

The Ecological Cult of Heritage

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THE ECOLOGICAL CULT OF HERITAGE

ABSTRACT: Since society's origin, it has been shelters for mankind to live and work. There, men were protected from their environment, but those shelters would inevitably decay, since all materials have their own lifespan. Old shelters would either be maintained and the degradations repaired, demolished and their old quality materials reused in the new shelter, or simply abandoned when not burned down. In time, shelters became buildings constructed with stronger materials, increased in lifespan and environmental resistance; nevertheless the same approaches regarding building's decay subsisted and still does nowadays. However, the environment changed, and now we face a demographic explosion combined with an endless use and contamination of natural resources. Ancient buildings became following generations objects of cult, re-titled as antiquities, historic monuments, monuments, historic city, urban heritage, cultural heritage, etc. Yet within the heritage globalization, interventions are often stimulated by other aims, rather economical and exploitive.

Lifespan rehabilitation of built heritage born conceptually in 2002 and is now under development in a PhD research, during 2004-2007. We intend to develop conscious guidelines - theoretical and technological - for built heritage interventions, with its building process entirely lifespan planned: from pre-design till demolition, pre-considering the reuse or recycle of all included components and materials. All existing buildings, more than one generation old, can be considered as built heritage, as long as distinguished by inherent cultural values. These buildings represent the environment of their inhabitants and their daily actions, reflecting the traditions of architectural design and technological craftsmanship.

But built heritage will only achieve future generations and contribute for their development, if modern interventions are conscious, adaptable for spatial conversions, expansions and deconstructions, facilitating management and maintenance of all their components and infrastructures. Only then, the 21st century needs can be easily and wilfully integrated without damaging the existent building character.

1. INTRODUCTION

Environment and climatic inconstancy have been the biggest responsables for the genesis of shelters; or else there would have never been a concrete motive for mankind to search or built indoor settings; moreover, the outdoor environment would have been entirely sufficient to live comfortable. Shelters born exactly for this reason, for the protection, intimacy and comfort of their users, even if later in time, society endorsed other reasons regarding specific proposes, functionalities, designs and workmanships.

Mankind shelters are not eternal even if involved by a mystic enduring awareness. They are surrounded by aggressive environments, they are edified with materials and each material has its own lifespan, variable according to its exposure, location, use and maintainability, and still their inhabitants, can maintain but also contribute for their effective degradation. The paranormal accomplishment, wished and ambitioned by many devotees, unfortunately is still a simple emotional illusion. Shelters won't stop decaying just as their inhabitants won't stop aging, fading and changing.

Even if sometimes undertaken, maintenance was determinant in the preservation and survival of many ancient remainings that arrive to us today, mostly in their original status. When not preserved, the degradation accelerates furiously and the buildings either suffer strong interventions or loose their inhabitants and decompose. In ancient times, the obsolete shelters would eventually be burned out or simply abandoned by their owners, coming others later on, to pick the remained structures and materials in good conditions, for reusing or recycling in other shelters.

The materials for constructing shelters had been improved with experience and that made them become stronger and stronger environments. Herewith such evolutions, the shelters have increased their lifespan, as well as its environmental resistance. Soon re-titled as buildings, such constructions became less frequent on maintenance, especially when compared to those shelters with such a short lifespan, working as ephemeral structures.

Several preferences, either in techniques and materials, survived until our days; nevertheless buildings are not surrounded anymore by the same environment, neither by the same society. We live now in a XXI century fulfilled with cultural problems, facing overpopulation in many urban areas of the world and simultaneously desertification in others; but still living with a sightless and egocentric behaviour, inherited since the industrial revolution era, which tolerates the endless use and contribution for the contamination of natural resources instead of preventing it.

