

Chapter 2

Conserving–Restoring for the Future What We Inherited from the Past

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2.1 The Reasons of Conservation–Restoration of Built Environment Today

For more than two centuries, Europe is discussing about the fate of what every generation inherited from the previous ones and tries to solve the related problems: ideal, doctrinal, theoretical, technical or pragmatic, and operational. A rich and wide literature, to which a large range of projects and interventions corresponds, attests this scientific, technical, aesthetical, historical, and “ideological” history that will never be declared concluded. The problem will in fact re-propose itself as life will go on, always enquiring which kind of relationships any new generation will establish with the relics and the material traces inherited from the past. It is also clear that the issues of conservation–restoration will remain meaningful in the future only if “a past” will continue to exist, producing remains, because, as Marc Augé suggests: “*future History will never produce again “ruins” but only rubble. It will not have enough time to do so*” (Augé 2003).

This also means that the central and crucial question in this perspective is: “Why do we conserve–restore?” or treat in different ways those material traces? And “why” can have at least two different and even mirrored meanings: it can evoke the reasons, or the causes, “because” we think or we do something, or it can refer to the aims “why” we do so, and to the aims we want to pursue of the objectives we want to reach by acting in that way.

As it happened during the past centuries, we will thus continue affirming that we want to preserve, maintain, conserve, or restore the fragments of previous ages and

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societies for different and sometimes mixed, contradictory, and conflicting reasons and aims, such as:

- to know, to discover, to understand, and to reveal—or to unveil—“what” is already clear and evident inside/within the material body of the ancient artefacts (embedded), or what is still hidden;
- to save, to take care of the existing artefacts by contrasting the effects of the injuries that they suffered along the past story and still suffer in the present;
- to consequently repair ancient or recent damages that have been caused by the unpredictable forces of nature or, more often, by men lack of care, distraction, ignorance, excessive needs, desires, and so on;
- to remember and therefore highlight, within the material fabric, anything we think could be important for our present but, even more, for our descendants and future generations;
- to celebrate, to remind, and to educate those who will look at those relics, thus improving our historical consciousness, our aesthetical and creative capabilities and sensibility and, finally, our “sense of beauty”;
- to use again the monument we are in front of, or to continue using it within a sort of historical continuity or with significant changes, so that it can be still part of our present and future life, urban scene, and landscapes.

The problem is that all these noble aims, sometimes deeply conflicting in between themselves, are often translated in really alternative actions and attitudes like, for example:

- to “complete” the ancient monuments, following the ideas and the suggestions by Eugène Emmanuel Viollet-le-Duc, thus discovering and rebuilding their lost unity in order to give them again a presumed or supposed original completeness, perfection, and splendour so that can still be able to speak, to teach, and to be really understood and comprehended by everyone;
- to “create and invent”, in this perspective, a new completeness, totally different from the original supposed one, basing our action upon the reasons and the rights of our present culture to leave its signs upon the ancient monuments, as any other previous age and generations made;
- to “correct or to erase”, in such a way, also the ancient or recent mistake, or what we consider bad and incorrect previous interventions of transformations and modifications carried on the buildings in the past;
- to even “ameliorate” those old artefacts, in order to raise their qualities and performances, or to preserve or to enhance their legibility, at least when they are conceived as a text, a palimpsest, a mine of knowledge and of information to be still discovered and metaphorically and concretely excavated.

These alternative but sometimes deeply mixed intentions and the correspondent actions are possible because conservation and restoration are not simply a matter of disciplinary discussion for some artists, scientists, technicians, architects, historians, scholars, or administrators, generically or directly involved in the responsibilities about the destiny of what we inherited from the past(s) and we call now

“Heritage”, with all the contradictions that this word finally carries in itself. The pair conservation–restoration belongs in fact to the deepest roots of our societies and culture, affecting the life of the individuals and of the social communities, even if they are not always aware.

Of course, the answers we can provide too so many, various and conflicting questions and issues—in terms of ideas, values, concepts, tools, and intervention techniques—are theoretically and even pragmatically very different. On the other hand, we still work on them rightly to give answer to some fundamental needs that more than two centuries of debates and of real interventions on pre-existing architectures did not solved in a definitive way. This is the reason why they are continuously re-proposed in our present days and will be in the future as well.

2.2 A Brief Historical Profile of the Discipline

Since more than two centuries, as we already said, Europe is discussing about the fate of an impressive amount of ancient monuments, of poor but meaningful buildings, of urban fabrics, and of rural hamlets that fortunately survived from the past and still characterize our territories and built landscapes (Carbonara 1996; Conti 1980; Jokilehto 1999; Musso 1988, 2007; Torsello 1984). They are the fragments, remains, or relics of a material and spiritual legacy, irreplaceable traces of an ancient and sometimes unknown or forgotten history. They are not only something to be transmitted to future generations, for several reasons and also in view of a really “sustainable future” that can be achieved if we first of all do not waste for nothing the existing resources. Those traces and remains are also among the most important signs and expressions of our cultural and social identity (or better “specificity”). For these and other reasons, our monuments (ancient or recent, rich or poor) are not “mere buildings”. They are more important than simple products of our ancestors’ constructive capability. Churches, palaces, mills, warehouses, and farmhouses are first of all an incredible “mine” of knowledge, of “direct” and “indirect” information useful to understand the past but necessary also to imagine and design the future. Over the centuries and the decades, further on, the aims and the objects of architectural conservation and restoration have significantly enlarged, since their beginnings, moving their focus from limited individual and isolated buildings to towns, territories, built landscapes, or even widest systems of artefacts and to their relationships, thus coming to face new challenges.

Today, beside the conservation, the safeguard of the processes on the field, of the technological systems, of the traditional skills, and of the bodies of knowledge has become one of the main challenges for the scientific and cultural community. We are aware and conscious of the role that our “Heritage” (better to say our built environment) plays in improving the sense of identity or specificity and that of integrity of the individuals and of the societies, thus participating in the construction of the future though apparently only in indirect ways.

