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# The Cittadella of Alessandria, project for an adaptive reuse

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## Abstract

The Cittadella of Alessandria is a system of fortified buildings established close to the Tanaro River, the only Savoy fortress on flat land which survived undamaged in its whole unity. Since the original function of the buildings has decayed and future vocation appears uncertain, also because of its huge dimension, the Cittadella requires an innovative approach that combines conservation needs, possible reuse and economic-management sustainability. Retracing recent, even though successful, experiences is not feasible. For these reasons, a new approach, called adaptive reuse, has to be experimented here. The incremental recovery strategy, outlined in the research project La Cittadella di Alessandria Scenari di riuso adattivo, developed in 2017 by Dipartimento di Architettura e Design of the Politecnico di Torino on assignment for Compagnia di San Paolo, starts redefining the boundaries and possibilities of reuse of this resistant to changes, deeply isolated, disused and oversized architecture. The identification of three landscapes dealing with the Cittadella and of eight environments help to establish a first hierarchy of the 26 buildings inside and unveiled the latent potentialities of a unitary but internally complex and heterogeneous building. The resulting image revealed an unclear spatial complexity, potentially able to house extremely different activities; and this concerns both buildings and open spaces. The research has identified a first abacus of flexible infrastructural devices that become the heart of a strategy aimed at minimally, almost light, intervention on historical artefacts, still able to immediately reactivate the Cittadella making it safe and usable.

Keywords: cittadella, adaptive reuse, strategy, research.

# 1. Introduction

As M. Augé wrote (2004), the ruins inherited from the past allow us to "touch" an almost indefinite pure time and, at the same time, are the prove of the material cultures that produced them. In this sense, the research represents an occasion to discuss the dismantling of the oversized military complexes that nowadays are new urban occasions of renovation. Oversize architectures, such as the Cittadella of Alessandria, whose original functions are decayed and their future vocations appear ambiguous, uncertain, unpredictable, require a design approach that goes beyond the indispensable conservation of the artifacts.

Nowadays with less economic resources, more than "select" what can be restored, the intervention has to identify the strategy that can support the subsequent intervention on buildings.

The renovation examples of the citadels are particularly interesting because they were designed to be close to the city but autonomous, imagined to be city homologous. The example of the reconversion of Suomenlinna – 800 thousand Sq m, partially dismissed in 1973, since 1991 included in the UNESCO World Heritage List –, the addition of new cultural and tourist functions, has transformed the military area in one of the

most attractive military cultural heritage – nowadays the park is visited by about 700.000 visitors per year. [N.R.]

# 1.1. The Cittadella of Alessandria

The Cittadella of Alessandria is the only Savoy fortress that survived undamaged in its whole unity. The construction period is described and detailed in some research and in particular those by A. Marotta (1991) and A. Dameri, R. Livraghi (2005). As V. Comoli (2002) synthesised, the construction is divided in four main chronological sections. The first, from the Middle Ages to the Spanish period, that coincides with the decision of the royal house to build a new citadel; the second, the eighteenthcentury phase, when the military engineers I. Bertola Roveda and F. L. de Willencourt plan and direct the works for the construction of the new Cittadella that is conceived according to the most up-to-date practices; the third phase, from the Napoleonic period to the restoration, according to the intentions expressed in the final project of 1808-1809, the citadel is recognized as one of the most formidable terrestrial arsenals in Europe; the fourth, from the Italian Risorgimento to the national role, the citadel becomes strategic in the defence against Austria and is updated with new infrastructures such as entrenched camps. Until 2007 the citadel was a military garrison; nowadays his property is attributed to the Ministero dei Beni e delle Attività Culturali e del Turismo - Soprintendenza Belle Arti e Paesaggio delle province di Alessandria, Asti, Biella, Cuneo, Novara, V.C.O. e Vercelli - interested in the enhancement of this cultural heritage. [E.V.]

# 1.2. The necessity of an intervention strategy

Because of its huge dimension, since the original function of the buildings has decayed and future vocation appears uncertain, the Cittadella requires an innovative approach that combines conservation needs, possible reuse and economic-management sustainability. Retracing recent, even though successful, experiences (such as the intervention on the Venaria Reale) is not feasible. The Cittadella represents a recurrent condition in the protection of vast heritage buildings with low patrimonial density: a gigantic military compendium positioned in peripheral context that cannot be capitalized with the only purpose of conservation, but even an undifferentiated use as container, or the selection of some elements to be preserved in spite of others, is not persuasive.