Society has always been guided by values and won't diminish building new, to preserve the already built heritage, as long as a specific cultural significance is attached to it. More than preserving only for erudite reasons, totally valid for experts, but insufficient for the ones that cannot reach and understand such guiding values; it is time to sensitize society for the vital importance of conservation of our existent resources guided by ecological values, taking into special consideration the current state of our planet and became conscious to the fact that slowly, one by one, we can start contributing directly for the re-use and the re-cycle of natural resources already altered by mankind and indirectly, by preserving the natural resources still available in our ecosystem.

2. CULTURAL SIGNIFICANCE

Cultural significance is regarded by Marta de la Torre as 'the importance of a site as determined by the aggregate of values attributed to it.' [1] This means that every site, building or element is target of several values, either in harmony or conflict, when establishing its cultural importance individually, as a particular object, and collectively, regarding its surroundings and global environment. All this could be very simple if time and society wouldn't change, but fact is that every generation has its own aspirations to achieve and even if afterwards we do not agree with it, we have to see it through their aims and values, weights and hierarchies, integrated in their contemporary circumstances.

During the Middle Age, buildings were considered merely as constructions built by man on their best penitence effort to combine light, material, ornament and workmanship skills. Antiquities and recent buildings would only be conserved if their **significance** and **use** would justify such intervention; without any consideration for a hierarchical typology or innate value. As so, when decaying two solutions would be considered: readapt or recycle. Many quarries have been created to recycle such **resources** in Rome [459 AC], and an official decree, attests the legalization of building's spoliation, as long as the decay condition of the building was considered irreversible.



Fig. 1. Amphitheatre of Nîmes in a painting of 1794

Source of information: <http://ist-socrates.berkeley.edu/~cls180/>

“Rome in the Eleventh century, [was] blocked up and filled with dwellings, storehouses, and workshops, while the arena received a church and the Citadel of the Frangipani; the Circus Maximus was replaced by dwellings rented out by the congregation of Saint-Guy; the arches of the theatre at Pompeii were occupied by wine

merchants and trattoriae, those of the theatre of Marcellus by rag-dealers, second-hand clothes merchants, and taverns.” [2]

But in Renaissance, ancient buildings started to be looked differently, however not by common society, but by a limited group of literate individuals, the Humanists. They considered antiquities as reference works, sourced of **knowledge**, enchantment and admiration, honourable masterpieces difficult to exceed or even raise equal. These intellectuals influenced all over Europe, and soon other scholars and artists would come as peregrines to Rome, in order to observe and learn from these antiquities. What they didn't know was that they would be contributing for the development of one of the most cost-effective industries of our society, the cultural tourism.

Not every ancient building was considered as antiquity in this time, for e.g. gothic buildings have been clearly denied by these intellectuals that considered it as, a style with no individual taste or rules, but a simple fusion of previous ones. For the first time we could therefore recognize **taste** and **style** interfering in the judgment of an antiquity designation. But not only aesthetical values have interfered in this judgment, historic values have also prevailed in their insignificance when regarding the shortness of the historical time line interval. Gothic was the style of their closest ancestors, and they were not yet prepared to accept and admire it.

The recognition of value is only possible due to a certain historical time line interval between the effective building construction and the building value perception. This period is not the same for each building, neither for each stylistic movement, because it always depends on the empathy between the style and philosophy involving the object of cult and his cultist. In ancient times, this recognition process would require much more than one generation to be accepted, because next generations would with every effort seek to deny or progress their elders, but nowadays, due to our eclectic society, stylistic diversions and varieties have become easily accepted, even if quickly forgotten. The historical time lime has achieved an entirely unlike speed and motion.

