An Architectural Project for Existing Buildings. From Understanding To Writing

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1. Critical reading
Issues regarding built property in its widest sense have, for some time now, been developing at various levels. Ideas are being multiplied, amplified and re-presented whether or not we are talking about intervention on historically and architecturally important buildings or redeveloping old industrial buildings. Highly specialised trade magazines and websites update us daily with a huge variety of interventions on existing architecture that apparently know no limits if not those related to the culture of the country and the professional appointed to develop the project.

These interventions are nearly always aimed at creating an “effect” where the new design component very often plays fundamental roles in defining forms, structures, finishings, colour, relationship (or not) with existing components. They all, however, have a strong common matrix, a starting point devoid of formal or valuable attributes (at least as far as an initial evaluation is concerned), the material of which architecture is composed. This material always tells a story, through the indelible marks borne on its surface, through the changes it has undergone over the years, the neglect, losses and additions which have passed it on to us as it is today. Sometimes though the story is incomprehensible because it has been written in different languages, it is worn out, illegible, has gaps or is incomplete.

This same material is, by its very nature, weak, often abandoned and unused, but rich in symbols, meanings and often strong links with its surrounding context. More often than not, browsing through magazines or websites showing interventions on existing properties, or experiencing such projects in person, it is clear that the reading, interpretation of the text, full understanding of the historical, material, structural, composite, morphological palimpsest of an architecture “through time” has been ignored from the start. In discussing the issue of design for built property, this “detached” approach can only lead to solutions that are far from the goal which we have been trying to achieve now for years: to jealously preserve the signs of the life lived (be it grand or humble) by each building, at the same time providing it with contemporary functionality and uses. In conceiving a project for an existing architecture therefore we must go through an articulated learning process to achieve a full understanding of the building on which to intervene, a complete knowledge of the material free from preconceived attributions of value.

A architectural project for an existing building is a place for synthesis, interaction among various professional sectors, not as a series of partial solutions and approaches, but in the widest sense of active participation in the various design phases, and at the highest level of competence of the individual disciplines, but only once a complete reading of the object for which the project is
being prepared has been fully metabolised. Interaction, therefore, contamination of disciplines and know-how all directed towards a full awareness and understanding of the state of the things, the places and material indispensable to best capture the real potential offered by the building for which the project is intended. Once the preliminary analysis at all scales and levels has been developed and completed, the next step of the intervention will certainly be easier since it will be strongly conditioned by the degree of freedom provided by the existing architecture and already aimed towards the architectural project for the existing building.

This architectural project must be able to fully respond to the needs of putting the building back into use unconditioned by unlikely and improbable “restorations”; a multidisciplinary project that cannot and must not be simply limited to being a passive act of preserving and ensuring safety of the building, but must aspire to the ideal search for a relationship between form and structure, between preservation and innovation, between past and future.

It should not be a forced design process to be channelled through the narrow precincts of “architectural restoration” (a discipline that has never been completely defined), obliged to direct design choices on the basis of the adjectives chosen to match the term “restoration” (scientific, structural, preservative, philological, analogical, critical, restorative ...), almost as though the “subject” must, necessarily, be rendered independent from the “material” as such, even more so when this same material has suffered the worst possible losses as a result of negligence, collapse, theft. Consequently, analyses, preventive reading, safety works, repairs or local interventions, improvements, consolidation or replacements (partial or total) are initially aimed purely at achieving the effect of what the building was like before, without trying to escape from the narrow applications of restoration, or widen the horizon by having a look at the field of architectural design for existing buildings.

2. Beyond restoration

The chronic secular incapacity (or unwillingness) to define the term “restoration” has brought us to a clear initial awareness, i.e., “the only possible definition of restoration is argumentative, not assertive” (Masiero 2005). Masiero’s “impossible discipline”, in fact, lives on with a plethora of adjectives that in practical terms makes it obligatory to accurately and conditionally pre-determine the definition and type of intervention: re-qualification; re-composition; re-construction; re-structuring; re-functionalization; re-utilization; re-integration.