Before its dismantling, at the beginning of nineties of the twenty century, Government, Piedmont Region, Province of Alessandria, City of Alessandria prepared a series of administrative and research initiatives aimed at enhancing the Cittadella. However, the outcomes did not have an active role able to trace a new reactivation of this cultural heritage, emptied of all activities, that seems increasingly destined to an inexorable decline. The main cause of the failure of these attempts is the fact that the Cittadella of Alessandria has always been treated as a unitary inviolable unit, both for the program of uses and for the economic intervention, that crashed into the oversize dimension of this artifact. While the public administrations were trying to define how to intervene and where to find the necessary economic resources, since 2008 when the management of the area passed to the City of Alessandria, in a spontaneous repossession process, the Cittadella has become a place where people love spending their free time. For these reasons, in 2012 the FAI identified the Cittadella as Place of the heart. Today, inside its spaces some cultural activities, such as the Museum of Uniforms, and events, such as the AleComics which is born in the Cittadella and attracts more than 17 thousand visitors in two days - and the Gathering of military vehicles, have found place.

When MIBACT took over the ownership of the area, the process had a turning point: the objective is the preservation of the entire military system through focused interventions such as the maintenance of the roofs or the securing of the bastions.

In 2016, thanks to the support of MIBACT, Compagnia di San Paolo – private foundation that has a specific asset on the cultural heritage preservation – appointed the Dipartimento di

Architettura e Design of the Politecnico di Torino on the definition of a recovery strategy. The research project La Cittadella di Alessandria Scenari di riuso adattivo – scientific supervisor M. Robiglio, FULL - the Future Urban Legacy Lab, with N. Russi, E. Vigliocco and G. Zotteri -, represents the first step of a complex safeguard intervention of this oversized cultural heritage. The mission of the research was (1) to integrate diverse opinions social, cultural, political - into a cohesive vision, (2) to translate that vision into a plan and program of uses, and (3) to ensure the sustainable implementation of the plan. Turning a shared vision into a reality - into a truly great place - means finding the patience to take small steps, to truly listen, and to see what works best in this particular context. For these reasons, the research included two moments of discussion with the involved stakeholders.

The previous iconographical and historical researches, such as the mentioned, represent the "state of the art" of the current knowledge of the Cittadella and the base on which the current project layout is developed. The investigation developed for Compagnia di San Paolo is focused on the strategic aspects of the adaptive reuse process; it has assumed the previous historical researches as scientific support but it has neglected to deep the material degradation of the buildings that will be explored by the successive knowledge phase. [M.R.]

#### 2. A proactive approach

 Citadel extension area: 444.000 Sq m

 Permeable area: 408.000 Sq m \_\_\_\_\_ 92%

 Covered area: 36.000 Sq m \_\_\_\_\_ 8%

Constructed surfaces: 115.000 Sq m

Used surfaces: 7.000 Sq m \_\_\_\_\_ 6%

Wall bastion surface: 90.000 Sq m

Because of its extension and its autonomy from the city, the Cittadella requires an innovative approach that combines conservation needs, possible reuse and economic-management sustainability. Retracing the recent interventions on comparable architectural systems, such as the concluded one on Venaria Reale, the hypothesis of musealization of this complex is not suitable. Contex and socio-economic conditions have changed: today a renewal intervention only designed for the heritage conservation is not sustainable; but neither it is legitimate to imagine that buildings can be used as a "container" for the most diverse uses or, worse, selecting some buildings to be handed down to the future, eliminating others.

The design research analysis has been developed both from a new interpretation of the architectural and landscape features of the Cittadella of Alessandria and through a careful recognition of its contemporary uses. The investigated spatial aspects have been useful in identifying existing values, latent potentialities and criticalities, and have been the starting point for the elaboration of the strategic proposal which has a strict connection to the economical resources available and to its developing in time.

Starting from the observation of people's spontaneous repossession process described before, the developed placemaking capitalizes the local community's assets, inspiration, and potential, with the intention of creating a renewed Cittadella public space that could promote people's well being.

Compared to the most recent projects of historical heritage renovation, the adaptive reuse of the Cittadella of Alessandria has interpreted the historical complex as an oversize potential infrastructure, a support able to host different ways of use, some already present in place, others to be investigated through successive project projections.

Three landscapes have been recognized; eight main environments compose the historical complex; 26 buildings help to establish a first hierarchy of spaces. These are the numbers that have allowed to unveil the latent potentialities of this unitary, but also articulated and heterogeneous complex.

