ABSTRACT: As recent case studies show, the concept of Adaptive Reuse and its strategies – mainly associated to creative-led regenerations of post-industrial complexes – have been transferred to buildings and urban complexes inside the consolidated city. The analysis of recent strategies of re-activation of historical buildings and their enlarged urban context in European and International case studies shows how these reuse strategies are crucial for sustainable development of contemporary historical city centres. The analysis of emblematic and renowned case studies aims at underline architectural design strategies that make adaptive reuse of the built heritage a resource capable of generating added value for society.

KEY WORDS: Adaptive reuse, sustainable development, refurbishment, urban reactivation, renovation

Introduction

The continuous and pressing demand for sustainable development policies in the International scenario, following the 2030 UN Agenda Sustainable Development Goals, calls for transformative and sustainable governances of cities in order to support their resilience. The European Union is taking action to face the current challenges of climate change and environmental degradation in which Cultural Heritage (CH) plays a crucial role. Sustainability is one of the pillars of the Framework for Action on Cultural Heritage, that envision actions in which culture and heritage can help to achieve inclu-
sive and sustainable development. Among them, in relation to architecture and urban design issues, actions have been developed to regenerate cities and regions through cultural heritage, and to promote adaptive reuse of heritage buildings. Architectural prizes and recent outstanding examples of architectural adaptive reuse are proof that this discipline has become an established praxis in architectural design, at various scales, from interior design to urban scale.

Adaptive reuse

Aim of this paper is to investigate, through the analysis of emblematic and renown European and International case studies of cultural-led adaptive reuse of buildings and their urban context, how this evolving discipline in architectural design can effectively ensure new uses and valorization of existing assets, generating economic, social and environmental impact, acting as a source of new developments and new lifestyles. Sustainable development can be obtained in urban sectors and specifically in consolidated one with qualities of stability and openness, through dealing with existing resources, and for our purpose, sustainable urban development means working with what is already there (Baum and Christiaanse 2012).

Adaptive reuse can be considered as a discipline in its own right, a “discipline of the existing”, in accordance with the expression coined by architects Flores and Prats to describe a way of thinking and acting that is specific to the architect. The term refers explicitly to changes that involve functional and physical components, with a degree of adaptation that may vary from almost completely changing a building’s structure and appearance to few minor changes (Plevoets and Van Cleempoel 2019). Acting in an existing building or urban complex is to reflect on the following theoretical questions: Which function is suitable for a specific building? How to create relationships between old and new? How to transmit the legacy of the past to the future?

Adaptive reuse helps communities, governments, and developers to reduce environmental, social and economic costs. It represents, therefore, an effective way to transform already existing derelict or disused buildings and bring them back into the life cycle of the city and is seen as an effective method towards a self-financing conservation, which contributes to the economic pillar of sustainable development (Othman and Elsaay 2018).

The case studies here proposed are clear examples of how adaptive reuse strategies can be used in cultural-led contemporary architectural interventions. The aim was to select outstanding examples, that vary in scale, and to consider the pedagogic qualities of them that can be inspirational for other projects. The case studies are presented as panels, and they are part of an ongoing publication called “Resilient Heritage”.
Case study n.1 – La Comunal, Barcelona, Lacol Arq

Situated in the neighbourhood of Sants in Barcelona, La Comunal is a cooperative space that was gradually recovered through a bottom-up process starting from 2018, with the adaptive reuse of buildings that since the early 20th century had been used for the manufacture of sailing textiles, now at the core of the dense Catalan city. La Comunal is a “cooperative of cooperatives” and the overall project, guided by Lacol – an architecture collective that has its office in one of the buildings – hosts various entities and activities, from a library, a restaurant and live-music space, to offices of non-profit associations, that take advantage of the shared space. The architectural intervention, at the core of which is a building that was industrial in the early 20th century, was aimed at recovering the industrial character of the site while also allowing for a new programme that can adapt to the future needs of the community.
its original geometry and allowing the opening of a central courtyard, that constitutes an element of centrality that works as an additional external space for gathering, meeting and events. The new interventions are focused on circulation and minor exterior treatments done with a low-budget ratio, with ordinary materials and elements, in accordance with the attitude of Lacaton & Vassal®.