The terminology immediately distracts from the objective, channelling the project and forcing the building towards improper uses. This functional forcing is far from the act of expressly desired safekeeping that we must perform to guarantee the unique, un-reproducible testimony with which every building is gifted. It is time that “restoration” with all its adjectives and types of intervention with their various pre-fixes should be overcome, not only by adopting a conservative type approach but by gathering all the distinct actions of an individual process within one Architectural Project for Existing Buildings, a project that does away with all the prefixes in order to adopt what remains and transform:
- re-qualification into qualification (raising the value of use);
- re-composition into composition (designing architecture for architecture);
- re-construction into construction (striking the right balance between form and structure, new and existing);
- re-structuring in structuring (designing the organization and articulation of and among the parts);
- re-functionalization in functionalisation (designing fruition, exploiting the intrinsic potential of the building);
- re-utilization in utilisation (designing uses, respecting context);
- re-integration in integration (designing the new in relation to the existing).

Thus we achieve a clear, aware design able to contribute to the existing architecture in full respect of the historical and testimonial values that define and highlight the strength of the design itself without falling into a stale restoration. This perhaps is the only criterion to express the strong character that distinguishes each building, clearing the field from the ratification of Restoration and its adjectives, underlining the “uniqueness” of each construction, re-positioning it at the centre of the project. It is a way of expressing a design process that sees the conservation/improvement/structural consolidation project as being distinct from the usage project only on paper, being able and having to include them both in the Architectural Project for Existing Buildings.

To do this a different approach must necessarily be adopted: understand, know, read the building before defining its use, to capture its essence, clearly define the points of constraint and the points of movement, fully absorb the potential in order to return it to a market increasingly bent towards accelerating processes, replacing, modifying, reproducing.

We are not talking about restoring an object, but about fully appreciating its vocation which necessarily evolves as a result of the object’s inadequacy for its purpose, changes due to unexpected external events or slow gradual deterioration, often simply the result of a lack of ordinary maintenance.

3. New material contributions
At this point it is clear what the aim must be of that in-depth, almost exasperated research that the building obliges us to undertake before putting our hands on its matter. Critical, pre-comprehension (another result of careful multidisciplinary design) of the object of the intervention may certainly provide us with the instruments to harmonise our intervention with the existing building, to blend the new with the old, preserving and at the same time improving every element which we have inherited without, however, being condemned to an immobile museum-like situation, allowing the most exhaustive reading (the clearest possible) of the passing of history.

The complete reading of a text which is often worn, fragmented or even lost, allows us (fully aware) to fill the spaces and gaps with new paragraphs, new passages and contributions, useful to complete the reading by enhancing it, providing an added value to the history of the building, to its spatial organisation, to its relationship with its surroundings, with the context in which it is situated making it a part of the urban organism. The new contributions, new
insertions can do nothing else but assume a contemporary character in perfect continuity with the existing building which in fact generates them. New contributions and insertions (architectural, structural, plant, technological) that can together appear to be prevaricating and invasive if interpreted as overwrites and not as new integrative and functional aids. The trauma suffered by the matter (whatever it may be) becomes a new opportunity, it is transformed into a new thought, in a wide-reaching project that can be dedicated to correcting past mistakes, to implementing safety and accessibility, to increasing and bringing up-to-date notions of housing and exploitation of space even on a large scale.

4. Depth that derives from culture

The architectural project for existing buildings faces the temporal discontinuity that occurred in the life cycle of the building preventing or interrupting its use, and defines the replenishment of a conceptual continuity represented by the insertion of new elements, recognisable and coordinated with the complex system of the building. These represent a process of transformation and remodelling that captures and completes the different layers which comprise the architectural palimpsest and repositions them in today’s architectural dimensions without betraying their true nature. It is not therefore a question of denying the past, but rather of an intense dialogue with the existing building of which we want to highlight the historical consistency and, at the same time, with the intuition of a renewed spatial proposal which allows contemporary continuation: an architectural continuity, not a mimetic continuity.