This innovative interpretation of the Cittadella enriches the traditional image of a unitary architecture that, represented in a more articulated way, reveals its specific, latent and non-visible potentialities. From this decomposition, the resulting image of the

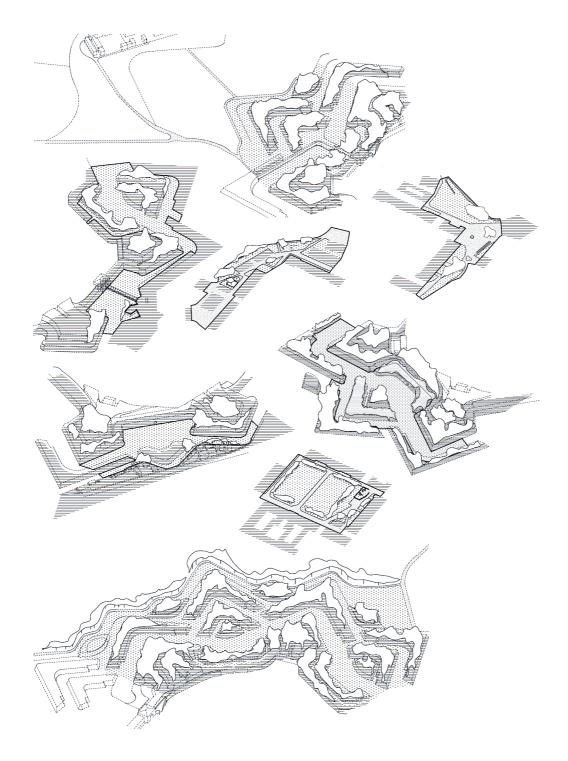


Fig. 1 – The recognition describes 8 environments that have different capabilities in relation to the near context. Drawings extracted from the research *La Cittadella di Alessandria\_Scenari di riuso adattivo*.

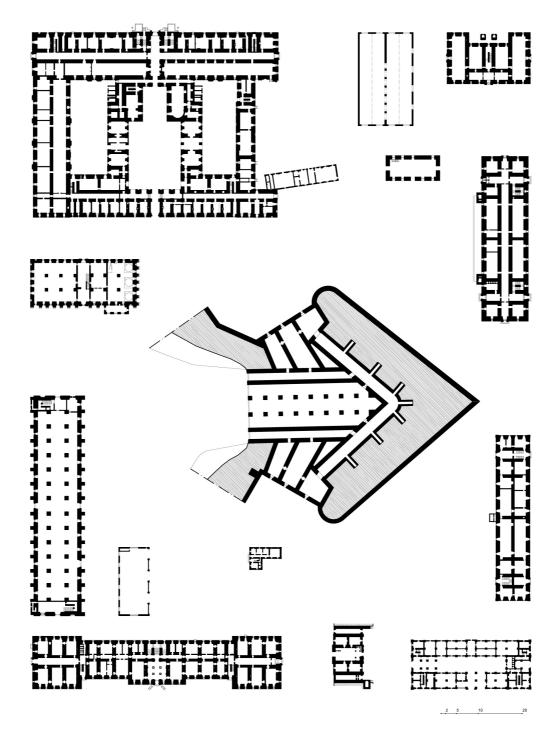


Fig. 2 – Ground floor of 14 buildings: the thickness of the masonry reveals the role and introduces to the period of construction of the buildings.

Cittadella shows a less evident spatial complexity, extremely rich and potentially able to accommodate activities and uses that are extremely different in consistence, function and size and that can be established at different time. [M.R.]

#### 3. The adaptive reuse strategy

On the basis of this new spatial interpretation, having the preservation of the historical complex as objective of our strategy, the project of adaptive reuse has identified a first abacus of infrastructural devices that combines the most urgent structural operations of consolidation, the main infrastructural backbones, the new architectural mechanisms that, together, are able to reactivate the Cittadella making it safe, usable and open.

The designed devices are the main instrument of an action strategy aimed at intervening as little as possible on the material consistency of this historical complex through the introduction of architectures structures, and systems characterized by maximum flexibility and possible reversibility. This approach, combined to a necessary temporal introduction sequence of these devices, evolves the architectural restoration project of the Cittadella from a "static" horizon, durable but also rigid and expensive, into a "dynamic" process, renewable in time, a stage for multile kinds of scenarios.

The aim of our strategy of intervention was to transform the Cittadella project into a real incremental design laboratory; a structural sequence of interventions as a possible synthesis between an ordinary restoration project – that starts and ends in a limited time, has government grants and a defined use layout – and a series of interventions developed over time but brought together by a unitary design intention. A project that brings together the structures of its past and a new sequence of independent and specific interventions aimed at defining a new "active safeguard strategy". [N.R.]

