

Cinderella's Slipper

New Uses and Junkspace for Old Buildings

Estefanía Martín

Escola Tècnica Superior d'Arquitectura de Barcelona (ETSAB), Universitat Politècnica de Catalunya (UPC), Barcelona, Spain, estefania.martin@upc.edu

Abstract

The present article seeks to reaffirm that the reuse of heritage buildings is one of the inalienable principles of architectural restoration; that is, since the very origins of the discipline, its ultimate goal has been to endow the historical framework with a new use (Marconi 1993). Restoration must bring life back, not mummify existence. Therefore, the strategies and techniques applied must follow the criteria set out in the international restoration charters in proposing an appropriate and compatible use for the preconceived space (Torres Balbás 1933). Although political and social interests often cause historic buildings to bend to pragmatic needs that blur the fine line between use and abuse (Rivera 2008), reuse remains both a responsibility and a task inherent to restoration. The reflective and critical process should lead us toward a balanced choice between historical and modern value (Riegl 1903), between documentary and instrumental value, as well as between the weight (and dimension) of the intervention and that of the pre-existence (Baldini 2002). By the mid-twentieth century, new forms of reuse began to emerge that maintained continuity with history—that is, unselfconscious interventions that recorded and provoked the mutation of historic buildings. In contrast to the nineteenth-century historicist language, modern architecture possessed its own expressive vocabulary, allowing it to expand, dissect, and even excise the preexistence (Rovira 1996) as if it were a living organism. In this sense, Carlo Scarpa's (1906–1978) interventions at Castelveccchio reveal modern tectonics interwoven with the historical work, representing yet another stratum of the palimpsest. This positivist vision of history, expressed by modern architecture in relation to the ancient building, had already appeared earlier in what Venturi (1966) described as “*violent adjacencies*” and “*superadjacencies*.” However, the later and more discernible works of Franco Minissi revealed a different approach and challenged the paradigm of assimilation. Today, the debate surrounding the necessary historical boundary and the use of preexisting structures remains alive, continuing to generate confusion among practitioners of critical-conservative restoration (Brandi 1988; Carbonara 2017), avant-garde architects of reuse (and adaptive metamorphosis), and the pure-conservationists of adequacy (utilitarian artifacts). Three positions that inevitably resemanticize the building—and at times provoke bewilderment among both users and scholars.

Keywords: restoration, adaptive reuse, historical integrity

Epistles for the Contemporary Architect

There seems to be a push to sideline Restoration in order to introduce “adaptive reuse” into heritage discourse, which appears to be a more contemporary and fresher concept than “rehabilitation.” However, this renewal of language, without grounding in old buildings, has led to interventions that speak only to themselves (“fuck the context”, Koolhaas 1995). The omission of Restoration may stem from the dominance of certain works that require only consolidation (Dezzi Bardeschi 2005), but since the dawn of the discipline, it has included among its operations structural reinforcements, changes of use, and building facilities:

«For every building whose restoration is undertaken has a function, it is intended for a use; one cannot neglect this final aspect in order to confine oneself to the role of restorer of obsolete arrangements» (Viollet-le-Duc 1854-68).

«That an architect should refuse to allow gas pipes to be installed in a church, in order to avoid mutilations and accidents, is understandable, since the building can be lit by other means; but that he should refuse, for example, the installation of stoves on the pretext that in the Middle Ages this system of heating was not used in religious buildings, thereby forcing the faithful to catch cold in the name of archaeology—this verges on the ridiculous» (Viollet-le-Duc 1854-68).

«A building is made to be occupied by man or by divinity. It cannot tell us the same when we visit it occasionally, as one visits a museum, as it does when part of our life is intertwined with it. [...] It is common to find in our towns old buildings that are closed and abandoned, on the verge of destruction, of great capacity, which with a small arrangement could serve to host schools or public-interest functions that currently occupy premises almost always in very poor condition. [...] Let us also ensure, as far as possible, that each building continues to serve the purpose for which it was originally built. That churches host religious ceremonies, monasteries continue their religious chants, palaces hold parties and receptions, and that traffic continues to pass over ancient bridges. And when this is not possible, let us give them a purpose of movement and animation, in which their doors and windows are always open to the sun and the street air, to the full intensity of our contemporary life» (Torres Balbás 1920).

«In monuments that can be considered living, only those uses should be admitted that are not very different from the original purposes, so that in the necessary adaptations no essential alterations are made to the building» (Gustavo Giovannoni 1932).