Figure 2. Illa de la Pietat complex by Toni Girones, drawing by the author

Case study no 2 – Illa de la Pietat, Vic by Toni Girones Estudi d’Arquitectura

The second case study is about the regeneration and re-activation of the “Illa de la Pietat”, an urban complex that constitutes the main historical part of the city of Vic and can be read as a sum of urban landscapes, a palimpsest consisting of an ensemble of buildings: from the ones of roman foundation to remains of a romanesque castle and
a Baroque church and its chapels, called “La Pietat” and “Sants Martirs and Fonda”. Toni Girones’ intervention on this peculiar context is about revealing this palimpsest and activating a series of “urban rooms“ with a public path that, passing inside the various spaces, ends in the bell tower with a scenographic view over the city. The project therefore proposes a transversal view, providing an intimate experience of the space complexity. Different interior and exterior intermediate spaces are proposed sequentially as new doors or thresholds, offered to understand the different realities in the monumental complex of the „Pietat“, generating multiple and labyrinthic routes (Girones T. 2021). This highly unconventional sensorial path is capable of enhancing the value of the dense heritage of the context, providing an example of how to intervene sensitively inside a high protected and complex site, providing public fruition and enjoyment, accessibility and also a narrative of the place with simple, light and discrete architectural gestures.

Case study no 3 – Muharraq Pearling Path, Bahrain by Various Architects

The revitalization of Muharraq project, started in 2010 and still ongoing, chosen as third case study, is an ongoing process of adaptive reuse and valorization of a large part of the old city of Muharraq, a UNESCO World Heritage Site from 2012 for its heritage related to the pearling proto-industry, under the programmatic title „Pearling Path, Testimony of an Island Economy involving various architects, planners and researchers“. The pearling industry was historically crucial to Bahrain’s economy, until the discovery of oil caused its decline and the replacement of indigenous populations. Through an effective system of private and public partnerships, the project involves conservation, transformation and adaptive reuse actions applied to various sites inside the city, with renovation and new buildings designed by renowned architects, all connected by a pathway, with voids transformed as public spaces. Starting from Bu Mahir Fort in which a visitors center was installed with a footbridge linking it with the old city, the path passes through a tangles series of narrow streets in which the new buildings and the main interventions act as new urban polarities. The core of the system is the new “Visitors and Experience Center” on the pearling divers’ ancient warehouses archaeological site, designed by Valerio Olgiati. The Visitors Center is conceived as a giant monochrome canopy that protect the site and provide shading to the visitors, as well as the possibility to host events and initiatives linked to the cultural projects of the Unesco Site. The projects by Anne Holtrop - starting to the National Pavilion for Milan Expo 2015 that was transported and reinstalled in the old city - discreetly confront the existing context with innovative experimentations on „material gestures“, while the interventions by OFFICE and Bas Smets in the public spaces of the city creatively reimagine the typical Terrazzo flooring with flecks of oyster shells. These integrated, incremental, evolving, open-ended and process-based
interventions demonstrate the perseverance and long vision of Pearling Path project’s instigators (Aga Khan Development Network 2019).

Figure 3. Pearling Path, Muharraq revitalisation plan (VA), drawing by the author

Results and Conclusions

From the case studies treated in the paper, part of a broader case study index in which the architecture department of the Marche Polytechnic University is working under the title “Resilient Heritage”, we can learn how the practices and the strategies of cultural-led adaptive reuse can currently have a broad use. They are no longer being used just on brownfields or former industrial sites in peripheral parts of the city, but also in historical city centres and inside the consolidated city, in which the case studies show how the concept of adaptive reuse can be applied to various type of building and at
various scale; we can argue that adaptive reuse for cultural purpose has passed from an emerging discipline to a consolidated one with a rich field of studies and projects, with various strategies of intervention that vary in relation to the context in which the architectural project acts. It is also a discipline that is intrinsically multidisciplinary, in its preparatory phases - as the projects Bahrain show – and in the community context in which it develops – as the case of La Comunal in Barcelona – contributing to achieve inclusive and sustainable development.

Footnotes

[2] Reference is made to European Green New Deal-Creative Europe and New European Bauhaus programmes
[4] recognized as qualities of dynamic-stable structures, identified by Martina Baum and Kees Christiaanse to make locations, buildings and open spaces inviting engagement with them, see Baum M. (2012) “City as Loft”, in Baum M., Christiaanse K. “City as Loft. Adaptive Reuse as a Resource for Sustainable Urban Development”, Zurich: gta verlag
[10] ibidem

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