The self-sustainable community Laboratories of Rome

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The self-sustainable community Laboratories of Rome: from information to interactive planning and design

The experience of the Laboratories is not new for Rome.
In 1993 the Historical Heritage Office of the Municipality came to an agreement with the Dioguardi Co. to found the Laboratory of Ghetto - the ancient Jewish quarter - with the following objectives: to offer space and tools to analyse public and private proposals for buildings restoration; to collect, elaborate and diffuse data and information about the neighbourhood; to involve inhabitants and train some of them in renewal and restoration activities through the creation of a "pilot yard". The data gathered in the Laboratory were elaborated and used to produce an hypertext which could be consulted by inhabitants. A section of this hypertext showed all the restoration projects, public and private ones (Sivo 1995).

Fig. 1 The self-sustainable community Laboratory (Marconi-Ostiense) at work

The year after the Municipality of Rome established the Esquilino Laboratory, a place where administrators, local associations and schools could interact in a continuative manner to discuss proposals of buildings restoration and neighbourhood renewal. About 500 inhabitants - both single citizens and representatives of local groups and associations - contacted the Laboratory. The most important initiatives of this Laboratory were some public discussions about neighbourhood management; a survey of citizens opinions; a permanent activity of information and guidance particularly for renewal and restoration projects and proposals; an exhibition of the historical heritage and socio-economic issues of the neighbourhood, prepared with the help of students of local schools (Spada 1995).

The activity of the Ghetto Laboratory is suspended at the moment, while the Esquilino Laboratory is working (inhabitants can access at the Laboratory twice in the week).

The Laboratory of Ghetto was mainly specialized in the field of building restoration and characterized by one-way communication (from the administration to citizens), while the Esquilino Laboratory is caracterized by a wider set of activities and is better disposed towards the "listening" of inhabitants needs.

Fig. 2 The competition reserved to students and inhabitants on the theme of the Park of

the South Waterway of the Tiber

Both Laboratories showed low interest for topics as community planning, interactive design and self-sustainable planning (i.e., a planning activity where is important to establish new rules to generate local omeostasys and to balance the anthropical and natural environment), which are main points in the programme of the self-sustainable community Laboratory of the Marconi-Ostiense neighbourhood (Giangrande 1995, Mortola 1995).
This Laboratory was established few months after the Esquilino Laboratory starting from an initiative of a team of teachers and researchers of the Dipartimento di Progettazione e Scienze dell'Architettura (Department of Design and Architectural Sciences), University of Roma Tre, which is part of a research group coordinated, at national level, by Alberto Magnaghi (Magnaghi 1992).

Main objectives of the Laboratory, at the beginning, were the following:

(i) to strengthen the community sense of inhabitants and improve their sensitiveness to the environmental balance and quality of places they live in;

(ii) to identify key problems of their neighbourhood and produce some projects suitable to solve them.

Fig. 3 The first card of the hypertext on the *progetto urbano* (urban project) of the Marconi-Ostiense neighbourhood

To pursue these objectives the research team contacted some local schools and associations. The Laboratory mostly relied on some teachers of primary schools, which were from a long time engaged in making their students more acquainted of the environmental problems of their

neighbourhood and town.

After few weeks some teachers and students of the local schools, the neighbourhood association "MarconInsieme", the local section of the european association "E.I.P." (Ecole Instrument de Paix, i.e., the School as a Peace Instrument) and twenty inhabitants decided to partecipate and give their support to the Laboratory activities.

The Laboratory, in the early months of its activity, began a process to make participants aware of the (actual and potential) quality and decay of natural, cultural, historical, social and economic environment of the Marconi-Ostiense neighbourhood.

After this phase a new one began in which members of the Laboratory were involved in some design activities.

During this phase the Laboratory (1) announced and managed a competition, restrained to students of primary and high schools, university students and associations of inhabitants, on the theme of "The Park of the South Watererway of the Tiber"; (2) promoted some design activities to produce some self-sustainable projects at the community scale.

The strong participation to these initiatives induced the Municipality of Rome to come to an agreement with the Dipartimento di Progettazione e Scienze dell'Architettura in order to experiment: (1) multimedia tools to facilitate the communication between citizens and administration; (2) new partecipation practices in planning and design based on self-sustainable principles.

To spread the content of this agreement, a workshop was organized in July 1995 taking place in the Faculty of Architecture, University of Roma Tre, on the theme of "Neighbourhood Laboratories in Rome" (*I laboratori di quartiere nella città di Roma*). In this workshop partecipated politicians, local administrators, university teachers, practitioners, trade unions, cultural and neighbourhood associations, etc.