After Gustavo Giovannoni (*Carta Italiana del Restauro* 1932), the discipline of Restoration continued to develop the inclusion of new uses in historic buildings. Notably, Article 5 of the *Carta di Venezia* (1964) emphasizes a useful function for society without altering the layout or decoration of the building, and the *Carta del Restauro* (1972) explicitly states: «Always with the aim of ensuring the survival of monuments, the possibility of new uses for monumental buildings has been considered, when these are not incompatible with historical and artistic interests. Adaptation works should be limited to the minimum, scrupulously preserving the external forms and avoiding significant alterations to the typological identity of the structural organism and the sequence of internal circulation».

Later, the *Declaration of Amsterdam* (1975) recognized the possibility of assigning new uses to old buildings, and the *Recomendaciones de Nairobi* (1976) warned against inappropriate uses: «Parasitic additions and abusive or insensitive transformations that damage their

authenticity, as well as those caused by any form of contamination. »

Article 11 of the *Convention of Granada* (1985) demands respect for the historical-architectural character of contemporary uses. Annex A of the *Carta di Roma* (1987) reiterates: «In this type of intervention, it is of fundamental importance to respect, as far as possible, the typological and constructive qualities of the buildings, avoiding functions that excessively distort the typological-constructive (and also structural) balance of the organism». The *Carta de Brasília* (1995) goes further, stating: «The adoption of new uses in culturally valuable buildings is feasible provided that the building is first thoroughly recognized and a precise diagnosis is made of which interventions it can accept and withstand. In all cases, the quality of the intervention is fundamental, and any new elements introduced must be reversible and harmonize with the whole. In buildings and ensembles of cultural value, façadism, mere scenography, fragments, collage, and voids are discouraged as they lead to the loss of the intrinsic authenticity of the asset. »

The *Krakow Charter* (2000) stresses the search for appropriate and compatible uses; the *Zimbabwe Charter* (2003) incorporates safety conditions into the use; the *The Xi'an Declaration* (2005) adds respect for heritage areas to avoid visual and spatial distortions from inappropriate uses; the *Carta de Cádiz* (2007) specifies that if a change of use is not possible, at least the memory of the original functions should be maintained; and finally, the *Documento de Madrid* (2011) for 20th-century heritage reiterates the same provisions.

Mnemosyne and the Remembrance of Architectural Restoration

As has been seen, architectural restoration returns to society a solid and safe building, one that enhances history, integrates respectfully, and remains useful and functional. However, depending on the state of conservation of the building, interventions will be more or less invasive, requiring a careful balance between new contributions and the pre-existing fabric. In this regard, Giorgio Grassi (1989) identified only two ways of approaching a historic work, depending on whether it preserves its representative (non-functional) role or not. The first requires technical solutions of consolidation or *restauro* (cathedrals, pyramids, etc.); the second calls for architectural solutions to recover its “reason for being” (partially or completely ruined buildings). In his unbuilt project for the Abbiategrasso Castle (1970) allows us to distinguish the line between “new” and “old,” and recalls the functional transformation and reconstruction of the Cortile Pesci and the Aula Magna of the Ospedale Maggiore, or Ca' Granda, in Milan (Liliana Grassi and Ambrogio Annoni). Even so, these *Restauro Critico* approaches (justified in a postwar context), which restored use through the construction of new buildings on top of vestiges, were quickly relegated. Over time, the execution of volumetric extensions came to be condemned, and as early as the *Carta di Gubbio* (1960), the addition of utilitarian superstructures was rejected. Nevertheless, attached artifacts continue to appear, housing services and communications that the historic building seems unable to absorb. When these new attached structures emerge, they highlight that the proposed reuse of the historic building is inadequate due to its disproportion. Likewise, when the original use expands and persists over time, it is vital for the building's architectural preservation; the migration of such original use to a new structure, and the implementation of a compatible new use (Rita 2004) in the orphaned now building, becomes essential. Thus, over time, critical approaches became circumscribed but presented in radical contrast. Extreme differentiation (discernibility)

revealed the lacerating fracture—both material and conceptual—between new and old work. Today, the application of decontextualized principles of *pura-conservazione* seems to carry out interventions based on freezing the old (worn) in order to resonate with the new. This maxim is also applied by architects unfamiliar with the world of *restauro* (archistars), who leave the vestige untouched (considered useless) and add their artifacts, whose signature is perfectly identifiable. In the end, the experiments of Dezzi Bardeschi (Pozzuoli or the *scala in vitro* in Milan) or even Andrea Bruno (Bagrati) are not so far apart. They seek an approach that unites avant-garde architecture and restoration (including conservation), yet the result often appears confusing, contradictory, and exhibitionist. And although there may be criticism with historical projection (and documentary records) behind the work, the visible outcome of the intervention, for the general public, is drastic and establishes highly dangerous architectural precedents. «It is evident that absolute principles in these matters can lead to absurdity» (Viollet-le-Duc 1854-68).