At the same time, some new and additional reasons to affirm and pursue the safeguard of our built environment have come to the fore. Among them we may highlight at least: the informative potential of ancient architecture, from which we can derive several interesting lessons about smart technological solutions to build in a more ecological and respectful way for the environment and the limited resources of our planet; the need for sparing resources (economic, energetic, territorial, human, social, environmental) because the energetic crisis and the fragile ecological situation of the Earth, also through the saving, recovery, recycle, and upgrading of existing buildings. After decades of interventions on existing architectures (not only “monuments”), moreover, it is now acknowledged that conservation or restoration interventions cannot be considered as arrival points for the life cycle of a building. They are delicate phases of its existence that may either positively or negatively affect its future and the need to be maintained on regular basis and with clear and documented methods and actions.

These new challenges do not mean that the old questions and issues have been definitely solved or that they have lost their relevance: the problems of “why?” and, consequently, of “how” to intervene on existing architectures maintain their actuality. The problem is that our theoretical reflections and technical tools do not always seem adequate to the present needs, also because most of the conservation discourse has been till now conceived to give the final prominence to the recalled opposite terms of “conservation”, “preservation”, and “care”, on the one hand, or to “restoration”, “renewal”, “revitalization”, or “upgrading”, on the other hand. And, unfortunately, the conflict between these words has been frequently used to define and to decide the destiny of ancient buildings, monuments, towns, and cultural landscapes even if it seems very often exclusively an academic dispute.

We perfectly know, otherwise, that the contraposition between “conservation” and “restoration” is as ancient as the debate on the fate of architectural “Heritage” or “Patrimony”. During the nineteenth century, the two recognized “fathers” of the modern “restoration theories” elaborated a propos two opposite ideas about the attitude and the behaviour to be adopted in relation with the traces of the past. Eugène Emmanuel Viollet-le-Duc clearly declared that restoration was a modern word for a modern thing and that: *restoring it is not preserving a building, but it could mean to bring it again to a state of wholeness that could have never been existed in a given moment...* (Viollet-le-Duc 1854–1868). With a completely different approach, but agreeing on the modern essence and origin of the problem, John Ruskin asserted that: *restoration is a lie; the worst lie which is accompanied by the destruction of the beloved artefact accompanied by the fake description of the destroyed thing...* (Ruskin 1849). The “restored” building, in fact, does not ensure in his mind the survival of the authentic ancient monuments for future generations. Ruskin thought in fact that restoration would change the monument in such a way that, at the end of the intervention, it would deal with the restorer’s work, ideas, intentions, age, and culture and not with those of the men that created and transformed or modified it after the first construction.

We have to recognize, nowadays that the above-mentioned sentences by Eugene Emmanuel Viollet le Duc and John Ruskin clearly synthesize two antithetical ideas about what we would have to do of the ancient monuments, and those ideas still

influence our debates, researches, and projects. Furthermore, all over Europe it is possible to identify more or less codified theoretical–doctrinal positions in accordance with (or in opposition to) Ruskin’s or Viollet’s thoughts, which left their traces on the materiality of our buildings and on their image, thus affecting the perception we have now of them. Some of the theories, or better reflections proposed after those first explicit assertions conditioned more than others some interpretations and treatment of our architectural “Heritage”. We could thus try to synthesize what really happened afterwards by selecting some extreme and clear positions that of course do not exclude the existence and the importance of others intermediate positions.

We can therefore provisionally identify at least the following main theoretical–doctrinal proposals:

- the so-named stylistic restoration focused on the construction of a “history of styles”, by using real-scale “exempla” and selecting those parts of a monument that are considered consistent with the prevalent architectural language recognized in the building as belonging to a same age and reconstructing what has been missing in order to complete its image, on the base of a comparative study and analysis¹;
- the presumed “philological restoration” (Giovannoni 1931, 1946) recognized the essence of the monument considered as a “document” and stated the necessity to valorize all the signs of succeeding phases of its history and status as are showed on its material body through a complex of formal, structural, and material stratifications that should be revealed and fixed in its image for didactic or pedagogical purposes;
- the so-called critical and creative restoration (Bonelli 1963), in its purest version, implied first of all the critical identification of the outstanding aesthetical values of a monument, its “true form” as the result of a genius’s creation, and basing on this judgement stated the need of a “creative action” in order to free the “true form” of the monument that constitutes its image, by abolishing any incoherent and subsequent element that cancelled, modified, or transformed it;
- a parallel and more complex version of this approach brought afterwards to the fundamental definition of the treatment of the so-called lacunae, i.e. the voids existing within a figurative texture, in order to “re-establish” not the original and lost unity but only the “potential” one, still suggested by the survived and remaining parts of the masterpiece of art and thus deciding which instance should prevail between the “historical” and the “aesthetic” one² (Brandi 1963, 1977);

¹See, during the XIX C., in Italy, the works of some restorers as Alfredo D’Andrade, Carlo Maciaccini, and Alfonso Rubbiani who often forced and misunderstood the ideas and the works by Viollet Le Duc giving life to the so-called stylistic restoration.

²See also the contributions by Walter Frodl and Paul Philipot who co-operated for several years with the School of Specialization in Restoration of Monuments in Rome, directed by Renato Bonelli, the Italian Central Institute for Restoration, founded and directed by Cesare Brandi, and then with ICCROM, contributing in diffusing the Italian positions about restoration.

- the usually identified as the modern “preservative approach” (or “Conservation School”) gave then the greatest relevance to the permanence of the existing artefacts, recognized and “accepted” in their irreducible complexity and contradictory, with no aspiration in transforming the existing buildings to match a coherent idea of them but trying to safeguard all the past interpretations already embedded in the body of the monument and the possibility for future ones³.

All these different positions in any case derive from different theoretical–doctrinal assumptions about History, Science, Technology, Arts, or human creativity and evidently lead to opposite ideas about “what to do” for the safeguard, protection, or enhancement of our built environment. The monuments that have been restored following those different ideas have afterwards influenced both experts and public and, today, we cannot ignore that our ideas about (and knowledge of) architectural “Heritage” have to take into careful consideration also their transformations occurred in the last two centuries.