«History tells us that, after the Pantheon of Agrippa in Rome had been burnt down, Hadrian, given his love for the gods, decided to do something more than simply rebuild it. Or rather, to rebuild it in the deepest sense of the word, with a depth that stems, not only from scholarship, but also from culture.» [Campio Baeza, 2012, 37].

By accepting the comparison with the history of the building with which it is being measured, the architectural project for an existing building begins a relationship of investigation and understanding of the material and its structure, able to comprehend the spatial value of what has survived until today. Only in this way can it formulate hypotheses for its contemporary use; a use realigned with the times, all times: those of the past, understood, documented, protected, and those of today, real, sustainable and consistent with the form and substance of the building. The project of these new models of fruition is particularly sensitive towards the corporal character of the building’s architecture, comparing itself with its spaces (those that have survived, tangibly existing, and those that are imaginable and can be represented in an immaterial dimension) as places of gestures, actions: to be lived. On this conceptual plane, which is also a design premise, the great affinity between the architectural project for the existing building and the architectural project for interiors takes form. These disciplines are not merely complementary, but rather partners, solidly “built” on the common ground of construction of space as an act of giving form to perceptions and exploitation of existing ambients as liveable places, capable, that is, not only of sustaining their functional purposes but,
above all, activating and stimulating relationships at all levels.
«Space is continuous, therefore it cannot be organised according to a partial
vision, it does not accept limits to its organisation and, just as form and space
are intimately linked by one being the negative of the other, inseparable, so
the visually cultured forms are united by close relations, that may be harmonic
or not, but always evident ...» [Tavora, 2000, 47].
New models of fruition look at the functionalisation of the historical building
(within a very wide meaning of the word “history”, which includes also mo-
derm) as the evaluation of realistic hypotheses of “reactivation” of the building
itself: architecture as a place to be lived in and not reduced to mere iconized
remains. This means facing design problems of relationships (architectural
object/widened and specific territorial system/building configuration/new func-
tions), acceptance (insertion in the local and expanded socio-economic con-
text), permanence (forecast of sustainability and development as a social and
temporal value), specialisation (specific potential in relation to its historical/
architectural nature), maintenance (functional, structural, economic, social)
and productivity (non-passive insertion in the local and expanded economic
system). «The project is born from a knowledge of the place, but at the same
time its architecture defines that place, architecture is the process of redefin-
ing the place (...) recovery to me seems to be a normal act for architecture,
whether I “restore” a building, or whether the building still does not exist, if the-
there is a space, a place, I am re-qualifying that place: I look for the best qualities
there are.» [Tavora, 2000, 16].

5. Creating a reasoned map of case studies
The design approach is, therefore, aimed at ensuring, at the same time, the
readability and understanding of the building in relation to its historical testi-
mony and to define the functional characteristics connected to its renewed
contemporary purpose with a particular care towards questions of layout and
habitability of the resulting space, which will be defined by the insertion of ele-
ments obtained through the multidisciplinary coordination of numerous design
approaches.
This method has become the subject of a still ongoing, in-depth research
programme aimed at creating a reasoned map (identification, classification
and analyses) of emblematic national and international case studies. To date,
a database has been developed of over two hundred projects realised over
the past 15 years in twenty five different countries (Australia, Austria, Belgium,
Brazil, Canada, China, Croatia, Denmark, France, Germany, Japan, Great
Britain, Iran, Ireland, Italy, Lithuania, Holland, Poland, Portugal, Czech Re-
public, Slovenia, Spain, United States, Switzerland, Hungary). This rational
inventory will be brought together in an “Atlas of Architectural Projects for
Existing Buildings” to be used as a critical analytical instrument for obtaining
an overall vision of the different, current conceptual approaches and results
achieved in various geographic areas.
The Atlas will also be an occasion for a disciplinary remodelling of the idea it-
self of “intervention on existing buildings” which, above all today, in a complex
international socio-economic context, dominated by a persisting economic-
structural crises, can no longer definitively confine itself to a careful so-called "restoration", be it scientific, critical, conservative, structural, etc., but must look towards protecting the building within the framework of its use and correct insertion in the vital processes that qualify its active contemporary participation. And so, the intervention on an existing construction, starting from the very first conceptual considerations, fits into a framework of architectural methodology through the articulation of common matrices that define the relationship between the existing - that is, the architectural object that time and history has handed down to us - and the existence - the lasting time of the object itself which brings it to us today with a still active role.