Fig. 1. Contemporary intervention in dialogue with the preexistence. Restoration of the vaults using traditional techniques integrated. Material discernibility not contrasted and analogous forms (photograph by the author).

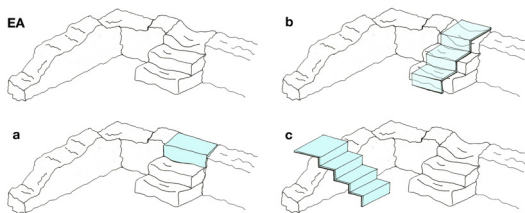


Fig. 2. The case of the eroded step (a twist on the example proposed by Baldini), showing three possible approaches for visitor access: a) restoration (reinstatement and maintenance) prioritizes architectural function and preserves historic circulation; b) critical-conservative restoration seeks coexistence between the vestige and current requirements; c) pure-conservative restoration is distinguished (in form and itinerary) and prioritizes historic material (contemplative) over function (it kills the use of the vestige). They are ordered from highest to lowest historical integration and evocation, as well as from closest to furthest from original uses and circulation. Also, from least to most fear/idolatry/contemporary design. Finally, what seems the most respectful (c) ends up being the most invasive by recoding the architectural space (author's elaboration).

The reuse of structures in the restoration process means bringing them back to autonomous and self-supporting life (Fig. 1). Ideally, this should respect historic circulation paths, floor levels, existing doors, and stair cores (Fig. 2). When this is not possible, some parts may be redesigned, but always with respect and integration (using traditional construction systems), since in most cases these are architectures whose author is time itself. The staircase of the *Igreja de São Francisco* in Évora is one example, and the restoration ultimately carried out at the *Castello Visconteo di Abbiategrasso* is another.

Adaptive Use, or the Bed of the Modern Procrustes

At this point, it is worth remembering that rehabilitation or “recupero” (re-habiting) is an act of instrumental reuse, where economic value prevails over cultural value (González-Varas 1999) and, therefore, applies to buildings that lack protection or official listing. The term emerged around 1970 and carries political and social advocacy connotations (Carbonara 1998). Its use expanded from residential buildings to heritage buildings that required extensions, and from there to the building itself (transformations, renovations, spatial and structural reconfigurations, etc.). On the other hand, the term “adaptive reuse” arose in the Anglo-Saxon context (mainly in the United States) between 1960 and 1980, as a response to the uncritical demolition of disused buildings (economic model) that had no heritage value but did possess anthropological and social significance. The versatility and flexibility of these mid-20th-century buildings (architect-designed) allowed the concept to evolve toward sustainability, energy efficiency, and technological innovation.

The benefits of “adaptive reuse” lie in recognizing the potential and inherent strengths of undervalued, outdated, obsolete, or abandoned buildings—including 20th-century war ruins—and bringing them back into contemporary life with a pragmatic approach and thoughtful, program-driven design that redefines their identity. Its applications are wide-ranging: shipyards, fish markets, warehouses, industrial halls, markets, and industrial complexes (textile, sugar, brewing, paper, steel, tobacco, electrical, thermal, gas, oil, telecommunications, water storage, etc.) have been converted into residential buildings, offices, libraries, film studios, laboratories, R&D centers, as well as commercial, civic, and craft facilities. Railway stations, prisons, bunkers, and mills have been adapted into interpretation centers or cultural and art spaces, while government buildings—such as stock exchanges, post offices, customs houses, and nautical offices—have been transformed into museums, universities, language, vocational or art schools, casinos, or hotels. Theatres and athenaeums have been turned into art galleries, community canteens, or parking facilities. Fantastic precedents from the previous century (Brandt 1994) include the conversion of the Quaker Oats Company grain silos into a hotel and the transformation of Jules Barsotti’s garage building into a retail outlet. Contemporary examples are the LX Factory and the Museu do Oriente (a former cod warehouse) in Lisbon. The concept has also been extended to a larger scale (Baum & Christiaanse 2016), including the adaptation of entire industrial estates (buildings and urban fabric), airfields, sports fields, or mining settlements into recreational, ecological, and botanical parks. It is worth noting that the proposed use is generally dictated by contemporary social habits and economic mechanisms (political, urban, and social context).