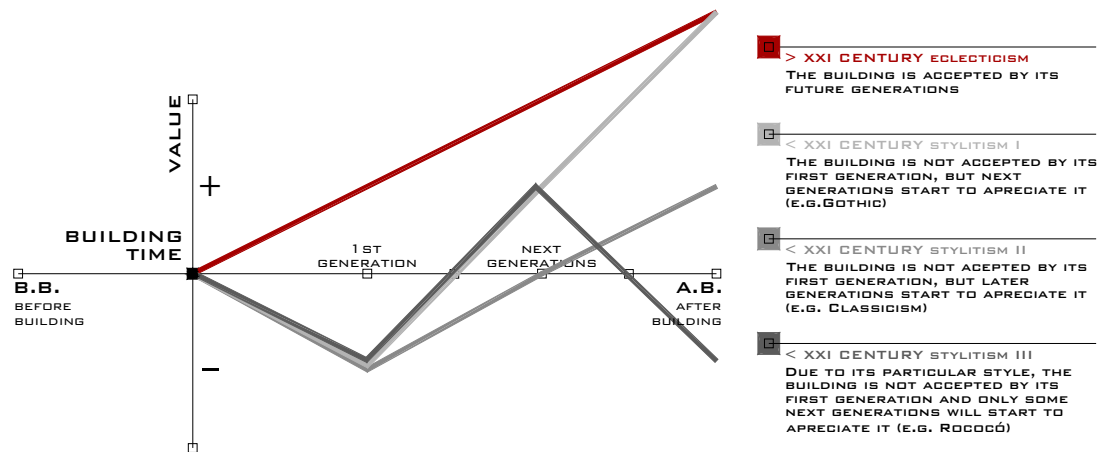


Fig. 2. Development of the building value among time

The XIX century was a period of change, which also influenced and twisted societal values. The Industrial Revolution came to border the two controversial realities of workmanship and industrial technology, old and new concepts, historic monuments and post-industrial buildings. And if on one side we would have the restorers, as Viollet-le-Duc, emerged into the development, ready to reuse, demolish and construct according to their style, time and technologies, on the other side we would have the conservatives, totally emerged into a deep romanticism, eager to stop progression and freeze the city without no more intervention than the necessary.

According to Alois Riegl this was the moment where buildings had become objects of modern cult, empowered by a vague new **memorial** responsibility. Antiquities, after embracing the gothic style and their buildings, became widely known as historic monument, according to Aubin-Louis Millin's denomination. With a clear progression regarding the Humanism, still there were some monuments, considered not worthy of conservation.

The valued monuments, skilled of retracing our **historic** greatest periods, such as ancient châteaux, abbey churches, and monasteries, would be spared from the natural decay, by its representation protected. Indeed, Gothic became considered the French national style, as Guizot defended, against their ancestor's substandard and degrading classification. According to him, antiquities had more than cultural and time knowledge; they had

strength and **national** emotions. Each building reflected, beyond its own theories and technologies, the historic progression of his nation. John Ruskin and William Morris have been the pioneers of the **international** protection and militancy for the defence of historic monuments. Together they advocated real battles in order to save certain monuments and ancient cities of France, Switzerland, and Italy. Ruskin proposed in 1854 the creation of a European protecting organization; prepared with financial and technical resources.

In 1903 Alois Riegl brought into the intellectual universe new theories and values, regarding the cult of heritage inherent in XX century society. As indicated in figure 3, Riegl differentiated monuments as conscious creations established a priori; from the not less noble historic monuments, which genesis was not premeditated for any celebrative motive, but recognized a posteriori by historians or even amateurs, for its own characteristics and values. He also defended the conservation of monuments, because aesthetical restoration wouldn't preserve the building **age** and their signs of time, later renamed as **patina**.

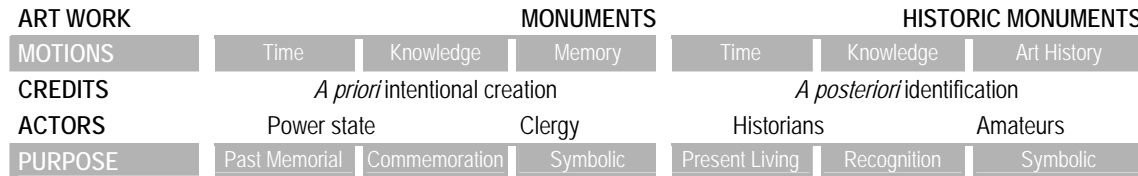


Fig. 3. Alois Riegl Works of Art categories [3]

Still in the 6th International Congress of Architects headed in Madrid, 1904, scholars developed a group of recommendations and definitions related to “architectural conservation”. Beyond many proposals they have emphasized the importance of the style **unity**, and agreed with the acts of restoration that would transform the building into a single stylistic expression, even if several styles were found combined.