In any case, what is now really important is to find a way to escape from the paralysing effects of these ancient conflicts. Different words, in fact, often hide different and even opposed intentions or actions. “What we declare” as our goals can thus bring to deeply different results that we cannot compare one to another, right because they cannot take place or exist simultaneously. While different words

³At the end of the 80s of the past century, in Italy, the panorama saw the birth of a new disciplinary tendency within the field of restoration. Someone, belonging to the so-named Milanese School opposed to the overpowering presence of the so-named Roman School and proposed some new horizons and a new concept of what restoration could have been. The “Roman School”, represented by scholars and professors like Giovanni Carbonara or Guglielmo De Angelis D’Ossat was the heir of the long and important tradition interpreted by Renato Bonelli and Cesare Brandi and, even before, by Gustavo Giovannoni. Within that intellectual tradition the influence of the neo-idealistic philosophical thought by Benedetto Croce was still predominant with all the consequences upon a vision of the monuments like masterpieces of art, aesthetically and figuratively examinable, valuable, and consequently treatable with a restoration aiming to free their “real form” (Bonelli), hidden by casual and insignificant transformations, or establishing again their “potential unity” (Brandi). In Milan, reacting to these positions, scholars, university teachers, and professionals like Marco Dezzi Bardeschi and Amedeo Bellini, immediately accompanied by Paolo Torsello and afterwards by many younger ones, gave life to a new tendency that, recalling Alois Riegl’s, John Ruskin’s, William Morris’, or Max Dvorak’s fundamental ideas and works, considered the ancient monuments as far as documents of their own history and, therefore, proposed to respect every traces of that complex history, without any preventive choice due to aesthetical, historical, or ideological assumptions. The debts towards the so-named New History (the “Nouvelle Histoire” funded by the French historians), the Culture History (or “materialist and archaeological culture”, derived from the German term “Kulturgeschichte”) and the most updated currents of the contemporary philosophical and epistemological thought were, in this case, very evident. Recently, that firstly very hard and almost irreducible contraposition has been almost completely exceeded, thanks to the efforts of many protagonists and we conquered, at least in Italy, the common consciousness of the irrepressible historical nature of any artefact derived from the past and, consequently, the idea that right this material consistency must be first of all respected and preserved. What to do beyond the primary needs for conservation, on the contrary, is still a hard and intriguing matter of discussion, above all regarding the possible construction of lacking parts or new necessary components of the monuments entrusted to our care.

or discourses can always coexist also provoking a productive dialogue, in fact, each single concrete action eliminates the possibility for any other to be realized or put in place. We can neither hope to definitely close the problem by looking for a general (or universal) agreement about the meanings of those different words. By elaborating about similar problems in the framework of the scientific research, Karl Popper (Popper and Notturmo 1994) perfectly explained that this is just a myth, the “myth of the cornice”. It is based on the fault idea that if a community firstly discusses to define the worlds they are going to use within its common researches, then it will be possible to really compare what each member of the community will say and elaborate. But, any attempt to define a “cornice” of such a kind will in any case use other words of uncertain or at least discussable meanings. The cornice will thus continuously enlarge along an endless process and no real common understanding and willing will be never acquired in such a way.

We have therefore to accept the irreducible opening of all the questions related to the conservation or to the fate of our built heritage and that this circumstance does not imply the impossibility to choose or to do anything, but it simply imposes the responsibility of a choice and not a chance to apply some superior rule, or behaviour code, because they simply do not exist. It is a good situation, perhaps, also because our landscapes, cities, and monuments are a complex whole of heterogeneous things, aspects, meanings, messages, and so on, the results of different or opposite actions, wills, intentions, needs, aspirations, and skills, and it is therefore a good practice not to reduce them to a stereotyped model. Monuments are also very often the random stratification of materials, forms, and traces of ancient uses that have been put together by the long river of an almost unknown history. We can only hope to be able to shed light on it and to reconstruct some fragments of this history, starting from its material remains and considering them as precious documents, direct witnesses of what has happened in the past ages and that nobody can entirely know.

Also for these reasons we cannot solve for ever the crucial problem of “what to do” for the future of our built Heritage, especially by reducing it to a mere struggle between the desire of a free territory for new unbound creativity and a strict respect for its existing situation. All our history, and certainly that of our cities and monuments, on the other hand, is deeply marked by constructive and destructive actions. Moreover, what we now consider as “Heritage” is only a small part of what other men built before us and an impressive number of subsequent generations co-operated to use and modify. “What to do” of this legacy or “inheritance” that our predecessors left us is a difficult and responsible choice for any generation, community, nation, and social group. Our choices will contribute in defining our identity or specificity, our place in the course of human history and civilization, and they should not be simply considered as a matter of technical discussion, but of a more profound cultural and ethical reflection and engagement. The destiny of our cultural, artistic, architectural, and environmental “Heritage” represents in fact a great responsibility for us that we cannot ignore or escape. Our descendants will ask us reason of our attitude and behaviour towards what they will rightly consider as their own proper Inheritance. For this reason, it is neither correct nor useful to

continue asking why we cannot do what all other generations made before us, that is: using, consuming, changing, destroying, transforming, or modifying the buildings they received from the previous generations. We must in fact remember and acknowledge that, during the last two centuries, our world and culture knew such deep transformations that have never occurred before. Since the French Revolution, so many industrial, economic, social, and political changes have been so subverting the human world that we now live in a completely different environment, if compared with the one of our forefathers. Because of this, we are conscious that everything they built or made and left behind themselves is a sort of irreplaceable fragment of a lost world and a provisional legacy for ourselves that should be left to our descendants the more intact is possible. If we deplete or harm our landscapes, cities, and monuments, we cannot hope to re-create anymore of them in the future: they will be lost forever and nobody, after us, will ever have the chance to contemplate, to study, to use them any longer. In order to be effective in the safeguard of this legacy, we should overcome the simple struggle between the extreme terms of the traditional debate that continuously opposes those who always want to change, to modify, to destroy, and to substitute little fragments or large parts of our present landscapes, cities and monuments, and those who always hope to preserve everything. On the one hand, we cannot pretend to stop the course of natural and human events but, on the other hand, we have to choose, every time, “what to do” in front of the power of nature that tries to conquer again the products of human work and culture or in front of men willing to improve the environment and places where they live without any rule and constraints. In the difficult choice concerning the “if”, “why”, and “when” not to conserve a piece of our Heritage we must remember, in any case, that what we destroy will be lost forever and that according to Leon Battista Alberti: *“There is always available time to demolish, to level or to destroy any structure”* (1454). We do not know exactly nor completely what we deal with, we cannot say in a definitive way that a building, an urban area, or a landscape has no precious elements for the understanding of the past, for the use of its values and resources, but also for a better future. The destruction, but also a restoration that radically modifies the existing buildings and artefacts, in the unadvised attempt to re-create their lost configuration, could be a real and irreversible loss of chances and resources for the future, more than a simple loss as regards the past. That is the reason why we have to accept the destiny of death that belongs to every natural being and, consequently, to the men work products as well. This means that we cannot really “restore” a monument, at least if we intend for restoration the desire to go back into its history by modifying its materials, its spatial layout, its aspect or structural behaviour in the attempt to recover (or repropose) a lost condition. On the contrary, we must take care of that artefact, with a preventive surveillance, an effective and programmed conservation, and respecting all the signs that the passage of natural time and of human events have left upon its surfaces and inside its body, even if—or just because—we cannot completely know and understand them. Those signs—traces bear witnesses to the “true story” of the building (not necessarily a “monument”) and of the men that constructed, used, and modified it during the past ages, even if this “true story” is