The main issue emerges at the end of the 20th century and the beginning of the 21st, when industrial buildings from the late 19th and early 20th centuries began to be revalued

and officially listed. In 1990, the *Recommendation of the Committee of Ministers of the EU for the Protection and Conservation of Industrial Heritage* appeared, and in 2003 the *Nizhny Tagil Charter* (TICCIH) states: «The adaptation of an industrial site to a new use as a means of ensuring its conservation is generally acceptable, except in the case of sites of special historical importance. New uses must respect significant fabric and maintain the original patterns of circulation and activity, and should be as compatible as possible with the original or primary use. It is recommended to provide an area where the previous use is represented. » The *Carta del Bierzo* (2009) for mining heritage maintains the same spirit.

At this point, rehabilitation, “retrofitting,” and adaptive reuse show a blind disregard for the protected context. Interventions of the same type are applied to any preexisting building (Fig. 3) without hesitation, as was common before the 19th century and the emergence of the *Restauration*—superimposing, inserting, landing, enveloping, merging, or cutting into the building (Martín, 2023).



Fig. 3. Contemporary intervention without dialogue with the preexisting structure. Insertion of a new reinforced concrete slab and “pilotis” (columns) into a space originally conceived as vaulted. Excessive discernibility (material and formal), even in the reinstatement of the arches (photograph by the author).

However, these venerable architectures (Fig. 4) are not characterless containers that require the imposition of a new use, provoking drastic structural transformations (spatial modifications). Similarly, as champions of technological innovation, they give rise to grandiose interventions lacking historical sensitivity. They exemplify the “spectacle architecture” of the late 20th century (Curtis 2012), now applied to the vestige: like its predecessor, it fails to integrate, is disproportionate, and decontextualized (see Leon Krier 2009, *How to deal with history on fame and/or merit*, where he outlines the architect’s dilemma when confronted with a deteriorated building). Moreover, the democratization of construction systems and materials has made such interventions possible in entirely different contexts. Globalization and the creation of standardized (generic) spaces according to contemporary taste erode the uniqueness of the preexisting fabric, reducing it to the desired aseptic container—or, as Koolhaas observes, it becomes a logo without identity (Koolhaas 2008).

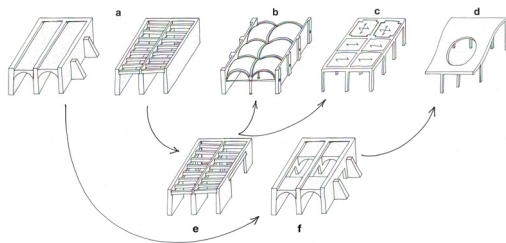


Fig. 4. Pilgrimage strategies in domestic spans (bays): a) diaphragm type and load-bearing walls (unidirectional), self-supporting box, 14th–17th c.; b) mixed type (“the functional tradition” according to Cantacuzino), tied ceramic and cast iron, 18th–19th c.; c) portico type (uni- or bidirectional), open and reticular, 20th–21st c.; d) slab type, laminar and organic (slender), 21st c. Structures a and b (historic and technical buildings) are less flexible and versatile, not easily adaptable like c and d (contemporary buildings), and require uses compatible with the space. When adaptive reuse is applied to authorless buildings of type a), they often end up as e) (attempting to be b or c) or f) (attempting to be d, see Figure 3). In other words, when misapplied, the concept tries to bring ancient spaces into the present through perforation, shoring, and spatial subdivision (compartmentalization and insertion of floors in double-height spaces) without consideration of the envelope—a true Back to the Future of architecture. Massive lintelled structures, which are only subject to restoration (Grassi, 2003), and large-span trusses or vaulted spaces, which are fully adaptable, are not included in the sketch: the first because they are preserved as-is, the second because their inherent adaptability makes them self-sufficient (author’s elaboration).

Various authors (Vines 2018) contemplate applying the concept of “adaptive reuse” to heritage buildings, including interventions such as enlargements when the existing space is insufficient for the proposed function. This approach risks repeating scenarios already identified as “recupero.” A lack of understanding of restoration principles can generate conflicts over responsibilities. Consequently, projects framed as “adaptive reuse” for historic buildings—effectively aiming to intervene in all architectural contexts—should be held to the same rigorous standards as restoration projects: comprehensive historical, artistic, archaeological, anthropological, structural, and constructive studies; landscape assessment; precise surveys; damage mapping; thorough diagnosis; clearly defined criteria and methodology; evaluation of values and SWOT analysis; detailed proposals; and maintenance planning. Moreover, such projects should be supervised by the relevant heritage authorities.