Such principles brought in controversy and confrontation, especially when the scale of demolition / restitution inflated and entire quarters have been rebuilt after the 2nd World War massive destruction, but this time with new materials, but old styles. The respond to this movement came during the XX century, together with the settlement of the term **authenticity**; and the defence of modern interventions, integrating their time aesthetics and technology, but simultaneously respect the pre-existence and their cultural values. Even if for some intellectuals such genuine intention is suitable and understandable, for other experts, as well as for common constituents, the old styles have always been much better than the modern ones. This is a quarrel that started centuries ago and we believe that will never end.

Later on, Camillo Boito divided also monuments into categories, according to their respective **style and age**. Their intervention philosophy would be strongly related with these three categories, having the restorers to change attitude according to the monument characteristics. Monuments of classical antiquity would have to be archeologically restored with a scientific precision, and in case of restitution, one should only consider volume and not treatment of surfaces and ornamentation. Gothic monuments would have a scenic restoration, focusing on its structural elements and leaving the decorations to its dilapidation. For classical and baroque monuments he defended an architectural restoration, taking in consideration the buildings in their totality.

3. CULTURAL CONSEQUENCE

John Ruskin has preceded Giovannoni's “minor architecture”, sustaining that a new role should be given to domestic architecture, which he considered a fundamental element of the urban fabric. He believed in the urban fabric with varied assembles, where all, either great religious, civic or noble buildings should be preserved. This came to sustain the **urban** scale of heritage that began to be recognised as historic city and ended incorporated in-between all the tangible entities that regard today's cultural heritage.

Many problems emerged together with this scale of heritage, because entire city quarters, have been considered as heritage, and no heritage Institution can deal with so many objects of cult. As a result of such enlargement and global thoughtfulness, we face the need of involving all the other social groups in a mutual goal: the preservation of our cultural heritage, which we wish to preserve for future generations; but for that aim we have first to develop methodologies that can contribute to this achievement and in fact, reduce the dilapidation of buildings and percentage of obsolescence.



Fig. 4. Urban rehabilitation in the city centre of Monchique - Portugal, 2003



Fig. 5. Rehabilitation of a building Pombalino (XVIII century) in the city centre of Lisbon - Portugal, 2004

Built heritage interventions are often stimulated by other aims, than the pure preservation of cultural heritage. As an example, figure 4 represents the city centre of Monchique rehabilitated in 2003, where EU funds came to support the development of low-density areas in the interior of Algarve. Questions should be raised against such interventions, regarding the old urban areas and their population. Do they truly improve the living conditions of the population, or just the sightseeing of their transitory visitors? Even if some of them feel pleased with their city embellishment, and it will increase the economy, is it valid and ethical, to give priority to external appearances?

It is not expected that every single building will end out preserved, because city developments and management interests can determine some demolitions or new introductions, but from the moment that the decision is taken to endorse this process, all efforts should be made in order to preserve the building, as a global structure, and not merely as a combination of architectural elements. Just because the building takes part of an urban structure with cultural inheritance that does not mean, that the building itself does not have any interest on its interior. Sometimes it can be quite the opposite, and when rehabilitated without many considerations, such buildings just lose their precious cultural value.

It is the wish of the Town Hall of Lisbon and many world citizens, to propose the quarters of Baixa Pombalina for the UNESCO's World Heritage international safeguard. Marquês de Pombal together with Engineer Eugénio dos Santos planned this urban area and developed anti-seismic solutions to prevent future massive destructions as the one they witnessed in the 1755's natural disaster; earthquake, seaquake, and fire; which destroyed the entire downtown area and punctual surroundings of the medieval city of Lisbon. It is undeniable the inherent cultural value and authenticity of such urban environment, but also the technologies and materials used to build these buildings should be considered.

