

Social and sustainable development of the architectural heritage

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SUMMARY: Within the context of a social and sustainable development, the present reflection considers the importance of a multidimensional and integrated approach of the historical heritage on the conservation and restoration of the renders. In this sense, an anthropologist and a restoration technician basically considered two aspects: 1) the importance of developing a multidimensional, inter/multidisciplinary, socio-ecological, dynamical and dialectical approach of the contexts of the intervention; 2) the development of such perspective as a contribution to the sustainable conservation of the historical heritage. The need of developing an interdisciplinary and multidimensional approach can be based in the following considerations: 1) the use and appropriation of heritage is a continuous and dynamic process of (re)configurations and an expression of a variety of aspects (historical, political, ideological, socio-cultural, economical, environmental and technological factors); 2) the constructive and decorative dimensions of architectural heritage are related with different historical moments, knowledge evolution and the influence of several styles, trends and taste, i. e., with social and cultural dynamics. In line with the above, we highlight the importance of creating a participated platform of intervention and maintenance regarding historical mortars context. The intention is to discuss the investment in developing interactive methodologies of research and intervention, which can give an important contribution to the implementation of a dynamic of preservation and development. In this sense, and based in a brief presentation of two different research perspectives, we identify the following: 1) research procedures aiming at identifying sustainability, conservation and development goals must be considered as important to the intervention; 2) bridges to the construction of an inter/multidisciplinary approach, producing a sort of needlework of various reflections about sustainability.

KEY-WORDS: Conservation, restoration, sustainable and social development

INTRODUCTION

The European Letter of Architectonic Heritage dated from 1975, meanwhile deeped with the Declaration of Amsterdam (1975), highlighted that “urban conservation of architectonic patrimony depends on its integration in citizens’ lives and in local and regional urban planning and appears as a way of defending and preserving older urban tissues from its threatening dangers”, namely through a shared work between restoration techniques and adequate functions definition [1].

In the Chart of Cracovia (2000) [2], for instance, communities are considered as responsible for their past and, by the cultural patrimony identification e management. Accordingly with the Chart of Cracovia, in order to maintain and preserve a place and its image is necessary:

- To preserve historical buildings and monuments, maintaining their authenticity and integrity;
- To preserve architectural decoration regarding technical and aesthetical characteristics;
- To preserve the elements of a give set which define city spaces regarding urban shape and internal spatial values considered fundamental parts of a building;
- To recover meanings, sense and symbolic, social and cultural values of the inner city communities;
- To preserve historical centers, conceiving them as morphological, functional and structural features of a given territory, environment and surrounding landscape.

Conservation logics enlarged their focus of actuation, in the sense that more attention has been paid to the conservation of wider urban tissues, and not only of relevant buildings. Conservation and urban rehabilitation assume both the promotion of a better environment and quality of life and the safeguard, maintenance and sustainability of spaces, goods, patrimonial and sociocultural values. Nowadays, the principles that sustain urban rehabilitation ranges are of diverse nature, namely social, democratic and environmental. Such principles emphasize the need of developing integrated approaches and interventions and draw attention to aspects related with regional planning, social justice and social participation [1].

Regarding our concern with social and sustainable development related with the conservation and rehabilitation of architectonic heritage, it as been noticed the importance in investing and promoting: 1) multidimensional, inter/multidisciplinary, socio-ecological, dynamical and dialectical approach of the contexts of the intervention; 2) integrated and participated platforms of intervention and maintenance of contexts [3] [4] [5] [6]. In this perspective, we assume the idea that “the basic premise is that heritage is best protected not only through strong laws, but also through a widely shared understanding of heritage values and their importance in community development” (Herb Stovel, in Eggen) [7].

In line with the above, we highlight the importance of creating a sustainable platform of intervention and maintenance regarding historical renders and mortars context. The intention is to discuss the investment in interactive methodologies of research and intervention, which can give an important contribution to the implementation of a dynamic of preservation and social development. In this perspective we discuss some aspects about: research procedures aiming at identifying sustainability, conservation and development goals must be considered as important to the intervention; bridges to the construction of an inter/multidisciplinary approach, producing a sort of needlework of various reflections about sustainability.

SETTING A COMMON PERSPECTIVE

We argue the importance of establishing an integrated and participated platform of discussion, which implies an interdisciplinary approach and an interactive perspective. In this sense, we discuss some aspects that may contribute to the construction of such platform, by articulating concerns deriving from distinct and specific techniques but sharing interests of conservation and social development. Also, we relate issues regarding architectonic

restoration on the conservation of historical renders and mortars with the ones regarding contexts' social and cultural dynamics.

