IDENTITY AND IMAGE OF PRODUCTIVE SPACES IN THE PROCESS OF REUSE

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Introduction

The transformation of the modern ruins of industry – machine-buildings belonging to a relatively recent past, now devoid of their original sense and use – allows to establish a reflection on the role of design meant as the intrusion of a new life, able to renew the image and meaning of these architectures.

In the reuse projects for these wide productive machines – respondents for practical purposes at the time of construction and development, but now no longer working – the delicate balance between the preservation of the identity and the updating of the image, according to the changing contemporary needs, may be declined through the concept of originality. An original re-reading of the pre-existences is thus capable of turning itself into novelty, meant as a the production of a new spatial interpretation.

Starting from these premises, a reasoning focused on two projects – both partly realized – is presented, to be meant as a research media to clarify the theoretical position assumed: the Washery at the Argentiera (Silverware) in Sassari, intended to accommodate the Mining Museum, and the Mill-Garden at the Zolfàra (Sulfur Mine) in Tufo, designed to host the Wine Museum.

These productive buildings – related to the mining assets – have had a parallel life, in a time span ranging from the late Nineteenth century to the Sixties: thus for many years the industrial activities have been completely interrupted and the structures totally abandoned.

The first life of these architectures – with all their events and transformations – has been unequivocally concluded since a long time, and their ruins have become an integral part of the landscape.

The task of the project was therefore to insufflate a second life into these artifacts: a type of intervention which is not easy to define in synthetic terms, that finds its origins in the pre-existing buildings, while not acting merely as a restoration.

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1 About modern ruins see the three exhibitions held in 2013: Rem Koolhaas, Off-Modern: Ruins of the Future, The Fifth Moscow Biennale of Contemporary Art; Peter Eisenman, Reinhold Martin, Joan Ockman and Bernard Tschumi, Ruins of Modernity: The Failure of Revolutionary Architecture in the 20th Century, New York University Kimmel Center; Project Space: Ruins in Reverse, Tate Modern London.
or introduction of new functions. The design experimentation may thus be identified with a new and original condition, arising from an open approach. This aim towards multiple possibilities of interpretation can be described towards the considerations by Giorgio Grassi, as he claims that “[…] the artifact fallen into ruin, reduced to fragment etc., shows a sort of recovered incompleteness in this ultimate stage, as a new availability”².

Therefore, in order to explain concisely these aspects, it is helpful to quote also an interesting reasoning by Giuseppe Galasso, about the logics with which the researcher selects the causes of an historical event, by working:

[…] through the criterion of creativity, originality, innovation of every present respect to any past. Any action fits into the past and it is temporally its continuation; but it is also a break from the past […], a break in the chain of what happens. And it is right this rift that differentiates the present from the past, the unknown that one gets to from the known, the choice which is not only the selection of the alternatives at stake, but, simultaneously, the modification of those alternatives in the very act of selection […]. The act of selection transcends the alternatives themselves³.

Fig. 1. Elevation of the Washery at Argentiera, Sassari (Italy)

Source: original drawings and design by the authors. Design team: Pasquale Miano (group leader), Eugenio Certosino, Sandro Roggio, Luigi Gavini, Gianvito Passaghe, Domenico Rapuano.


³ “[…] col criterio della creatività, originalità, innovazione di ogni presente rispetto ad ogni passato. Ogni azione si inserisce nel passato e ne è temporalmente la continuazione; ma è anche una rottura del passato […], una frattura nella catena di ciò che accade. Ed è questa frattura che differenzia il presente dal passato, l’ignoto a cui si approda dal noto, la scelta che non è solo la selezione delle alternative in gioco, ma è, insieme, modificazione di quelle alternative nell’atto stesso della selezione […]. Nell’atto di scegliere le alternative vengono trascese”. Galasso, Giuseppe, Filosofia e storiografia, in: Rossi, Paolo (ed.), La Filosofia, vol. II. UTET, Turin 1995, p. 431.
The different identities and images of productive spaces

The Washery is composed of spaces arranged at various altitudes, according to a very close chaining: a proper intertwined sequence of concatenated spaces, among which the independent bodies of the workshops can be distinguished, with their more regular and ordinary setting.