When a new use is assigned to historic religious buildings (predating the 19th century), Cantacuzino (1979) highlights two essential conditions: the intended function should respect both the building’s character—its merits and singularities—and its form, including spatial layout and structure. With the secularization of many churches and monasteries, however, transformations have multiplied—skateparks, bookstores, paddle courts, parking lots, pubs, and similar uses. Convents of mendicant orders, contemporaneous with late 19th-century industrial architecture, have particularly become the focus of interventions (Fig. 5) that often fail to meet the criteria traditionally applied in restoration, demonstrating a recurring tension between adaptive reuse and restorations principles (includes conservation).

«Thus, a refectory or a hall intended for meetings and meals, where the ritual proper to a

group of people having lunch together takes place, could be considered an appropriate use, provided that kitchens and other service areas do not harm the integrity of the main spaces. [...] Theatrical performances, musical interpretations, as well as conferences or debates, can be considered more appropriate activities than the exhibition of artworks, although this use requires minimal changes. A church can also serve as a library, a non-ritual activity, though quiet and contemplative. As a last resort, and provided the interior space remains intact, it is better that a church is used by people rather than by things [...], but infinitely better as a furniture storage than allowing structural transformations essential to convert a church into a student residence or a group of apartments, as they would radically and irreversibly modify the character and form of the interior, that is, everything that is common and can be considered essential in this type of building» (Cantacuzino 1979).

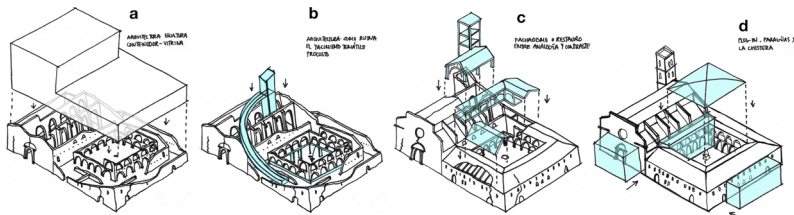


Fig. 5. Four approaches to historical works: a) the showcase or frozen ruins; b) adaptation (the “thematic” site) and transformation (Procrustes); c) restoration (the balance of Damocles’ sword); d) extensions with new construction (sometimes monolithic, à la 2001: *A Space Odyssey*). Often, with “adaptive reuse,” approaches (b) and (d) are combined, giving rise to an example of *Junkspace* «Junkspace is additive, layered and lightweight, not articulated in different parts but subdivided, quartered the way a carcass is torn apart—individual chunks severed from a universal condition. There are no walls, only partitions, shimmering membranes frequently covered in mirror or gold. Structure groans invisibly underneath decoration, or worse, has become ornamental; small, shiny space frames support nominal loads, or huge beams deliver cyclopic burdens to unsuspecting destinations... The arch, once the workhorse of structures, has become the depleted emblem of ‘community,’ welcoming an infinity of virtual populations to non-existent theres. » Koolhaas, 2008 (author’s elaboration).

Therefore, an intervention on heritage (fragile structures shaped by time) should never be approached under the criteria of “adaptive reuse” or “rehabilitation,” as this would imply the explicit recognition of an abusive action, which could shatter the glass slipper. The *raison d’être* of architectural restoration is to provide a new use that is appropriate, restrained, and respectful of the preexisting fabric (it does not compete, it integrates, and it enhances the historic building). In cases of restitution of parts of the building and inclusion of new volumes (perhaps the ‘non-places’ of Augé: spaces of circulation, communication, and consumption), the project should be titled “restoration and extension,” without fear, with sincerity, and without contributing to terminological or typological confusion (it is worth recalling the staircase of the Palazzo Cavalli Franchetti and Asplund’s project in Göteborg).

Between Vestige and Future: Janus' Gaze. Reflections on Adaptive Reuse and Architectural Restoration

The specificity of each case, the requirements and demands of different clients, excessive protections or their absence, and the deliberations of Heritage Commissions will shape the (more or less appropriate) destiny of the buildings we intervene upon. And while “rehabilitation” and “adaptive reuse” are not “restoration,” understanding their theoretical frameworks and applying their principles can guide interventions that are far more delicate, respectful, and attuned to the historical character of these structures—shielding them from the unilateral impositions of contemporary authors.