# 4. The activation

Restoration parametric estimated cost: 200M€

Economic available resources: 34M€

Spending time: 2017-2023

Our active safeguard strategy is designed starting from the analysis of the last quarter century of events of the Cittadella, even before its definitive military dismantling. More than the big top-down projects – almost all stopped because of the disproportion between available funds and necessary costs – small bottom-up initiatives have made the Cittadella known by people, loved and protected by its users and have encouraged ownership to invest in this cultural asset. These initiatives have made the Cittadella a lively and popular public place and this aspect is the core of the first step of our strategy.

On this assumption is based our incremental project approach and the light management model we propose. The sequence of interventions is based on the recognition of the specific characters and potentialities of the different buildings and open spaces: through a minimal set of interventions, ranging from the simple preservation to the insertion of the devices necessary for the safe use of spaces, the successive incremental interventions will return a new identity to the conservation of this oversized architecture.

The first tranche of funding (2017-2023) represents the trigger – with immediate effects – of the entire program of adaptive reuse that, governed by a sustainable management model, will be able to attract public and private operators. The public funding currently available amounts to  $34M\varepsilon$ : the intervention strategy designed starts from the renovation of the central axe, situated between the Porta Reale and Porta del Soccorso and that includes the Piazza d'Armi.

This first step consists in the definition of a punctual series of "light" interventions aimed at halting the deterioration of the buildings and fortifications and activating a peaceful reconquest of the Cittadella. The aim of the activation phase is the reinforcement of the contemporary significance of the Cittadella through the definition of a support platform – physical and managerial – able to attract international flows.

The beginning of the Cittadella adaptive reuse strategy will be also the occasion for the

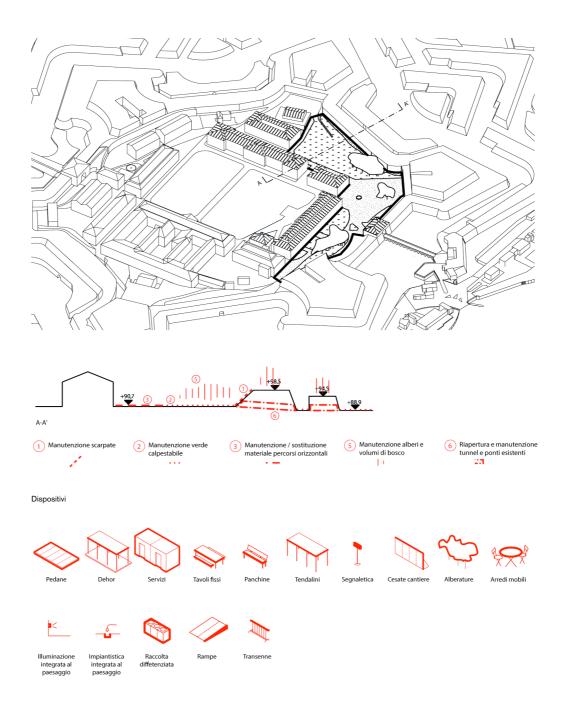


Fig. 3 - The first environment includes the main entrance of Porta Reale. The activation of this environment is included in the first public funding of MIBACT. The expected devices are those that have a relation with the reception activities such as signage, outdoor bench or enjoyable illumination. The devices are imagined "light" and with a low impact on the environment.

beginning of a more ambitious project of knowledge. This new parallel phase of knowledge, that will be the continuation of the first historical studies (Dameri, 2005; Marotta, 1991) through a multidisciplinary research programme, will be the opportunity to highlight new project occasions. In this manner the renovation of the Cittadella of Alessandria will be a real chance to enrich the international debate on the contemporary heritage conservation, on the contemporary role of what our past has left us as a living heritage. [E.V.]

# 5. Conclusions: ceci n'est pas un projet de restauration

The objective of the restoration project is the permanence through time of the cultural heritage received from history which can be guaranteed through the preservation of every active use elements to be pursued through appropriate and evaluated project contributions.

The strategy described, which is not a restoration project, states that (1) the subjective selection of

architectural elements, and their consequent sacrifice, is not functional to the hypothesis of "actualization" of this cultural heritage - the "soft parts", structures and buildings incoherent or with a poor value, are more interesting for a project of adaptive reuse because they can "absorbe" humble uses such as stores or services; (2) it is necessary to introduce technological, material and infrastructural systems necessary to reactivate this historical heritage; (3) the "new" added by necessity must have a character of autonomy and clear legibility; (4) the adaptive reuse strategy is founded on local potentialities and its objective is the evaluation of the place identity through the capitalization of the current resources.

Do not "subtract" but preserve; "add" to enhance; these are the interpretative keys of the entire proposal. These are the challenges of the project: on the one hand, the "knowledge" to preserve the existing heritage; on the other, the legitimacy of the "compatible" valorization on the front of the culture of contemporary architectural project.

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