What you can observe in Figure 5 has become a common case in Portugal, but in this specific situation, it represents the rehabilitation of a building from the Baixa Pombalina. Without considering any value to the interior, often buildings are emptied and only the façade is "preserved", so that the Town Hall cannot complain about the intervention. Many technicians defend that this "façadism" is a good solution because the inside can be totally adapted to the XXI century needs and still they preserve part of the building, but in what concerns structural heritage; authentic elements and workmanship are simply being substituted by the most common, practical, and economical solution: the concrete skeleton. This means that the cultural significance of heritage and the consequence of interventions are still very dominant by economic and political values, especially when experts are not involved in the process. For this reason, experts should find a solution to subvert this seditious reality and contribute for the better understanding of the regent values and needs of our society!

4. THE REGENT VALUES

Heritage has become a very important issue for our contemporary society; even if not regarded with the same interest, and even if not the same building has been considered as valued. Fact is that we are now living in the XXI century and past generation's experiences from our cultural background influence our current values and

aims, actions and judgments. Heritage is nowadays ruled by a variable network of values and bared by an anthropological environment, where **experts** play only a small part.

We face four social groups that can influence in the heritage domain: **leaders**, **experts**, **constituents**, and the **environment**. With their own priorities and aims, we often face overlaps and conflicts, especially when their range of interests differ and collide. The Cultural values taxonomy of figure 5 is a schematic representation of the network of values active nowadays. The social groups have been interrelated to their main guidance values, but this doesn't mean that they are not influenced by any of the others. This was just a way to categorize ideologies and ranges of influence.

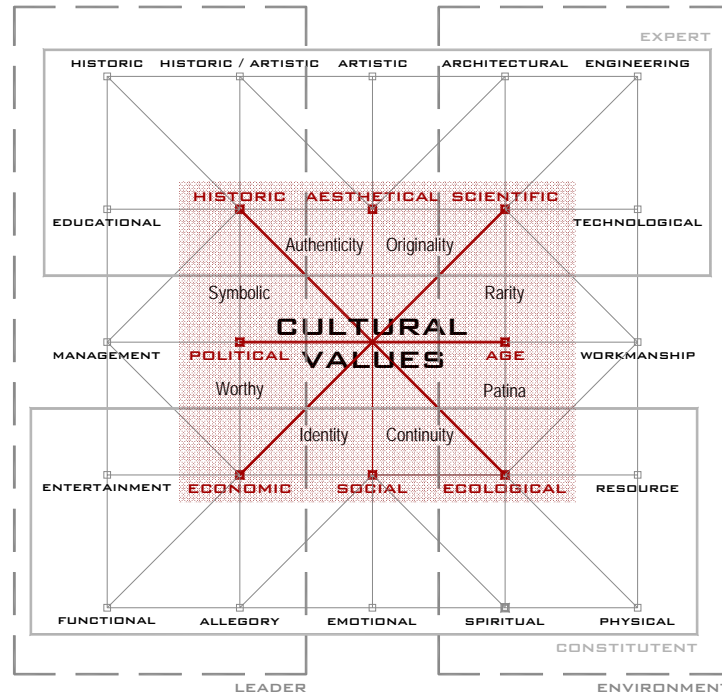


Fig. 6. Cultural values taxonomy

As **leaders** we considered every social individual or institution, in the most various sectors of guidance; either religious, monarchic, military, estate or even private, as long as they manage, conduct, and take decisions that can influence the living and judgment of a considerable group of people. The church has been an important leader concerning the conservation of religious heritage, having achieved in its time, even more power than the government itself.

The Cum aliam nostrum urbem, a bull promulgated by Pius II Piccolomini in 28th April 1462 decreed that all persons despite power, dignity, social position and religion should be punished from damaging, dismantling, demolishing, or converting into lime, any public building of antiquity or any antique vestige existing on the soil of Rome and environment, even if found in their own properties.