During the workshop an idea came out to found new Laboratories, linking the experience of the Municipality (Esquilino Laboratory) and the one of the self-sustainable community Laboratory established by the University. The program of these new Laboratories should be: to improve quality and transparency of communication between administrators and citizens, from political and technical point of view; to give spaces in which inhabitants could meet and learn how to recognize and increase their neighbours identity, to contrast environment decay, partecipate actively in the transformation process of the territory with the aid of new planning and design methods.
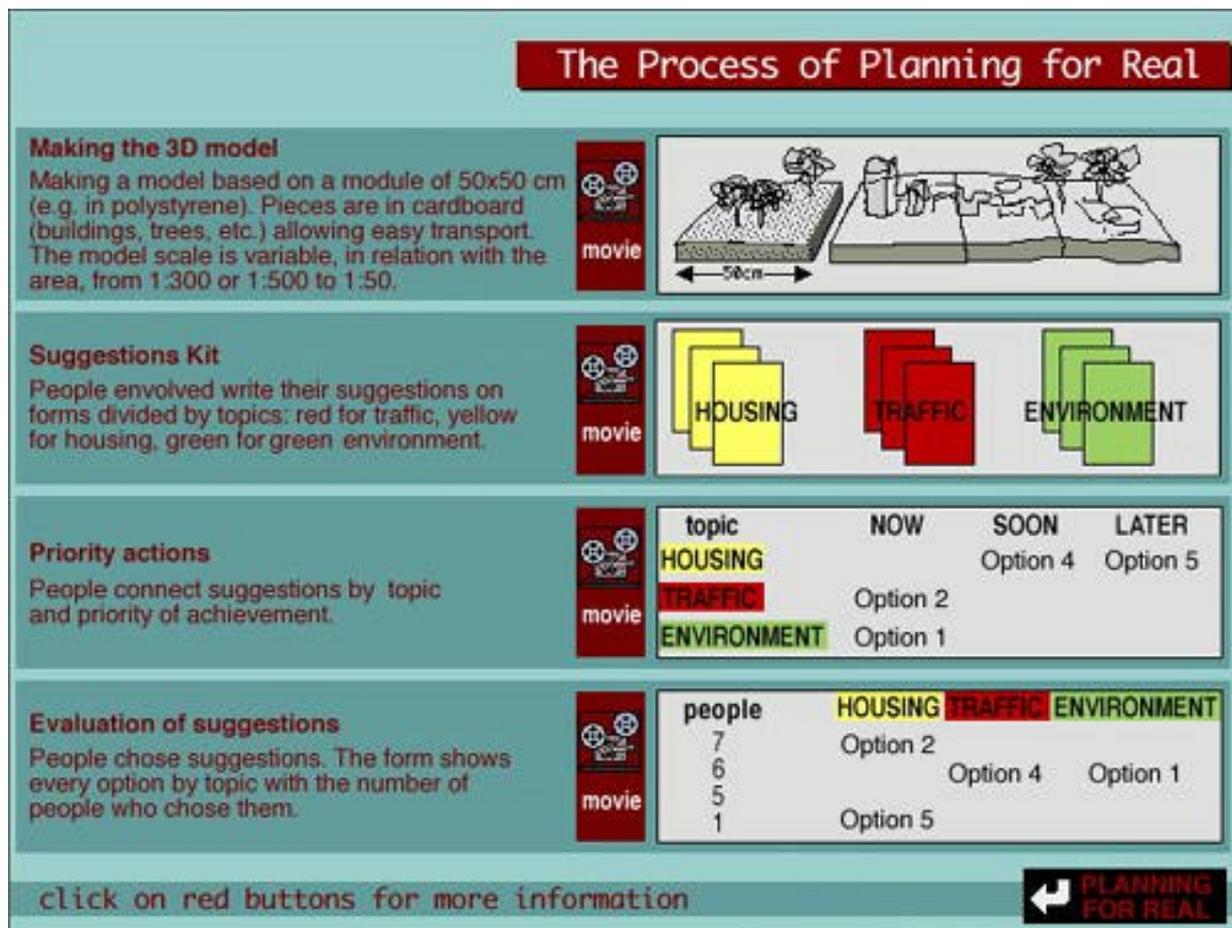
Fig. 4 The Planning for Real Approach

Six pilot Laboratories were established by the Municipality of Rome in April 1996, in neighbourhoods where the Municipality decided to experiment some new urban planning or renewal tools (for instance, *progetti urbani* , urban projects).