6. Four actions of the architectural project for existing buildings
These conceptual methods, given the above assumptions, have immediate practical applications and are identified here through a description of "design actions". These are operative behaviours that highlight converging fundamental ways of approaching and comparing the existing with the new. A reading by "action" unmistakably highlights and affirms the scope of the intervention where by "design" we mean explicit choices of interaction with the pre-existing. Intervention, therefore, is active: an aware statement of profound superimposition in which the needs for repair and those for development and potential coincide.

To face a pre-existing architectural complex calls for an understanding of the best qualities that are in it, so intense as to reverberate through time up to the present, and of its location which, on the other hand, is almost always profoundly changed, in order to identify those categories of actions that permit us to achieve new relations. Faced with characteristics that have been mediated each time by the unique nature of the object of intervention, architectural projects for existing buildings present four homogeneous families of approach and resolution that correspond to four consequential levels of "intensity" of relationship with the building. These actions are: approach, addition, insertion and superimposition and, depending on their internal declinations which
form a homogenous spectre of possible results, indicate four large conceptual categories of comparison that allow the definition of some margins of action, capable of distinguishing different goals and, consequently, to evaluate the results.

6.1. Approach - action of independent proximity
The action or act of “approach” implies an awareness of the relation between the original, historical body of the building and its new complementary and/or defining elements, a relation that is established in terms of nearness and juxtaposition. It implies, in fact, an absence of contact (limited and subservient to terms of distributive-functional needs such as the presence of shelters, walkways, etc.) that results in an overall reading defined in terms of a formal, composite, volumetric relation among the parts always allowing a reciprocal independent reading. New and pre-existing face one another in a relationship of independent proximity, put together to activate declinations (or intentions) that structure a semantic of reciprocal traces, whose formal capacity knows how to generate cross-references and intertwinements that become intuitions of elective affinity: reciprocity of reading and complementary narration. Allusions merge into this, allusions that become concrete in harmonic assonances (formal, volumetric, material), “juxtaposition” that looks for relations of static proximity (a counterbalanced and measured independence), “nearness” that establishes relationships of dynamic proximity (an independence conforming with an evident tension of reciprocal conjunctions) and “alignment” that activates relations of laying (unveiling of geometric continuities).

6.2 Addition - action of explicit contact
The act of “addition” reveals a reciprocal need for physical contact that, albeit abolishing the principle of independence, preserves the explicit reading of the added elements, and aims at describing the building as a whole generated by the co-presence of original portions and new, as in a single consistent

Approach - action of independent proximity: Andrea Bruno, the Brigittines Chapel, Brussels (Belgium); Comoco Architects, Castelo Novo, Fundão, (Portugal); Christian Campanella and Marco Borsotti architects, Castello di Casteld’Ario, Mantova (Italy)
where the addition plays the role of “semantic support” to the reading of the original plant. The pre-existing building reveals its capacity to evolve in time, manifestly annexing new bodies to its historic arrangement, triggering a relationship of explicit reciprocity where the whole is legible through the sum of the parts according to a criteria of temporal sequentiality. This approach is explicit in terms of adherence and contact from which derive implementation declinations such as “connection”, referring to relations of anchoring which affirms the addition to the formal and structural rules of the pre-existing; of “support”, establishing consequentiality of reciprocal stability where the play of the masses finds an almost equal balance; of “union”, which represents a declaration of physical continuity and, in some cases, of “redress” which resolves the need for mending, facing the problems of the parallelisms of stratified reading.