On the other hand, in the case of the Mill-Garden, it can be noted the prevalence of the lengthways extension. Even this architecture is made up of levels, but it is much more stable and built in a less provisional way. The result is a wide complete architecture, somewhat rhetorical in the façade towards the railway, articulated into three blocks aggregates along the longitudinal axis, and then followed by further elements which become increasingly less structured, until they merge with the morphology of the place.

The historical and architectural study of the Washery and the Mill-Garden also shows the potentiality of tracking a subtended project, corresponding to the most profitable and heroic phase of these activities, perhaps resulting easier to be read in the current condition of silence and neglect.

Today, the two complexes accommodate peculiarly characterized spaces, representing much more than just fragments of their previous lives: the design work finds its most interesting part in this deciphering of the spatial dynamics.

Fig. 2. Plan and elevation of the Mill-Garden at Zolfara, Tufo (Italy)

Source: original drawings and design by the authors. Design team: Pasquale Miano (group leader), Eugenio Certosino, Domenico Rapuano, Francesco Polverino, Achille Renzullo.

For both buildings, starting from the methodological principle that the survey and the description of the status of the sites constitute essential stages of the project, work has been done to identify some significant outlines of the spatial organization of the productive and mining structures. These outlines are capable of telling the story of the articulated productive machines, originally intended as unities which are hardly splittable into elements. Particularly, this modality characterizes the design of the plans of the seven significant levels of the Washery and the numerous cross-sections of the Mill-Garden, which constituted highly relevant cognitive equipment for setting the project.
The main question is then: how to bring back life into these productive machines, originally arisen and developed through time in response to practical purposes, but now devoid of their original meaning and use? And yet, how to achieve an image which is able at the same time to preserve the specificity of the existing architectures and to give them the mark of a novelty?

In both cases, the novelty consists right in the peculiar configuration of these spaces: dynamic, contemporary, not programmatically searched, but able to set up a proper update in some respects, developed from the seek for technical solutions, as they often take the form of significant preconditions for the idea of new in architecture. In other words, in these buildings there is a coincidence between the concept of originality – inherent in the simple elements that make up the architectures – with the idea of innovation, that originates from their particular articulation, thereby resulting in unexpected and evocative spaces.

Thus, the new image of both structures has been configured as a framework, as a new architecture in some respects meant as a device for encouraging the reading of the former one, while conceived also for the specific purpose of involving the existing spaces into a new spatial organization.

**Frameworks for renewed machines**

Rather than conceiving the past on the one side and the present on the other one, the design follows a specific condition of continuity and interweaving, since – as argued by Francesco Venezia – “there is no authentic novelty without reference to the chain of efforts that have preceded us”\(^4\).

This way, the old building turns out to be re-written – involved into a logic of overlapping – aiming at defining a multiple palimpsest.

In this perspective, the pre-existing architecture is read as a text on which new sentences – new systems – can be superimposed: the introduction of a new constitutive logic, different than the existing one, thus proves to be inevitable.

Far from being decontextualized, the elements belonging to the original mechanism are re-interpreted into the new architectural machine, which surely establishes a form of continuity with the existing one. However, a consistency meant in general terms is not achievable, rather it is possible to highlight some pieces of the original mechanism, capable of taking a new ability of functioning. The main design objective – not easy to achieve – has thus been focused on the internal consistency of the result. In this sense, the existing parts qualify as the structural elements of the new composition – without taking a definitive configuration – which keeps being open to new interpretations and new interventions.

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In the design solutions developed for the two machine-buildings, the superimposed framework – kept to a minimum – assumes the characteristics of a sequence, of a path that calls back into play the components of the former machine, properly reassembled.

In both cases, the main aim is to induce a new spatial interpretation, or in other ways to make it possible a double – or multiple – portrayal of the space, starting from the precise idea that today a project should have the ability to actualize an old building, so to effectively respond to our questions.