The Municipality also decided to grant the Laboratories 150 millions lire to support their installation expenses.

To each Laboratory were assigned four persons, selected from different Departments of the Municipality (generally two technicians - planners, architects, sociologists, etc. - and two administratives).

Recently the Municipality of Rome set up a call for workers, some of which will work part-time in Laboratories in different fields: environmental planning, urban renewal, social interventions, etc.

University teachers and researcher of the Department were invited by the Municipality to give some lectures and practical exercises to the people involved in laboratories activities.

Topics of lectures were the auto-sustainable development, community planning and design methods: Strategic Choice (Friend and Hickling 1987), Planning for Real (Gibson 1988), Microplanning(Goethert and Hamdi 1988), etc., methods to improve the quality of the environment at the community scale (traffic calming, courtyards, balcony gardens, green walls, green roofs). Practical exercises concerned mainly multimedia as a tool to facilitate the communication between administrators and citizens.

Fig. 5 An hypertext imbued with t some students' ideas aimed at improving the garden of their school (the needs of kids)

Some other topics were about public relations, urban marketing, the use of Internet, etc.
At present time three hypertexts have been realized by University teachers and researchers on commitment of Municipality, which are now used to communicate to citizens plans (*progetti urbani*) and design projects proposed for Esquilino (which is part of the historical centre), Marconi-Ostiense (a renewal area where, *inter alia*, the University of Roma Tre is in course of settling) and Pietralata-Tiburtina (in which a new important business and central administrative pole will be located).
These hypertexts are an innovative instrument to communicate to inhabitants interventions proposed by the Municipality and collect some proposals - previously discussed and elaborated inside the community Laboratories - to qualify the environment (new green spaces and renewal of existing ones, valorization of local culture, actions to promote the self-consciousness of the local community and the birth of new echo-sustainable enterprises, etc.) (Mortola,Fortuzzi and Mirabelli 1995).
The use of these tools suggested a new way in which local communities could partecipate, in the future, to the transformation of their neighbourhoods. This way is different from the discussions that take place in public meetings where politicians strive to obtain consensus and citizens defend their private interests, where conflicting situations compromise the possibility to find an agreement and reach some positive results.
To create a synergy between the six community Laboratories, the Department created a web site to communicate activities and to facilitate interchanges of local experiences between the Laboratories and between inhabitants of the same or different neighbourhoods.

Information technologies as a new tool to aid comunity participation

In addition to above mentioned participation methods in design, which are already been experimented successfully in other European countries, another experiment is in progress

concerning the correct use of emerging information technologies and the application of these to aid participation in urban renewal.

We tried to enable people to mature an opinion about the whole transformation in progress and those needed in the neighbourhood. The first step was to gather and communicate as much information as possible about real condition and future development plans for that particular area; information, from history to town-planning maps, which are usually not easy to find for citizens. To do this, in alternative to traditional paper documents, the experimentation focused on multi-media technologies, for a richest and more comprehensible communication, and on hypertextual technologies, to facilitate the reader to achieve a personal opinion about expressed concepts.

Fig. 6 The home page of the CAAD Laboratory

Results of this were some hypertexts developed with authoring systems (Hypercard, Director) and distributed on CD-ROM.

A step forward matured trying to overcome problems appeared during the elaboration of multi-media documents: more the gathering of information is successful, attracting different contributions, less easy it is to "close" the work to print it on CD-ROM. CD-ROM which requires expensive and laborious printing and distribution, and encounter problems in working properly on computers which are different from the one used for developing (different operating system, software configuration, hardware equipment, clock speed, etc.).

For these reasons an experimentation started on Network technologies based on the Internet. The first step was the creation of a web site, <http://www.arch.uniroma3.it> or <http://rmac.arch.uniroma3.it>, which, besides giving information and on-line news about

laboratories, also contain a rich harvest in hyper-media form of data about the urban plan for Pietralata-Tiburtino area: material about the plan itself and documents about citizens' discussions and remarks about it.

Fig 7. A web page of the urban plan in Pietralata-Tiburtino area

Now, this material is not only directly available on the Net from every computer connected via Internet, but it is also possible to spread opinions about it in almost real-time. The web site becomes in this way a "fulcrum" of discussions, which is already a first important step for interaction.

The third step of the experimentation is to increase this interaction both in "local", inside a Laboratory, and "remote" way, connecting laboratories together and with others, like associations or single citizens, which are already self-connected (local authority should provide connections, with public net and agreement with private companies, to guarantee the access to everyone).