In spite of this imperative bull, few actions or projects were found complete to certificate this XV century philosophy regarding the conservation of antiquities. Quite the opposite, many interventions or new building constructions from that time, testimony the needed demolitions and reuse of ancient elements and materials, ordered by the same leaders, but beneath the justification of territorial development, for the wealth of the kingdom and their people.

Nowadays the reality didn't change that much, and often leaders take decisions that go against the constitutional, democratic and ethical rules, but their power is strong enough to provide them security and a wide range of influence over several fundamental concerns. This can be clearly understood if we compare leaders with the other two social groups; even if in some historic moments **constituents** have rebelled against administration and struggled for own their values and aims.

Dispassionate of management and economics, **experts** have already showed experience and tradition when dealing with heritage buildings. Considered as individuals with a high degree of skills or knowledge, these specialists can be positioned as historians, archaeologists, architects, engineers, etc. Even if both integrated in the same social group, each of them has a particular perception over the heritage reality. Historians and archaeologists have always been much more conservative than architects and engineers, as they admire history and their remnants, while their differing colleagues look further on spatiality, aesthetics, functionality, and technology.

Constituents are all the citizens that can be directly connected to the object of cult, as neighbours, owners or even as users, inhabitants or either visitors. These individuals can play an important role regarding the survival of a certain object. Some scholars defend that **constituents**, the main stakeholders of the social values, normally members of society, owners or users, have not been taken in consideration traditionally. But actually, they have been the main intervenients regarding the unrecognized heritage, by **leaders** and **experts**, during all this last centuries. They have been the ones using, preserving, adding, demolishing, etc.; the buildings that we consider today as heritage.

All these groups have very clear and established task regarding society endurance, but not always they have to be distinguished by their disagreement of ideologies. Sometimes they can follow the same road, combining forces in order to achieve goals, and don't become revolted about a particular choice or action. For this reason we considered the fourth social group **environment**, as the global circumstances that involve and influence the object of cult, either **anthropologic**, concerning its society, social groups and individuals, or **geographical and physical** concerning its milieu: altimetry, morphology, biology, climatic, resources, etc.

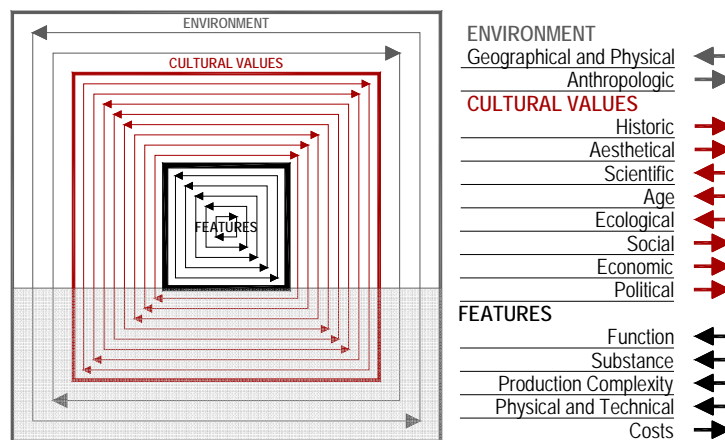


Fig. 7. Built heritage interrelations

The object of cult **features** are more related to its own characteristics, either functional, substantial (structural, aesthetical, spatial, etc.), its complexity of production, physical and technical conditions and effective costs. Away from values and vague influences, this field is much more objective and precise. For instance, during the intervention process, the building will be analysed in order to better integrate the new use and even if it still needs the human evaluation, all these factors are measurable by society developments.

