - plural society!

Materials and Energy

How do aspects of sustainability affect the management of resources (land, water, materials, energy) within the built environment?

How should resources be considered in the operation and management of the built environment?

The scarceness of soil is a major issue to be addressed. A new use of urban space, trough better project of public space, could generate an intensification process of the urban system increasing consequently the attractiveness to cities.

K. Implications and recommendations for practice and science

The implications for practice are that:

- Building an interdisciplinary approach and linking together health and territorial/urban issues, especially in case of architectural approach of the project.
- Developing the “concept of quality of life” and implementing together with the civil society (considering each citizen's needs).
- Local authorities should play a major role in the pondering of opposite interests.

The recommendations for practice are resumed in the MANIFESTO (cfr. Appendix D), which contains the main issues of an adequate Public Space for elder needs:

The founding principle are organised in three scopes:

- “Process management”
 - governance
 - participation
 - mainstreaming

- “Urban context”
 - accessibility
 - connectivity
 - intensity

- “Quality of spaces”
 - conviviality
 - security
 - flexibility
 - comfort

In order to make explicit the general principles and to contribute to the decision-making and designing process, a helping tool will be develop (www.urbaging.ch).

The public space for the aged person is certainly attainable with a fair dose of common sense, but the sectors and needs to be taken into account at the same time, are countless. It is impossible to answer unequivocally to the question: how should the city be built to be suitable for elderly people? It is a matter of method and approach and therefore the research focused on the elaboration of a tool for helping the decision-making process. The tool intends to guide the designer, the public administrator or the consultant to reflect, through questions on the relevant criteria to create a public space adequate to the elderly people needs. In addition, the global vision of the issue should be maintained.

Build a society suitable for all ages means to be attentive to every generation and its reciprocal relationships. Elderly are an important and growing part of our society, therefore we have to integrate them into a developing process of our environment. A society that pays attention to all its social components is going toward a sustainable development.

The implications for science are that:

- The cooperation between architecture and social science is very profitable, but has to be addressed already at the beginning with the definition of precise boundaries and mutual expectations. Taking into account the possibility to enter in a participatory process is very challenging, for urban designer and architect in particular.
- Urban designer normally considers the link between analytical data and concrete proposal a necessary step toward good project, but it is not always easy to collect the right information for the foreseen project. The problems, beside territories and their changes, have to be defined more clearly to increase the impact and the efficiency of the multidisciplinary work. In the urban studies still exist a huge gap between analytical tools and concrete interventions.

- The cross of macro analysis (municipality), micro- analysis (single space) and the meso-scale (networking infrastructure) give a new dimension into the space where architectural research, in parallel with urban studies, can operate.

The recommendations for science are that:

- A participatory process is a valuable way to collect and to understand a territorial situation and can give means to improve the dialogue with practitioner.
- An applied research that serves as example to establish the guidelines cannot be thought as a normal analysis or a project mandate.
- According to the mainstreaming concept of sustainable development, applied research has to be done with a continuous confrontation with the people's daily life and their needs.
- Interdisciplinary researches have to be discussed deeply. The topic is the same; the methods and the objectives can be in conflict.

L. Future plans (planned future activities of the applicants in this area)

- Implementation and dissemination of the main recommendations through the interactive Decision Support System available at www.urbaging.ch, and by other means.
- Definition of a concrete way to develop consultancy activities towards public institutions and professionals.
- Publication of a book regarding the theme of elderly and the city, as a result of the research and of the international congress organized in Lugano as a conclusion of the research project.
- Deepen the relation between health and territorial issues, including the residential dimension within the city and the quality and suitability of the housing offer.
- Consider the actual trends of urban development linked with the demographic shift in territorial organization perspective (intensity, connectivity, ...).
- Coordination as Guest Editor of a special issue of the GERONTECHNOLOGY Journal - Designing technology and environment for independent living and social participation of older persons in good health, comfort and safety. Special issue: Urbaging the city and older people (www.gerontechjournal.net)

M. Appendix

A. Internal reports

- A1 – geostatistical analysis (Urbaging: analisi preliminari – 31.05.2007)
- A2 – internal mid-term report (Stato avanzamento – settembre 2007)
- A3 – internal mid-term report (Projektstand – Dezember 2007)
- A4 – interview analysis Lugano (Indagine presso la popolazione anziana di Lugano sull'utilizzo degli spazi pubblici all'aperto – giugno 2008)
- A4 – interview analysis Uster (Schriftliche Befragung de älteren Bevölkerung zur Nutzung von städtischen Freiräumen und Grünanlagen in Uster – 9 Juni 2008)
- A6 – Public Space analysis in Uster (Spazi pubblici aperti di Uster – schede di rilievo – giugno 2008)
- A7 - Public Space analysis in Lugano (Spazi pubblici aperti di Lugano – schede di rilievo – giugno 2008)
- A8 –maps of gaps in the public space in Lugano e Uster
- A9 – Project idea on Lugano and Uster (October 2008)

B. Press review 2007-2009

C. Other publications

D. Manifesto: spazi pubblici a misura di anziano

E. International congress – Urbaging – the city and the elderly