As a result two FTP sites are created, accessible from web pages too. The first of these is dedicated to private citizens and associations with IT expertise and to Municipal laboratories as interpreter for other citizens; this FTP will contain a Geographic Information system, which is currently under development by the university, which can be used to support the formulation of ideas and designs in the area of interest. The other FTP is freely accessible by everybody who wants to download and, eventually, upload documents concerning topics of discussions; this will extend the already active possibility to send messages and documents by electronic mail (E-mail), which is available in the foot of every web pages.

In progress is also a system to gather and organize citizens opinions through the Net using forms and organizing information in a data-base.

Depending on experimentation results these interaction tools will eventually lead to

newsgroups and tele-conferencing, reaching, not too far in the future (they are already under development for one year), interfaces based on urban representation through virtual reality and interactive three dimensional spaces for net collaboration.

The main point, which is subtended in all experimentation of advanced technologies in the field of participation and sustainability in urban development, is to maintain a critical point of view about these technologies, to avoid both aprioristic refuse or enthusiasm. That is because of important chances of inventiveness, creativity and, not last, democracy opened by these new technologies to almost everyone. Chances which are going to be defended from anyone who have interest to control the stream of information. However this is not the place to probe these key questions, but we would like only to underline how important are the conceiving of these tools and the sharing of information, not centralized but distributed, and that people attending (e.g. Municipal laboratories, university laboratories) are connected together in a "network", without any special point which could become easily a directive centre.

Conflicting objectives could lead to a difficult development of community Laboratories

Technicians of the Municipality of Rome that work inside the Laboratories can help citizens to obtain information and realize community actions. The risk is that the Municipality could use Laboratories to find consensus in order to take electoral advanteges instead of improving the quality and efficiency of planning.

If this happens, inhabitants goals could contrast with municipality ones, and the consequence will be a rising of the conflictual situations.

To contend this trend, more and more citizens should participate to planning and design activities, acquire new ability in gathering information and in organizing oneself, organize political and social actions, etc. To this end inhabitants need to gain competence in the administrative and legal issues as well as ability to deal with the representatives of the power (politicians, building societies, etc.). Inhabitants must be able to discuss and negotiate with the administration, inside and outside the Laboratories, whenever should come afloat some disagreements of opinion and objective.

To contrast the blackmail of administrators, local community must become more cogent and autonomous from the economical point of view.

Citizens must organize themselves in enterprise relative to *third sector*, namely the sector generally named voluntary or independent, where "the trust agreement give way for the community links and the voluntary transfer of the time take the place of the market relationships artificially imposed and based on selling oneself and one's services" (Rifkin 1995)

This sector, nowadays, is not marginal, considering some data reported by Rifkin:

"Whereas the private sector is responsible of 80% of economic activities in the US and the public sector is responsible of 14%, the third sector participates for 6% in relation to the economy of the country and for 9% in relation to the occupation. (...).Though the third sector is half of public, in relation to the occupation and revenues grows twice if compared with both private and public sectors" (*op.cit.*, pp. 382-383).

The *third sector*, as well as it means a different way to conceive the social and economic relationships, will be an effective antidote to that current outlook of the world, so incredibly destructive and improvident, which compromised planet's biosphere because of the greenhouse effect, the reduction of the ozone layer, the desertification, the felling of the forests, the extintion of many vegetal and animal species, the degradation of the territory and cities, etc.

Fig. 8 A 3D model of residential intervention (on the right) proposed by a consortium of owners and contrasted by inhabitants

The work in the private sector is justified by the profit, and the security is considered in term of growth of consumer goods; whereas the *third sector*, based on partecipation, is - or should be - caracterized by spirit of service, and the help and the security depend on stronger interpersonal links and on the sense of community.

Is that utopic? Can be. "But the vision of technological utopians about a world where the machines replace the men by creating an unbroken flow of goods and the possibility of a greater delight could should be considered a very unlikely event one century ago" (*op. cit.*, p. 392).

The reduction of the working time in a world strictly constrained from an economic point of view can produce a decrease of the values and philosophy of the market and the birth of a new vision of life based on the community participation and the environmental awareness, i.e., the start of the *after-the-market* era.

In conclusion, the autonomy that citizens are able to reach inside the community Laboratory, not only will represent an antidote in relation to the risk of the blackmail of the local administration, but it will contribute to the enforcement of the concept of sustainability inside the community.

Self-sustainable community Laboratories, if conceived in these terms, could give an effective contribution in this direction.

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