Can be related problematic?

In sum, the main challenges regarding historical renders and mortars conservation are [8] [9] [10] [11] [12] [13]:

- Difficulties on the conservation of traditional constructive techniques;
- Unawareness of materials and related techniques;
- Materials exposition to destructive actions (examples: climate, pollution, vandalism) as well as to degradation.
- Render renovation without the registration of aesthetical, cultural and technical aspects, in some cases implying the extraction of old covers followed by the use of modern solutions not always adapted to the function of the old wall with performance levels and with durability lower to the pre-existing ones.
- Need to use materials with aesthetic, physical and chemical compatibility.

Regarding architectural patrimony conservation it is widely known that exterior covers are essential to walls protection in the sense that can be considered as “skin buildings”, protecting them from “climate action, mechanical chocks and environmental contamination” [12] (see Table 1).

Table 1 - Historical renders and mortars: problematic and potentialities of conservation

OBSTACLES TO CONSERVATION	CONSERVATION FAVORABLE ASPECTS
Lack of maintenance and difficulties on reproducing constructive techniques	Sophisticated and distinct techniques
Lack of registration of the pre-existing elements and techniques	Buildings walls protective actions
Unawareness of techniques and composition involved	Architectonic cultures registration
Exposure to destructive actions	Influence on buildings' external appearance and on urban image
Exposure to degradation	Better performance compared to modern materials
Repair through the extraction of old elements	Ecological (since the use of traditional materials) and economical potential and also safeguard and development sustainability
Substitution of old elements by modern ones	
Need to use compatible materials	

But renders also “strongly influence the constructions final look” which, in turn, also influences the image of contexts where buildings are inserted. And, accordingly with Rosário Veiga [12], they can “significantly reinforce mechanical resistance of weak masonry, a not at all despicable detail, since old walls generally have structural functions.

These characteristics are the reflection of distinct historical moments, styles, trends and tastes, contributing to the inclusion of covers in a wider set of architectonic patrimony eligible to preservation.

In addition, Rosário Veiga points out that the conservation of these covers should be placed as a primordial option when planning an intervention [12] [14]. This can contribute to the conservation of architectural culture material aspects, as well as meanings and symbolic, social, cultural and aesthetics values. More over, such perspective of action has also an HMC08

ecologic, economic and sustainability potential of conservation and development [10] [12] [14].

Curiously, potentialities and problems on the subject of architectural heritage conservation and, specifically, on renders and historical mortars, also emerge in social issues. For instance, many difficulties related with the conservation of renders and historical mortars are, in certain way, connected with aspects like: a) the need of cultural transmission of technical knowledge; b) the influence of taste and social status references, the styles and trends within the maintenance, change and/or neglecting toward renders; c) social and economic recognition of artisans' importance or others detaining constructive techniques; d) the recognition of the importance of elements, objects and historical and patrimonial buildings; e) social conscience about what is important to preserve in patrimony through registers and classifications but also through daily maintenance (see Figure 1-2 and Table 2).

Figure 1 - Historical renders and mortars conservation: obstacles and potentialities



In fact, some of the difficulties regarding the conservation of architectural heritage, and specifically, with the conservation of renders and historical mortars are associated to contexts' loss of social, cultural and economical vitality.

Table 2 - Some relations between historical renders and mortars conservation and social issues

TECHNICAL AND CONSTRUCTIVE ISSUES	SOCIAL ISSUES
1 - The need to know materials, techniques, instruments and strategies of use and application, regarding the restoration through original techniques and compatible materials 2 - Exposed to degradation 3 - Extraction of old elements and substitution by modern ones, contributing to patrimony destruction 4 - Building protection and larger durability of old walls 5 - Architectural cultures registration 6 - Economic and ecological sustainability	1 - Transmission, reproduction and knowledge registration, sided by the necessary improvement of artisans skills and their social recognition 2 - Social degradation, for instance, vandalism and lack of communication (by negligence, poor economic conditions and lack of information) 3 - Situation related with lack of information, symbolic issues and of status affirmation, fashion and trends, styles and ways of life, easy access to current products 4 - Contribution (or not) to improving environmental comfort, which may influence old buildings residents' satisfaction levels 5 - Historical and symbolic reference, distinction between old buildings/architectonic set and the wider urban tissue, improvement of social respect regarding previous architectonic culture 6 - Renders conservation contributes to improving society regarding resources use

Figure 2 - Social dimensions of conservation: obstacles and potentialities



Here, we highlight population age dynamics (elderly) and the contexts' emptiness, low levels of education and low qualified professions, poor housing conditions and low offer of services and equipments [15] [16]. This set of conditions contributes, in part, to emergent abandon and degrading dynamics, which may imply a non valuing of communitarian architectural patrimony (see Table 3).