The project for the Washery has been defined by starting from some specific considerations about the machine-building. Primarily, the site at Argentiera is a potential museum of itself, meant as a document of the very peculiar productive process which originally used to start from the mines – arranged at the highest altitudes – and to go down to the sea, in accordance with a mechanism that can be reconstructed in precise terms, although subjected to constant changes and updates through time.

At the same time, along the structure in the opposite direction (but this possibility emerges from the very first vision of the buildings in their current configuration), the result is a sort of adventure of knowledge, in which nothing is taken for granted, and the prevailing characterizations are the wonder and the surprise, namely those features which are increasingly required by contemporary architecture. The choice of crossing the architectural machine in the reverse direction is an option that allows – when entering the artifact – to activate a particular cognitive mechanism, that does not follow the ordinary procedure through which a museum’s path is usually realized. This, just to say that the building shows in itself an exceptional modernity, and this aspect has been strongly considered in the design process.
On the other hand, the fundamental choice carried out in Tufo concerns the positioning of the wine museum in the wide and unified space characterized by cross pillars and large arches, arranged at the lowest level of the Mill-Garden.

It comes to an extremely interesting and majestic space, which can ensure a great flexibility in the organization of the exhibition and museum activities, constituting itself an evocative place to cross and visit.

Also in the case of the Mill-Garden, the design work has been focused on the definition of a path that follows an opposite development compared to that of the materials. Thus, entering the large vaulted area and crossing the entire building, it is possible to reach the outdoor space, where the materials of the sulfur mine used to be deposited. It comes to parallel paths arranged at different levels in elevation, which take place at the ground floor in the broad main spaces, but also higher up in side tunnels drawn amidst the building and the street, or even still higher, in a continuous exchange between the inside and the outside, also using the roofs of the lower volumes.

The configuration logic of these internal paths is the mounting of a sort of framework, connecting all the new elements. It comes to an even temporary support, which at the same time crosses and interprets the existing spaces. Therefore the framework has been meant as a sequence of connecting elements, which configures and integrates the structure of the original linkage setting. It is a set of absolutely necessary elements – ramps, stairs and elevators – that is to say the connection system, reunified and made functional in its overall image.

The two design have assumed a very precise approach, appropriately synthesized by Franco Purini, in a text about the meaning of the Italian word for installation, namely allestimento:
In museums, the *allestimento* loses one of its main features, a character that is written within its own etymology – *allestimento* contains the idea of *lesto*, quick, fast as Mercury – to become a stable arrangement, a conformation of elements, walls, lights, paths – not more ephemeral, but called to an existence which can be as lengthy as the life of the famous installations by Carlo Scarpa, BBPR, Franco Albini, is now. Yet, it is precisely in the fact that is usually a system upon fast consumption that the installation seems to correspond exemplarily to the futurist proposal of an architecture which should be no longer projected on the long term, but rather cast to search the flash, the brevity, an architecture made of fulminating and extreme trajectories⁵.

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Some design issues

Many are the issues that should be explained and discussed at this point, but perhaps it may be helpful to take into consideration at least one of them for each of the two projects, exemplificative and of greater interest in relation to the specific theme hereby.

In this light, a detailed reasoning can be established, in the first place, about some issues related to the tamponade of the Washery.

In the history of the Washery, the phase in which the structure was buffered with wood paneling was followed by the abandonment, when the wooden skeletons were only partially infilled.

Starting from these two preexisting conditions, the design has introduced an additional possibility based on working with large glass windows as a shielding system, aimed at allowing to reconstruct the full part of the panel, offering at the same time the possibility of achieving a closed and protected structure.