Fortunately, new generations of architects are cultivating a refined sensitivity toward the historical built landscape and the social realities it serves. The careful balance between creativity and respect for preexistence—the Brandian critical and artistic act—remains the most sustainable and sensitive stance for engaging with architecture of the past. In this sense, interventions should aspire to embody the spirit of Janus: one face attentive to history, the other oriented toward the future, each guiding the other with care, intelligence, and humility.

Bibliography

- Augé, Marc. *El tiempo en ruinas*. Barcelona: Gedisa editorial, 2003.
- Baldini, Umberto. *Teoría de la restauración*. 1978. Guipúzcoa: NEREA, 2002.
- Baum, Martina, and Christiaan, Kees, eds. *City as loft, adaptive reuse as resource for sustainable urban development*. Zurich: gta Verlag, 2016.
- Brand, Stewart. *How buildings learn, what happens after they're built*. London: Random House, 1994.
- Brandi, Cesare. *Teoría de la restauración*. 1977. Madrid: Alianza Editorial S.A., 1988.
- Cantacuzzino, Sherban. *Nuevos usos para edificios antiguos*. Barcelona: Gustavo Gili, 1979.
- Carbonara, G. “Tendencias actuales de la Restauración en Italia”. *Loggia, Arquitectura & Restauración* 6, 12-23, 1998.
- Carbonara, Giovanni. *Il restauro fra conservazione e modificazione. Principi e problema attuali*. Napoli-Roma: Editori Paparo, 2017.
- Curtis, William J.R. *La Arquitectura Moderna Desde 1900*. New York: PHAIDON PRESS LIMITED, 2012.
- Dezzi Bardschi, Marco. “Conservar, no restaurar. Hugo, Ruskin, Boito, Dehio et al. Breve historia y sugerencias para la conservación en este milenio.” *Loggia, Arquitectura & Restauración* 17, 16–35, 2005.
- González-Varas, Ignacio. *Conservación de bienes culturales*. Madrid: Cátedra, 1999.
- Grassi, Giorgio. “Una opinión sobre la restauración”. C. Martí (Ed.), *Arquitectura lengua muerta y otros escritos*, 109-116. 1989. Barcelona: Ediciones del Serbal, 2003.
- Koolhaas, Rem and Mau, Bruce. *S, M, L, XL*. New York: The Monacelli Press, 1995.
- Koolhaas, Rem. *Espacio basura*. Barcelona: Gustavo Gili SL, 2008.
- Koolhaas, Rem. *La ciudad genérica*. Barcelona: Gustavo Gili SL, 2008.

- Krier, Léon. *Drawing for Architecture (writing architecture)*. Cambridge: The MIT Press, 2009.
- Marconi, Paolo. *Il restauro e l'architetto. Teoria e pratica in due secoli di dibattito*. Venezia: Saggi Marsilio Editore Spa, 1993.
- Martín, Estefanía. “La experiencia de la restauración arquitectónica: Complejidad y contradicción en la conservación de edificios”. *Heritage & Museography. Universitat de Lleida*, 94-120, 2023.
- Riegl, Alois. *El culto moderno a los monumentos*. 1903. Madrid: La bolsa de la Medusa, Visor, 1987.
- Rita, Maria. *Il riuso edilizio, procedure, metodo ed esperienze*. Torino: UTET Libreria, 2004.
- Rivera, Javier. *De varia restauratione*. Madrid: ABADA EDITORES SL, 2008.
- Rovira, JM. “¿Destruir es grave? Algunos ejemplos históricos y las enseñanzas que aportan”. *Actes IV Simposi sobre Restauració Monumental. ¿Conservar o Restaurar?*, 177-180. Barcelona: Diputació de Barcelona, SPAL, 1996.
- Torres Balbás, Leopoldo. “La utilización de los monumentos antiguos”. *Revista Arquitectura* III (27), 51-54, 1920.
- Torres Balbás, Leopoldo. “La reparación de los monumentos antiguos en España”. *Revista Arquitectura* 163, 1-10, 1933.
- Venturi, Robert. *Complejidad y contradicción en la arquitectura*. Barcelona: Gustavo Gili SL, 1966.
- Vines, Elizabeth. *Streetwise design, a practical guide for new development and adaptative reuse in Asian liveable heritage cities*. George Town: Think City Sdn Bhd, 2018.
- Viollet-le-Duc, E.E. “Restauración”. *Dictionnaire raisonné de l'architecture française du XIe au XVIe siècle*, (1), 14-34, 1854-68.