6.3 Insertion - action of internal integration

The act of “insertion” is the one most intrinsically connected to internal design: everything is realised inside the volume of the pre-existing architecture, according to the principle of inclusion. The historic building complex becomes a sort of palimpsest where the actual layout is a container “housing” new internal layouts, according to a progression of coordinated overwritings. The result is an intervention that does not increase volumes, but reconfigures internal spaces and ambients, design behaviours that are not, usually, perceived on the outside. It expresses, therefore, the intention of integration and stratification. The internal perception of space and its liveability is reconfigured, exploring the potential to highlight the existing, through choices of assonance, disarticulation or relative autonomy. These are activated according to declinations of “introduction” which imply relations of contact between the parts; “grafting” which causes, as in botany, budding of a new sort, closely derived from the superimposition of the genetic characteristics of the original elements and the new; “inclusion” which acts through relations of relative definition, where container and contained are compared according to an interpretation that directly states the fact that the latter derives from the former; “completion” which, on the other hand, causes a relation of objective definition, i.e., with a reciprocal independence of the parts.

6.4 Superimposition - action of voluntary interference

Superimposition represents the most intense moment of comparison between the characteristics of the pre-existing building and its reconfiguration through a design voluntarily oriented towards an act of over-writing implied as an obvious addition or even explicit interference. In this approach the direct and declared visibility of the new elements are geared towards the construction of a referential system that places each element of the final architectural complex on an equal footing or may, even, establish a certain semantic predominance of the new elements. In this sense, there is a need for physical connection that does not in any way attempt to “nullify” modifications to the existing building, but actually favours a volumetric expansion. The declinations characterising this design action are those of “supplement”, i.e., an interposed volumetric incre-
Addition - action of explicit contact: Werner Tscholl, Fürstenburg Castle Agriculture School, Malles, (Italy); Lipsky and Rollet architects, National Choreographic Center, Montpellier (France); Ofis Arhitekti, Baroque Court Apartments, Ljubljana (Slovenia)

Insertion - action of internal integration: Architecten De Vylder Vinck Taillieu, House Rot Ellen Berg, (Belgium); Chartier and Corbasson Architects, Maison de l'architecture, Couvent des Récollets, Paris, (France); Embaixada arquitectura, Casa dos Cubos, Tomar (Portugal)

Superimposition - action of voluntary interference: Fernando Pardo Calvo, Bernardo García Tapia, Archaeological Museum renovation and extension, Oviedo (Spain); 2tr architettura, Saint Antonio church and Clarisse convent, Santa Flora, Grosseto, (Italy); Project Orange, 192 Shoreham Street, Sheffield (United Kingdom)
ase still related to the existing layout; “addition”, where the increase becomes reactive, i.e., intentionally meant to arouse reasoned contrasts. We also have implementational declinations focused on “occupation” implying relations of relative predominance among the parts, with a clear imbalance over the new, and to on “incorporation” where the relations of predominance become objective and interpret the contemporary additions as elements of superimposition characterising the entire design layout and therefore absolutely primary.

7. Conclusions
The choice to “harness” the many experiences of intervention for/on/in/with existing buildings within well-defined design actions was not intended to become a banal theme selection or, worse, a definition of how to do architecture with which we have never been in agreement. Not by chance we kept well clear of a sub-division of types of intervention, of accepted function, of expressed architecture, aiming without doubts to describe a picture, the most wide and heterogeneous possible (places, functions, materials, actions) of projects that have involved existing buildings, without preconceived assessments of the value of the work before and after the intervention itself. Our aim was that of clarifying, as far as possible, the “physical relationship” that is created between new and existing, to define in some way the level of conceptual and design intensity. Our main interest in this logic of growing intensity is to focalise and define the attitudes that new design manages to express with regard to the existing, trying at the same time, to make opportunities or pretexts, additions or subtractions emerge (from the classification by actions). In the end, our intention was to create a formally uncritical classification, but based on an ancient culture of historical stratification, cohabitation and continuity with the pre-existing, viewed and experienced as a means of generating new material, as a protagonist and not merely in a “supporting role”. A pre-existence often confined and undervalued, separated and isolated from the context that it has contributed to construct, engulfed in an atopic conception of doing architecture.

Notes
Although the paper is a result of the joint work of both the authors, C Campanella is, in particular, author of paragraphs 1. 2. 3. 7.; M Borsotti is author of paragraphs 4. 5. 6.

References
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