hidden and partly unknown. We have to “take care” of our monuments as precious sources of culture, knowledge, and technical skills, in order to contrast the threats and the actions that could damage or destroy them. We have to make all our possible efforts to ensure our built Heritage a longer life, always stopping ourselves in front of any temptation of transforming it in a sort of “fake” simulacrum or clone of itself. We cannot therefore simply or “a-priori” decide whether everything we inherited from the past must be “conserved” or “restored” (i.e. “preserved” or “modified, integrated, substituted”...), also because both perspectives cannot take place in the space and time of existence of the same generation. We must be conscious that where the care for conservation stops (because we decide it is impossible, not convenient nor viable to retain one particular building) the space of new design and of new Architecture begins. There is no space for any ambiguous mix between the needs of preservation and those of innovation. Where one stops the other begins, even if the boundaries between these two central activities are not always clear and easy to be defined and fixed. Afterwards, we have to decide if new and “never seen” forms must characterize the new architectures or if they could follow ancient rules or “reproduce already seen solutions and forms”. This is, of course, a matter of discussion and every chance is the result of a free choice and not of an obliged behaviour. Therefore, if the choice of “how” to intervene on existing buildings is a matter of decision, we must assume all the responsibilities about it, renouncing to invoke metaphysical or legal reasons in order to diminish the role we play in determining the real impact of our ideas and proposals. We must moreover denounce in advance “what we gain” and “what we lose” when we adopt one or another solution. We also should select the options that minimize the losses and maximize the permanence of material sings, immaterial cultural meanings and values of the legacy we aim at safeguarding. This is neither a duty nor a metaphysical or a simply ethical law; it is a call for prudence and for a responsible and thoughtful action.

2.3 Methodological and Operational Issues and Tools

Though the above-mentioned problems could have as in the past various and different answers, any conservation/restoration enterprise usually respects some fundamental methodological steps, a sort of logic scheme, or a sort of flow chart that in any case asks frequent feedback procedures, in order to check its correctness and efficacy (or efficiency).

Concerning this topic, we could also recall a very ancient metaphoric or symbolic image of Architecture or of a building as a “body”, a natural body. Leon Battista Alberti (1454) inaugurated the Renaissance adventure and the rediscovery of the ancient classical culture of Rome not to imitate it but to overpower right it by using this powerful “paradigm”, as Françoise Choay qualified it (Choay 1980). One of the consequences of this theoretical concept is represented by the comparison we often propose between the activity of a physician and that of an architect, when this

last intervenes on an existing monument that was built following forgotten rules and plans and that is now affected by unknown decay phenomena or structural diseases. It is not a modern metaphor. It was explicitly proposed and used by Leonardo da Vinci when he was asked to suggest a solution for the completion of the unfinished “*Duomo*” (Cathedral) of Milan and to propose the best form to be adopted for the flesh to be built completing the church. Leonardo (Bruschi et al. 1978)⁴ proposed, right starting from Alberti’s idea of the necessary “*conformitas*” (accomplishment) between the existing parts and the new ones of the building to adopt a light structure based on a square or octagonal plan in order to match the existing pillars of the dome and thus respecting the structural logic of the ancient gothic church. That was not the result of an academic, aesthetical, or simply architectural preference. As Leonardo clearly explained, in fact, it was firstly necessary to discover which were the rules of the good building practice, which the loads and the forces that ruled the existing construction and, consequently, which were the problems or the phenomena that put in danger the equilibrium or structural balance of the already-existing cathedral. Only thanks to this “naturalistic”, scientific, and inductive method, it would have been possible to find the right solution: the medicine able to “recover” the “*malato* (sick) *Duomo*” respecting its constitution, its “sanity”, its life and avoiding the risk to kill it, or to transform it in unacceptable (unnatural) way.

So, if we accept to use this ancient metaphor (conscious, of course, of its limits), we could individuate in our job at least the following schematic but fundamental phases, even if they do not always exist and follow each other in this specific unidirectional order: (a) analysis, (b) diagnosis, (c) anamnesis, (d) prognosis, (e) therapy, (f) prophylaxis. Other parts of the job follow the basic phases of inquiry, as we see, on the level of intervention, passing towards the crucial and not automatic moments of the interpretation of the analytical and diagnostic results. These new phases are represented by the design hypothesis (prognosis), their control, the definition of the project (the therapy: aims, tools, intervention techniques, technological, environmental, and economic requirements), and its realization in the construction site to end with the maintenance of the restored building.