Table 3 - Social dimensions: some problems in the urban historical contexts

DIMENSIONS	RELATED PROBLEMS
Demographics	Elderly population, residents decreasing Low educational levels, dropout and poor academic achievement Low levels of professional qualification, unemployment, inadequacy between professional qualifications and labor demand
Housing	Deprived housing conditions (buildings degradation, functional, environmental and comfort deficiencies, space reorganization in dwellings) Dynamics of dwelling/building cleaning and maintenance often low adapted to buildings materials and constructive characteristics Risk related with situations of imminent buildings fall
Urban and Environmental	Urban poverty, social exclusion and socio-spatial segregation Vandalism and difficulties in implementing dynamics of maintenance of building tissue, eventually renovated Deficient offer and degradation of community facilities and public spaces
Social and Cultural	Locals associative dynamics weakness Vitalization and social, cultural and economical sustainability debilities Social management of deprived areas debilities

Basis for the construction of a methodology within a inter/multidisciplinary approach

The need of development of an interdisciplinary and multidimensional approach can be based in the following considerations (see Figure 3):

- The constructive and decorative dimensions of architectonic heritage are related with different historical moments, knowledge evolution and the influence of several styles, trends and taste, i. e., with social dynamic;
- The city image is closely related with social, cultural, economical, political, organizational and environmental dimensions which provide expression to urban contexts;

- The reading and interpretation of image and urban landscape is diverse and a function of individuals perception of meanings, and symbolic, social and cultural values.

Guaranteeing the quality of an intervention is related with the application of a methodology that assists, in a reasonable and well informed way, to the following [1]:

- Production of a diagnosis of the situation, as well as “to fundament a posterior aims definition and the degree of intervention (phase of analysis and diagnosis)”;
- Conception of “adequate intervention solutions aiming at responding defined purposes (phase of project)”;
- Execution of an “adequate implementation of the projected solutions (phase of execution)”.

Figure 3 - Architectonic conservation: sustainable potentialities



Without entering in technical and specific details of the phases considered above, it is important to define a methodological departure base that integrates different perspectives, i.e. multidisciplinary approach. In this sense, the phase of analysis and diagnosis should make a relevant contribution toward the identification and the linkage between problems, needs and resources with measures, actions, strategies and tactics that can permit a minimization of a given problem-situation. The stages and objectives that characterize this first phase can be described as [15]:

- Situation analysis: characterization of the problems, needs, resources and potentialities;
- Organizing and integrating gathered data: classification and definition of problematic situations, resources and potentialities, within a given typology;
- Interactive hierarchy of problems and needs: ranking information (from the less priority to higher priority) aiming at the actions definition and measures implementation;
- Predefinition of the nature and the purpose of the actions: through the organization, definition and classification of actions (related with specific areas of intervention and in temporal terms: short term, mid term and long term objectives).

Regarding the results optimization, and as pointed out by Ascher [17], it is central to privilege the goals with a larger probability of performance and less demanding (taken as an order, law, discipline or submission).

The phase of elaboration should incorporate the conception of an integrative project of conservation and rehabilitation. Within a maintenance and sustainability perspective, this phase should allow the creation of an organizational model of integrated management of the program and the planning. In this sense, it is important to create the satisfactory conditions in order to incorporate a monitoring and evaluative culture during the project development. The phase of project can be important to the definition of a qualitative typology of possible interventions, such as:

- Isolated actions, where problems and related causes are recurrent;
- Palliative actions, which can minimize negative effects without aiming the nature of problem;
- Preventive actions, as those aiming at the conditions favorable to the emergence of a given problem.

Regarding the phase of implementation/execution, another aspect that must be assured is the preparation of a good activities plan, which should be oriented to the following [11]:

- “Setting objectives and goals (these goals can be qualitative, financial, temporal, etc.)”;
- “Defining which tasks must be developed and its limits in detail and with clarity”;
- “Identifying the intervenient and related qualifications within each task;
- “Identifying the used methods and technologies, which should be, as possible, based in normalized procedures”;
- “Assigning competences and identifying responsibilities”.