Each one of these three hypotheses determines a different interpretation of the whole architecture of the Washery. The preservation of the machine in state of ruin definitely requires the entire wooden structure to be open, but this choice would fail to meet the functional needs of a museum. Furthermore, in that option it would also be very hard to guarantee the conservation of the interiors, threatened by the presence of pigeons and the proximity of the sea. Consequently, the other two solutions take the form of more concrete answers, but the propensity for the use of glass or wood is supported by good reasons. Though, it is very important not to interpret this juxtaposition in a rigidly alternative way, meant in terms of a unitary and fixed conclusion.

Both solutions, whether completely carried out and fully realized in an exclusive manner (total wood or total glass), would constitute a betrayal of the open interpretation of the building, which represents a key point. This consequence evidently appears by reasoning on the option of choosing the glass solution: in that case, the character of the machine-building would be completely altered, although a very significant image might be achieved from the viewpoint of functionality and of the possibility of defining evocative views over the Argentiera landscape. Considerable doubts would also arise from the alternative of adopting the solution of the wooden infill: apart from giving a rigid configuration to the artifact, this choice would deprive the visitors to the museum of the striking views of the Washery along the Argentiera coastline.

Through a slow work – pursued almost piece by piece – progressively the design has been achieving a more articulated solution: partly open (without any infill), mostly wooden, and with some glass portions. This choice is not meant to be a mediation, but the attempt to provide a coherent response, an answer capable of guaranteeing to strike a balance, by taking into account the multiple factors involved. In this research, the Washery has not been conceived as a static element, so that there is not a past that interacts with the present, but rather a past that runs together with the present time, aiming to recompose a fracture. The slowness
PART 1. Image of Industrial Heritage

of the Sardinian construction site – which has already been lasting for several years – has helped to think long and hard about this issue and maybe further changes might be introduced afterwards.

On the other hand, in the case of the Mill-Garden, it is interesting to reason on the replacement of a wooden stairway – hardly restorable – with a new element containing the staircase and the elevator. Placed on the narrow front of the artifact, this new architectural body occupies a very important position, at the main entrance of the machine-building. The key role of this location is due to the rational connection it establishes with the designed distribution network, namely the articulated system of walkways and hallways, partly pre-existing and partly new. This solution have been challenged during the approval of the project by the competent Superintendency, yet still providing some room for reflection. During the phases of construction, the existing wooden ladder has been incorporated into a broader element, enclosed, made up of wood and glass, and protected by a wooden brise-soleil.

Certainly the staircase holds the role an addition: it acts as a continuation of the efficient system of the internal passageways of the Mill-Garden – arranged sideways between the large vaulted room and the street – and at the same time as the entrance element, recognizable from the outside.

This way, the added component – characterized by a diverse nature – grafts itself onto the machine of the Mill-Garden, simultaneously emphasizing one of the fundamental peculiarities of the pre-existent structure and looking for an innovative synthesis, which results from a new functioning.

Conclusions. Open solutions

The last aspect concerns – once again – the need for an open solution. In both projects, some interiors have been left in their current status as uncovered spaces, even though once they were configured as covered rooms. Some internal spaces, properly freed, have become crucial outdoor spaces in the new compositional balances of the two artifacts. The inner spaces that turn into external spaces play a major role, synthesizing the concept of an interrupted narrative: they may become different things, such as indoor gardens, establishing dialogue in a diverse manner with the other parts of the pre-existing machine.

![Fig. 6. Plan of the Mill-Garden at Zolfara, Tufo (Italy)](source: original drawings and design by the authors.)
Above all, these spaces become places of *waiting*, places in which the condition of ruin – which has been experienced by the machine-buildings for such a long time – suddenly returns to be the protagonist.

In point of fact, both buildings have been interpreted as public machines only partially determined and finished. Thus, specific management procedures need to be defined for the two artifacts, able to continue and develop the design, according to multiple directions and starting from a condition of flexibility. In this light, the machine-buildings may be able of regaining a state of transience and impermanence, which is embedded in the inborn founding features of the buildings themselves.

Ultimately, design flexibility, temporariness and openness foster an interpretation of the buildings as relational machines, capable of determining a project of correlation and conjunction with other parts of the territory and of the landscape – from the mines to the villages – by grafting a new life even into them.