The “anamnesis” is particularly interesting for us because it implies the attempt to reconstruct the history of the monument in order to understand “how” it was conceived and realized and afterwards changed, modified by men or by natural events, but also “how” and “why” it was used and consumed in the past. We are dealing with an “idea of history” that is quite distant from the traditional one and

⁴Leonardo Da Vinci, *Lettera ai fabbricieri*. In the same volume, some other interesting texts are collected belonging, among the others, to Donato Bramante and Francesco di Giorgio Martini, always related to the problem of the completion of the flesh of the Milanese cathedral and, further on, the so-called Lettera addressed by Raffaello Sanzio (but probably written by Baldassar Castiglione) to Pope Leone X about the state and the destiny of the ancient ruins in Rome. These writings are very interesting and explicit theoretical expressions about the problematic relationships existing between the protagonists of the birthing Renaissance culture and the medieval incomplete monuments or with the ancient classical ones they assumed as a reference legacy.

that expresses the evolution of the historical sciences and methods during the past century, particularly the birth and development of the so-named New History—*Nouvelle Histoire* (Braudel 1986, 1987; Bloch 1949; Le Goff and Nora 1974; Le Goff 1988, 1999; Fevre 1930) aside the traditional one. It was a new history defined as a “history as a problem”, facing the ancient “history as a tale” and attentive to the “long duration” of some phenomena more than to the single outstanding “events” that signed the existences of the past generations and societies. It was a new concept of the historian’s trade carefully intent in studying all the possible traces of the past, material and immaterial, tangible and intangible, descriptive and qualitative but also quantitative and apparently meaningless in themselves because their sense could exclusively emerge from the greatest series of single data considered under different and new perspectives. It was a method to reconstruct the unknown history of the past, ancient or recent, avoiding any preventive selections of data, any “a-priori” choice of a particular position within the rich offer elaborated on the level of the more general “Philosophy of History”. Only this kind of historical research could allow reaching new cognitive borders thus contributing also to the development of the conservation/restoration issues. This intention to discover and recover the starting moment of the existence of the artefact and all its subsequent phases can and must use, in fact, different data and information sources: indirect, i.e. independent from the physical status of the monument (written documents, iconography or oral testimonies, and oral traditions), or direct, i.e. the monuments considered as the first and fundamental document of themselves. Right within this second perspective, our job inevitably interacts with all the analysis and the diagnostic tests that could be developed in order “to inquiry and to know” the building, in its present material state and consistency. Among these last methods we could briefly remember the: (1) architectural survey (executed with topographic, longimetric, photogrammetry techniques) intended to know and dominate, thanks to elaboration and restitution techniques, the “geometries” of the monuments (original and acquired, for construction mistakes or for structural assessments or changes, regular and irregular, intentional and casual—Torsello 1988; Musso 2016); (2) materials and decay phenomena identification (mineralogical and petrography characterization, physical and chemical analysis, biological, botanical, and zoological inquires...); (3) analysis and interpretation of the constructive techniques, throughout the instruments of the “history of culture” and of the archaeological methods applied to architectural standing structures (see apropos the experiences of the so-called medieval archaeology and Harris’s stratigraphy); (4) structural analysis with specific interpretative numeric models or non-destructive tests. All these aspects, in fact, could be essentially used to understand the building as it is today but, above all, why it finds itself in its present status (i.e. the “anamnesis” phase of the inquiry, by the way). Any attempt to discover, reveal, unveil, and understand the monument, in this perspective, brings in any case our attention towards the reasons that determined its construction and subsequent existence, and this means that we have to look at the society that produced it, keeping again in consideration the crucial question about “why”, we started from, even if in a different perspective but with not less important consequences on our job.

Another important aspect of our discipline (even if it could not be exactly a discipline) is represented by the wide and urging theme of the protection and the valorization of our Heritage, that will bring us towards the impact it can have on the social, economic, and cultural context.

It is also necessary to remind that someone still doubts about the existence of possible general methods in this field, or at least he highlights the risks of misunderstanding about it (Torsello 2008). They usually argue, about the possible sense and the role that a method can have (provided that it exists) as regards research, teaching, and professional practice in conservation/restoration. By a bolted game of cross-references and comparisons with other domains of human knowledge and activity—not casually mainly regarding Medicine—they affirm that such a method does not actually exist and cannot really exist because one can teach how to analyse an artefact or how to choose and accomplish specific technical actions but nobody can really teach how to build a synthesis, while a project is eminently the result of a synthetic or “holistic” action and, by many aspects, a “creative” one. What we call methods, in the teaching of Architecture and—even more appropriately—in restoration seem thus to be frequently reduced to simple “ways of thinking or behaving” that each one of us adopts and would aim at taking in charge a wider and more universal role. Therefore, it is not a matter of a method universally recognized by a scientific community, but of an indistinct ensemble of ethical or ideological rules which call the risk to deepen the division existing between the different competences involved in conservation/restoration and to encourage a project to drift towards a misunderstood freedom, totally unbound from a rigorous knowledge of the artefacts of our Heritage in their real context.

2.4 Studies and Researches

Also for these reasons, the analytical and diagnostic apparatus have assumed a crucial role and importance for conservation and restoration. In this field, a common language developed during the last decades, with evident and appreciable repercussions at least as regards research and didactic. Some worries emerge, on the other hand, about the risk that a sort of consolidated “orthodoxy” can hide a sort of purely formalistic respect for some apparently inescapable rules, accompanied by a certain passiveness. In any restoration intervention, relevant technological devices often support the architectural surveys. The historical inquiries, grounded on strong critical apparatus, are very often rigorous and rich. The collections of diagnostic data concerning the physical state of the artefacts, as regards the constructive materials and techniques, or their state of deterioration/conservation, are meticulous, faithfully and punctually visualized and synthesized in “thematic maps” of sure communicative and perceptive impact. The use of “virtual simulations” of the interventions, on the built materials and on the structures and spaces of ancient architectures are diffused and refined. Also some complex structural studies and

non-destructive testing and monitoring are frequently exploited, generally with the consultancy of experts belonging to different disciplines.

At least from this point of view, it thus seems that we have achieved some elevated common standard. Nevertheless, this achievement does not seem to solve all our problems, and it raises some doubts about the real efficacy of our actions, for the evident risk of a formal homogenisation to which an analogous strong presence in our activity does not seem to correspond, in a field that appears to be beset or endangered by other disciplines and professions. No scandal lays in this circumstance, of course, but far too often this condition does not prelude to an effective generalization of the attention to the conservation–restoration themes to the necessities and objectives by it postulated but, rather, it seems to announce a possible Heritage’s misuse and depredation. Concerning this hazard, in fact, the apparent and soothing homogeneity of our technical apparatus can hide an uncomplaining or unconscious closure of our entourage as regards the transformation the world goes through, the world in which we operate.

2.5 Values, Impacts, and Consequences of the Conservation–Restoration Interventions

When we think of (or we deal with) the problems, the ideas and the aims of any conservation or restoration theoretical or ideal (ideological) positions and practical actions, we inevitably face the crucial theme of the values involved in the field.