Nobody was yet able to restrain time, therefore present or absent as individuals, society won't stop developing and changing, just as it has done during the last centuries, years, days and seconds. Our way of thinking and living is moulded by our environment even if we reject it. That is why evolutions are always expected in every factor that can influence heritage, but not all of them progress (fig. 7). Normally it is actually the opposite, because what today is modern tomorrow is outdated, degraded and old. However, its value as heritage becomes stronger and stronger, together with the progression of some values that are directly related to society and not to the object of cult itself.

5. ECOLOGICAL SIGNIFICANCE

The XXI century has inherited from its preceding century a planet careless of ecology and resources savings. Ever since Industrial Revolution, natural ecosystems have been alarmingly destroyed, due to the technological

developments that provided the people with tools to transform the face of the earth. Mankind has been very wasteful, but particularly, in what concerns building construction, there is a non-stop tendency to build and build new housing, commercial facilities, industries, public buildings, etc., satisfying the needs and wishes of families and businesses, while the existing building stock remains under-used and becomes more and more degraded.

New aims should be refreshed in order to sensitize our society about the importance of reusing built heritage or recycle the manufactured resources available in the existing building stock. Built heritage is the research denomination for all kind of existing buildings that passed down from one or more preceding generations, moreover the cultural heritage symbol of “outstanding universal value from the point of view of history, art and science” declared by Unesco in the Convention Concerning the Protection of the World Cultural and Natural Heritage, in the Paris meeting. [4]

We believe that every existing building is valid regarding the network of cultural values. They represent the daily environment of many generations and provide a sense of local continuity anchored in the past towards the uncertain future. Always associated to their inhabitants or actions, they represent past traditions of architectural design, craftsmanship, and ways of living and building, and can contribute for the development of future incoming generations, even if not in its totality, as an existing resource of structures, elements and materials. [5]

There is the urgent need to find aims for the regent values in order to subvert this existent resources disequilibrium. If society doesn't understand expertise values, its actors should be able to understand the value of mankind survival and cultural preservation. Even if only part of the global network of values, ecological values should be our guideline in the XXI century, just like other values were guidelines in other centuries and societies.

6. CONCLUSION

We believe that the XXI century needs can be easily and wilfully integrated with the rehabilitations, without damaging the existent building character. But for that, other society actors have to change their perception regarding built heritage and their priorities of values. Modern society can and should contribute to the development and continued existence of future generations. And as long as modern interventions in our old urban city are conscious to their contemporaneity, adaptable for spatial conversions, expansions and demounts, facilitating management, maintenance and deconstruction of all their components and infrastructures, we believe that we will be already contributing.

Lifespan rehabilitation of built heritage born as a concept in 2002 and is now under development in a PhD research, planned for the period of 2004-2007. Our goal is to develop conscious guidelines - theoretical and technological - for built heritage interventions, in order to contribute to the consciousness of the building rehabilitation process. From pre-design till demolition, all steps will pre-consider the reuse or recycle of all components and materials, chosen not only by their aesthetical and functional qualities, but regarding cultural, ecological and lifespan suitability.

REFERENCES

1. M. DE LA TORRE: Assessing the values of cultural heritage: Research report, The Getty Conservation Institute, Los Angeles, 2002 [<http://www.arch.chalmers.se/www/anytt/schewan%202003-2004/A4CultHeriassessingvalues.pdf>]
2. F. CHOAY: The invention of the historic monument, USA: University Cambridge Press, Cambridge, 2001
3. A. RIEGL: Der Moderne Denkmalkultus, Sein Wesen und seine Entstehung, in Verlage von W. Braumüller, Wien und Leipzig, 1903, Italian translation edited by S. Scarrocchia, Il culto moderno dei monumenti, il suo carattere e i suoi inizi, Nuova Alfa Editoriale, Bologna, 1990
4. UNESCO: Declaration from the Convention Concerning the Protection of the World Cultural and Natural Heritage, Paris, 1972, article 1 [http://whc.unesco.org/world_he.htm]
5. A. PEREIRA: Reusing built heritage resources with sustainability, CIB Student Chapters International Symposium - Sustainability and Innovation in Construction and Real Estate, Beijing, 2004