CONSIDERATIONS AND FUTURE PERSPECTIVES

Conservation and social development promotion

In line with the importance of preserving historical renders and mortars, it is vital to underline some aspects about how this perspective of intervening in patrimony can contribute to the promotion of the involved communities.

Technical and constructive knowledge

One of the difficulties on the preservation of historical renders and mortars is related to the awareness and/or loss of technical knowledge and materials (see Figure 4). The gathering and registration of relevant information is crucial within conservation subject. However, it is known that often this kind of knowledge is in the hands of elderly artisans. The systematic gathering of this knowledge can contribute to the social inclusion of elderly artisans in a given community, besides contributing to patrimony conservation.

Figure 4 - Developed of technical craft and material resource knowledge



In parallel, this information gathering can be framed by a work plan within a specific formation, where the artisans can be involved as transmitting agents of a specific know-how. This can be very attractive to younger professionals, contributing to the improvement of their professional qualification and integration. Beside, the investment on technical expertise can contribute to unemployment decreasing and to increase the creation of micro-enterprises and/or associations of expert artisans. Also, this information assembly can be linked with the production of elderly artisans/informers biographical notes which, in turn, can contribute to

increase artisans' and communities' self-esteem, namely the ones with architectonic patrimony to preserve.

By other hand, information gathering can be linked to a systematic registration of the involved instruments combining with the techniques, methodologies, materials and locations where they have been extracted. For instance, where lime and soil pigment were collected? It was the same person doing both extraction and re-use?

These assessments can contribute to put into practice the following:

- Formation in cultural animation;
- Information and community diffusion;
- Community workshops focused on the practical application of render' ancient techniques;
- Development of documents and ethnographic collections;
- Documentation centers and/or locals/regional assets.

Promoting the respect for architectonic heritage

The respect for architectonic patrimony implies gathering and the conservation of constructive techniques and the promotion of maintenance practices. However, this respect can not be independent of involved communities (see Figure 5). This fact put in evidence the need of creating social mechanisms that improve:

- Heritage daily maintenance, contributing to caring and increasing collective abilities and controlling actions that may jeopardize patrimony or increase degradation (vandalism, careless and abandon).
- Awareness dynamics regarding the importance of conserving heritage and considering patrimony as a registration of architectural cultures. This contributes to the development of daily practices of maintenance. Within a wider perspective, and associated to the promotion of formation, information and dissemination practices, this can contribute to put in evidence the importance of patrimony as a resource (architectonic, social, cultural, economical, ecological), avoiding, for instance, the extraction of old elements and the replacement by modern ones.

Figure 5 - Architectonic heritage: conservation or not?



Vandalism



Renders extraction



Renders conserved



Wall conserved

From physical to social sustainability

Sustainable development promotion claims a multidimensional and interactive perspective in defining a course of action. In fact, this perspective should include several and diverse notions of sustainability, namely, soil use, poverty eradication, housing conditions and environmental quality improvement, efficient energy, transportation and communication systems and patrimony safeguard. Yet, this perspective of knowledge and action is too

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ample and complex, namely when the crucial point of our discussion are the conservation of historical renders and mortars. In fact, it is noteworthy to highlight that this perspective of conservation has implications in landscape and communities and can contribute to the creation of sustainable social development even then confined to a small area.

The creation of an interdisciplinary work platform can be considered as starting points of the integrated promotion of sustainability [18], where what matters is the creation of “arenas” of discussion that can make the establishment of “new training settings” viable [19]. Accordingly to the document “Celebration of Craft” [19] it is interesting to conceive that work platform based on three notions:

- “Arena – area of activity that concerns the public, especially one where there is a lot of opposition between different groups or countries”; “the field for interaction created by the listing act and the subsequent activities coming from the different actors with their specific interests and, in the case of the Authorities, various levels of political”;
- “Site - a place where building, town, etc., is or will be located, a place where something has happened or that is used for something”
- “Setting - way or place in which something is fixed or fastened”; “each architectural object and its potentiality to hold a lesson”

Here is important to stimulate a culture of a collective project and a participative culture [20]. This entails the value of investing in an interdisciplinary research perspective and knowledge production, of project and programming, of intervention and urban management, of conservation and development. The underlying intention can be a good starting point to the creation of another “modus vivendi” meaning “an arrangement that is made between people, institutions or countries that have very different opinions or ideas so that they can live or work together” [19].

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