It is not a novelty at all and already Alois Riegl (1903) deeply treated this conflicting and contradictory aspect of the matter at the beginning of the nineteenth century, asking to himself the reasons why his times were so deeply crossed by a new and powerful “modern cult for ancient monuments”. While examining the phenomenon, he clearly outlined and analysed a wide and articulated range of values belonging to the dimensions of contemporaneity and of memory (of every time, of course). They were and still are values belonging to men and assigned by themselves to the ancient monuments, thus reflecting the changing in their cultural asset and atmosphere, along the times passing on. We could even now refer ourselves to those values, together with their complex games, in order to explain which the real contents of our discussions and actions are, within the field of the protection, conservation, restoration, and valorization of built Heritage. This last notion, in itself, is quite recent, and it represents the result of the long and rich history of the modern “theories” of restoration (if any theory really exists) from its right beginnings, between the eighteenth and nineteenth centuries, as many protagonists affirm: Eugène Emmanuel Viollet-le-Duc, John Ruskin, William Morris, Max Dvorak, Camillo Boito, or Gustavo Giovannoni, among the others. It is sufficient to recall, apropos, the important analysis by Francoise Choay (1992) developed about the birth and evolution of the idea of “Patrimony” from a concept of monument initially considered as a “masterpiece of art”, an isolated and unique object mainly characterized by aesthetical or historical values and slowly arrived to

the more complex concept of a monument as a cultural and not exclusively a material good that can also have outstanding social and economic values⁵. Any doubt should therefore exist about the crucial role that our ideas, concepts, and theories but also our analytical, diagnostic, and intervention techniques, in their whole, play in the contemporary world and society, even if with frequent contradictory and conflicting results.

Once again, the question “why do we conserve/restore?” emerges as the really crucial one, as regards any attempt to understand and correctly use our ideal and operational tools, above all if we look at the non-specialist world. Within this perspective, in fact, any attempt, desire, or compelling attitude towards the conservation/restoration of a material good derived from an almost unknown past, so that it could reach the future, should be explained, communicated, and hopefully accepted from the social communities we belong to, more than by the only cultural or scientific ones. Only in this way we could hope that this effort will be really culturally sustainable and will be felt as chance and not only as a load or a problem for our present situation looking to a better future.

2.6 The Specificity of Any Conservation–Restoration Project

The “project” always emerges when we deal with the topic and the issues of conservation/restoration of our built Heritage, raising profoundly different meanings and accents. On the other hand, we know “project” is a crucial crossroad for research, teaching, and above all professional practice, here and in other fields of human activity. Right for this reason, someone underlines the existence of deep differences between a “project” aimed at creating a new object/building and a “project” that has to do with an already-existing objects/buildings/sites. In fact, this last one can never just limit itself to be the mere sum of some functional modifications of the given reality but should primarily aim at “taking real care” of it, with its memories, material traces, explicit or hidden depots of knowledge and potentialities, in order to make it still useable for our present and future, in the most undamaged and undivided state—if ever enriched by new resources and not certainly impoverished of the already existing ones.

The project is doubtlessly a crucial point in the process of conservation/restoration. In this regard, we could certainly list endless reasons why project of conservation/restoration of an existing building/site is—and must be—different from that of a new one, therefore demanding different contents, tools, and forms. However,

⁵See, a propos, all the international documents and the numerous International charters devoted to the problem of the destiny of ancient architectures, towns, and cultural landscapes but also to the huge legacy of immaterial goods of humankind in the contemporary world in the perspective of the future generations.

project will be just only one moment—even if fundamental—within the complex process of conservation/restoration and programmed management of our historic, architectonic, and environmental Heritage. Furthermore, the project will be for sure a moment that “only apparently” ratifies any provisional conclusion of the conservation/restoration process. Here an enormous risk really lies. At least two centuries of discussions, debates, and interventions, in fact, have not decided, neither the coming ones will do, which possible alternatives, concerning goals, objects, tools, and methods of the conservation/restoration project should or could be. Also for this reason, architecture and conservation/restoration often look like “poor neighbours”, not communicating in between themselves, subjected to the perennial contraposition between the exaltation of free creativity and the research for the analytical rigour, among the tension for pure “knowledge” and the pressure of the professional pragmatism, in a time of deep and quick transformations of our world which would instead demand their profound and meditated integration. According to many scholars, in fact, the relationship between conservation–restoration and Architecture does not simply consist in their common affiliation to the same world of objects, methods, or instruments. Conservation and restoration are profoundly tied to Architecture firstly by their shared aim of inhabiting the world on an even keel, between memories of a past which can be still significant and productive and a future that must be free—but not oblivious—for us not to waste what the earth has given and still offers us.

The reference to the contemporary philosophical and epistemological thought, at this point, is the necessary background in order to correctly underline the need of a higher integration with the various disciplines involved in Architecture, even by facing the risk—that many dreaded—that this would end up in a loss of the centrality of the conservation/restoration matter and issues, wrongly considered as an autonomous, self-sufficient, and self-related world. We must on the contrary ask ourselves if our scientific, cultural, and didactic action can keep on being proposed as a sort of “pillbox defence” (or a “Ivory tower”), granted that it exists or should exist, or if it should rather necessary and useful opening up it for a confrontation in which our reasons would stand just because their own strength, instead of invoking weak protectionist or policies that are actually ignored or half tolerated by the society for the welfare of which some of us are invoking them (Musso 2008).

On the other hand, it also appears evident that the project, considered as a mere technical action tied to the artefacts and their fate, cannot be the only focal point of our research and teaching activity because a wide amount of new questions, themes, and objects are progressively emerging in this field. Moreover, this is true if we think of the difficult relationship that presently exists between Science and Technique where the second one is no more a tool to realize the previsions of the first one but it is going to begin more and more the goal of (and in) itself⁶. We must thus at

⁶As regards the relationships and the respective roles of Science and Technique/Technology in the contemporary world see, in general, the most recent epistemological elaboration from Karl Popper to Hans Georg Gadamer, Francoise Lyotard, and Jürgen Habermas.

least consider with new attention the problems connected to the management phases or to the normative rules that closely concern conservation and restoration. Unless, we will reduce our activities to a mere search for more or less shareable technical solutions (accepted by many, or few, by a “school of thinking” or another) in the attempt of answering to some questions that have been already selected by “others”, elsewhere, before, and ignoring us (Stovel 2008). It is time to recognize that we cannot just restrict ourselves to the mere discussion or confrontation (sometimes hardly hostile) exclusively about “how” to technically intervene but completely ignoring “who”, “where”, and, first of all, “why” decides what must or can be conserved or restored (Della Torre 2008). By and large, we cannot simply ignore, forget, or avoid facing the many facets and implications which the issues of conservation/restoration imply at larger scales—urban, territorial, of entire built landscapes—exceeding each single artefact we take care of. Mainly at these levels, in fact, it seems clear that the themes related to conservation/restoration are now more than in the past profoundly entwined with the general processes that are conditioning or marking our communities and culture that are now immersed in a global and planetary dimension but that are still seeking for more or less certain identities (or, better, specificities) that, just as regards Heritage, should be deeply rooted and clearly expressed why they are demanding an active tutorship and defence (Morin 1999a).

2.7 Conservation–Restoration as an Open and Transversal Field

As already underlined, architecture in itself, from the very beginning of its history and considering Vitruvius’s treatise, is “interdisciplinary” and “multidisciplinary” (or even trans-disciplinary). It is not simply a matter of choice; it is just a compulsory status. Every building, even the simplest one, is the synthesis and complex result of different components, material and immaterial, physical and spiritual, local and universal. It is “a big thing” made of “little things”, till the borders of the atomic and subatomic universe (if we simply think of the decay phenomena that affect the ancient artefacts and involve us for their care). Architecture always stays on the difficult edge between the “World—and time—of Nature” and the “World—and time—of Culture” (J. Ruskin). It is a product of artifice (made with art), and thus it stays between the world of Sciences and Technique/Technology and the world Humanities and free expression or creativity (Garimberti 1999). As a discipline, looking at the knowledge’s organization proposed by the nineteenth century culture, Architecture is part of the “nomothetic” sciences, with their willing to predict and to explain the reality and its phenomena but, in the mean time, it belongs to the “ideographic” world of the disciplines that are mainly signed by the search for individual facts and the desire to inquiry, save, and improve all the human expressions and creations that could not easily be put under the dominion of

the first ones (Cassirer 1973). Moreover, architecture is potentially overcrossing these borders right because it mainly deals with a different topic: “how do we like or want the things and the inhabited world would be”, more than to simply explain why it will be so. For its own nature, architecture is thus an ideal field for a really “holistic” way of seeing, studying, and managing the world, taking advantage of any results of a good “reductionism”—that brings with itself also that extreme disciplinary specialization we are sometimes worrying about—but going beyond it in order to conquer a higher and synthetic level of comprehension and of acting capability, as any project and any building to be preserved or restored actually claims.

Moreover, according to Hans Georges Gadamer’s thought (Gadamer 1960), architecture needs, and in some way instigates, a never-ending “hermeneutic circle” as for what regards its objects, their conception and ideation, their construction and following life cycle, because they register upon and inside the material body of any building all the human and natural events occurred during their existence and their consequences with regard to inhabitants’ and direct or indirect users’ lives.

For these and other reasons, if we consider our built Heritage (or better Inheritance), from the single monument to an old town or city centre, from a poor rural house to entire fragments of our cultural landscapes, we have to recognize that it is time to conquer a real “trans-disciplinary” approach in architecture and even more in Conservation–Restoration. We have to conceive and develop our future studies, researches, projects, and actions upon the results of the already-existing multidisciplinary and interdisciplinary attitude and capability in these fields (Morin 1999a, b). It is not easy, but we must elaborate new intellectual and practical tools, in order to face the challenges that the endlessly changing world will put in front of us within a global and sustainable dimension of any problem and of the future human existence. Finally, if this is true for architecture, it is even more meaningful and rich of potential consequences for what we identify as the Conservation–Restoration field. The recalled hermeneutic challenge and needs, on the other hand, are also a fantastic opportunity for our future, if we think of the immense richness of knowledge, capabilities, skills, secrets of the arts, and other information that are embedded and hidden in the physical and material bodies of the elements of our Heritage (or Inheritance).

Let us consider by the way how we are already used in speaking and dialoguing with experts of other disciplines, and how this also means that we have to be able to propose them our questions in correct ways (i.e. using the right language, terms, discourse structure, and so on). It is a quite common circumstance that an architect, while working in the conservation field, asks to an engineer about the structural stability or behaviour of some ancient buildings. In parallel, he would frequently demand to a chemist some information about the nature of a material that must be often analysed in its already transformed or modified status by the decay phenomena, thus obliging us to better understand also the causes and the possible evolution of the processes responsible for that condition. At this point, we could easily add more examples in this direction, but it is not necessary at all. Right for the condition or for the “essence” of a building, it is evident that the competences or the various

disciplines potentially involved by our need of understanding what we are in front of and what we have to take care of, are very numerous. The problem is that this way of interrogating the experts is often reduced to a simple mechanism that does not ensure the quality of our studies. It is evident, on the one hand, that it is necessary to use specialist competences and that nobody in the world could even only imagine to possess every possibly required ones. On the other hand, perhaps, it is not sufficient to be prepared to propose the right questions to the specialist on a single problem or on a specific aspect of the Conservation/Restoration work. It is not just (or only) a matter of difficulty of communication on a linguistic level. More deeply, it is a problem of communication between different worlds that were born sometimes very far from each other, in terms of basic principles, tools, instruments and, moreover, aims and goals. A geologist will ever look at a stone sample, kept from an ancient wall, as to a simple fragment of the lithosphere of our geode. He will analyse it with the maximum possible care and attention, using the simplest or more sophisticated technical instruments but, at the end of his efforts, that sample will in any case remain a fragment of the marvellous and astonishing "Book of Nature", as Leonardo da Vinci suggested inviting man to open and carefully read it in order to discover and to interpret its secrets. Also a lichen is always a lichen, for a botanic expert, but we, as conservationists or restorers, have to understand "how" and "why" it does not represent any problem when it appears upon a masonry wall in the garden or when it affects a face of a marble statue, asking to be eliminated because it risks to damage it, or to be preserved because it protects it or even improves its picturesque aspect⁷. The architect, as the artist, the historian, and perhaps also a citizen, on the contrary, will consider that same material sample a trace of a past history, a fragment of the work and the fatigue, the capabilities, and the tastes of other men who built that wall or sculptured that statue, one time, or of other men that, after that first building act, probably modified that construction for various reasons and needs. This is exactly what anyone would like to discover and to understand in this perspective. This is also the real reason (even if not the only one) that urges all of us committed in this field to save, preserve, protect, and sometimes "restore" that wall, by operating upon its physical body, but also by asking ourselves which is our real goal and also "when" and at "what point" to stop our intervention not to waste more than what we could gain through our intervention.

The problem at this point is, once again, "how" we could or we should intervene on the elements of our cultural legacy (Torsello and Musso 2003). Before answering to this question, we nevertheless must remark that if what we said about the different attitude of a geologist and of a conservator–restorer is true, or at least reasonable (extending the observation to other parallel categories of scientists and experts, of course), then we have to make more and new efforts towards a real

⁷This circumstance means, by the way, that also our ideas about the decay phenomena and their meanings as regards the needs of intervention are quite relative and absolutely not fixed or universally conceived.

“trans-disciplinary” attitude in our job (Morin 1999a, b). We need new tools simultaneously belonging to various existing disciplines, rather than to limit ourselves in using together those derived from the “pure” and “self-referential” world of a single sector of the present knowledge’s organization. We have to share something between those disciplines, starting perhaps from the objects of interest and the goals of our common actions, more than use or compare our already existing and perfected (finished) ideas, methods, instruments, and goals. Only if we really begin working together, starting from new shared basis, we could hope to go further on beyond the enclosures that sometimes make our work difficult, weakening its results and limiting its interest to a closed group of people, thus vanishing its real and richest power for the common good. The same need emerges, beyond any analytical and diagnostic phases of our job, within the design phase, as already mentioned. It urges, actually, in any moment of the development of the intervention project and, after it, during the construction works and within the foreseeable life of the involved artefact through the conservation–maintenance programmes and management. In every phase, in other words, we need to confront ourselves with other experts or with the representatives of other disciplines. That’s the reason why the analysis and the diagnostic inquires and tests are not mere preparatory steps for the design phase. They should in fact continue during the construction works, when new aspects of the building could be casually discovered or when new unexpected problems could suddenly and dangerously emerge. In this perspective, the need of cooperation is destined to continue and to reinforce. Also the maintenance and the management phases, even in the form of the possible valorization (“mise en valeur”) of monuments and sites, ask this capability in using different competences. We have thus to teach and to show to our students, with our practice (didactic and professional), how to correctly use this kind of “trans-disciplinary” attitude or “mood”. Once again, it is not simply a matter of choice: it is in some way a compulsory attempt for our future and for that of our built Heritage, for our historic towns and settlements, monuments, and cultural landscapes.

2.8 New Reasons and Challenges for Conservation–Restoration in the Future World

Conservation, after more than two centuries of history, debates, and interventions, is now in front of new and difficult challenges that cannot be faced by using the same arguments of the past, even if some of them are still true and useful. Our world is deeply and quickly changing, thus obliging us to renovate our instruments, tools, methods, and also the real reasons for our actions. In a globalized and “post-ideological” world, even if this last assertion is at least strongly arguable, we cannot continue using the traditional instruments that our fathers adopted in this field. We must also remember that two centuries of debate and experimentations were deeply and completely aroused in the Western World or—even better—merely

European (Glendenning 2013; Jokilehto 1999; Munoz-Vinas 2005). This long process, as it has been already highlighted, saw the appearing and the progressive consolidation of the opposite polarities of “Conservation” and “Restoration”, up until the slow but consolidated process of expansion, “for kind, age of formation, for extension and quality”, of the artefacts subjected to tutorship and safeguard. For this reason, we are now almost acquainted to think of a completely known and consolidated universe of subjects and objects although they seem to be progressively widening. New problems and artefacts, on the other hand, everyday emerge in front of us, asking for our attention and care, potentially making our world, that is rich of fragile certainties, explode or implode. Many journalists or scholars, politicians, or architects at this regard could remind, for example, the fatigue and disillusion while working in some troubled lands and parts of the world, where conserving can mean to have to deal not just and not as much with the technical or theoretical alternatives within which we often limit or constrain our work. This new situation would in fact imply to face wider horizons of sense for our behaviour and, in particular, it would call on the table the crucial problem of co-existence between people that are everyday fighting, each of them living and interpreting their living environment and its depots of signs and historic traces in very hostile ways. Not to speak about the dramatic situation of many human groups and communities with no State, no Land, no food or citizenship and for whom conservation, even before restoration, could assume very non-understandable meanings. We conserve, in fact, for a future world of civilization, cohabitation, and sharing of memories, values, and potentialities of life within a perspective of true freedom. Otherwise: why should we do it? For this and for other reasons, we cannot ignore similar questions and problems, pretending that they exclusively concern the political assets of our world, and that they are regarding our possibilities of acting. It seems that, instinctively, we think to ourselves as responsible only of some “jewels”, which value we debate on but that for sure seek to belong to a world of consolidated peace, for which these problems seem to have no meaning at all, or that they have been already solved by others, throughout different fights during previous times. The situation is not exactly like it appears, even for us Europeans, and we have to acknowledge this simple fact. Being able to see through the curtains of approximation, we could thus discover that they could concern also the monuments or the artefacts belonging to our civilized countries and not only those in some world areas that seem to be perennially at risk of surviving because of the many conflicts and radical contrapositions affecting them and the entire humankind of nowadays. Not to forget or ignore the everyday more urgent demands derived from the need to protect our built environment and, within it, the more culturally significant artefacts, by the recurring risks of natural disasters, usually emphasized and worsened by human wrong actions and behaviours, like fires, floods, and earthquakes. Let us also think of the need of really making the “Heritage” something belonging to everyone. This also means to make it really universally accessible, in physical or in mediated ways, also thanks to contemporary ICT (Musso 2009a, b, 2011, 2014) for cultural goods and using all our true creative capability to look for innovative solutions, instead of stopping to the already experimented and consumed ones.

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