Heritage and Modernity - the Problem of Rebuilding and Reconstruction of Historical Theaters in Europe

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Abstract. The article describes historical theaters in Europe as an object of preservation, reconstruction, and restoration; formulates the problem of double value of cultural heritage sites - functional value and memory value, lists the conflicts arising from this problem; demonstrates the most widespread trends in the selection of a fundamental reconstruction decision; describes the role of the contemporary architectural language in preserving the architecture of the past; mentions the inclination of the society to stylistic reconstructions of significant objects; and identifies the most frequently applied method - combination of different approaches to restoration within one object of architecture.

1. Introduction
For more than 150 years the problem of interaction of modern architecture and architectural heritage has remained relevant for almost all historical European cities [1]. For many centuries, objects of architecture had a prevalent value - the functional one, i.e. they performed the purpose they had been intended for (along with the aesthetic value). The value of buildings decreased as they had ceased performing the intended purpose; after that, these buildings were usually rebuilt. Throughout many centuries of a struggle between the "old" and the "new", the priority has almost always been put on the "new", as it has always better performed its functions. This logic worked throughout the history of the mankind until at least the XVIII century when the cultural development of the society gradually led to the appearance of a new value of the architecture - the memory value [2].

The memory value is seemingly not important from the economic point of view; furthermore, as the memory value increases, the functional value decreases, yet the architecture as a reminder of the past or a component of the collective memory meets the ethical and esthetical demand of the society [3]. Thus, a conflict of values arises when the increase in the secondary value results in the decrease of the primary value. The problem of historical architecture is that it features both of these antagonistic values. Origination and development of restoration in the XX century, which prioritizes the secondary value (the memory value), created a new range of problems associated with the architectural heritage [4]. Along with the gradual, yet continuous extension of the field of restorative activities, as well as of the definition of heritage itself, the professional community has been raising new issues concerning acceptability of restorative intervention, methods and techniques of working at objects, and theoretical approaches to restoration. By the end of the century the definition of heritage had extended considerably, the theoretical foundation had developed, as well as specific methods and techniques of working with the heritage [5]. However, the conflict of the economic and the ethical/aesthetic approaches remained active. This conflict reappears with every restorative intervention. It is logical to
track this conflict using theaters as the buildings continuously changing their engineering equipment and resolving the issues of preserving traditions of the architectural image when modernizing the engineering portion of the spectating complex.

Additional historical value of architectural landmarks lays a range of restrictions on their use, particularly, on the change in a building's image [Shchenkov, 6]. The problem is that due to rapid development and change of the society historical building cease performing their initial functions and in order to meet increasing demands they must change or lose a part of their functions. This problem is frequently resolved in the simplest possible way - by an extensive transfer of the function to a different space. This method usually works successfully with residential and public buildings, but not with theaters. As long as theaters' functions are complex and inseparably connected with the city, they cannot be transferred or separated. Transfer of the function is undesirable, as the city's texture becomes poorer and changes having lost one of the dominant urban elements - centers of attraction of public life (one example of such a not too successful transfer is the Teatro degli Arcimboldi; although it features splendid acoustics [7], it was not popular, as it was built away from the city center as a temporary substitute for a reconstructed historical stage). It is also difficult to expand a theater's area in a historical city where the long-formed high-density development does not leave space for new buildings. At the same time, requirements to performances/shows become more and more complex: first of all, theaters serve as a mirror of a kind - they reflect the ever-changing view of the society on the fine and the festive; secondly, theaters must be cost-effective. Commercial benefit is achieved by improving technical conditions, first of all, by changing the stage machine (when a theater purchases a transformable stage, increased rate of scene change during a play, ability to show several plays within a season, larger number and better comfort of spectator seats, higher quality acoustics, state-of-the-art equipment), which requires more space with each rebuilding. What is to be done when a theater's space is limited by historical facades, and laws of scenic life require changes?

According to European experience, we may conclude that the choice is made in favor of the "new" - scenic life and architectural changes. It is interesting to track how the conflict between the historical heritage and requirements of the society - how the modern architecture enters historical cities and interacts with them - is resolved.

2. Main part

The Teatro alla Scala was built as per the project of Giuseppe Piermarini in 1776 at the site of the Church of Santa Maria della Scala that had been built in the XIV century and demolished for that purpose. It has been rebuilt several times [8]. The most significant changes took place after 1943, when the theater was damaged by a bomb. The restoration works performed by Milano Secchi were completed in less than 3 years, and the theater reopened in 1946. High work rate and slender means exacted their toll on the quality of reconstruction; unwanted use of reinforced concrete constructions worsened the auditorium's acoustics. Apart from restoration of the existing theater, it was decided to build a new theater - Piccola Scala (i.e. small La Scala). It was designed as a stage for rare performances, plays by XVI-XVII century composers, and chamber performances. This small theater operated from 1955 until 1983, when it ceased to be self-financing.

For 50 years since the previous rebuilding La Scala had been gradually becoming obsolete and by the end of the century operated in emergency conditions [9]. In 1992, it was closed for reconstruction. In 2004, Mario Botta spoke about the bad condition of the building in his interview: "The theater was closed because it was technically unfit (for use). By the end of 2001, all the deferments (of the post-war reconstruction - translator's note) granted for several decades to go ceased to apply; it was a mouse hole: unsafe, workers labored in terrible conditions, emergency works had been going on since the post-war period. No planning. To go on, La Scala required this cleaning..." [10]. Two options were considered for this "cleaning": simple restoration of the existing structure, i.e. of the construction implemented in 1947, or an ambitious reconstruction using additions of modern architecture to achieve a significantly higher flexibility in terms of the stage machine in alignment with modern technologies. In the end, the latter option was chosen. The project may be divided into three parts for clarity: part
one - restoration of the auditorium and facades of the historical building; part two - reconstruction of the stage machine and everything associated therewith; part three - addition of new architectural forms to the existing building. The theater's area was expanded by means of demolishing the historical building located deep in the block (one of the demolished objects was the Piccola Scala theater). Thus, the historical heritage value is deemed secondary in comparison with the economic and functional value when working on a socially significant object.

Two annexes were made to the building behind the historical facade of La Scala. One of them is rectangular and located over the stage, the second one is ellipsoid and located to the left. Mario Botta spoke of these new annexes as follows: "the two annexes protruding out of the building of the XIX century will be perceived only from a large distance: standing by the theater, only will only appreciate the dialog of the facade and the city." The roof will have the same elements as any other roof: tops, drums, water tanks, annexes. The city also features its own world of roofs..." [10]. An elliptical annex was chosen not by accident - this shape does not have a "face", a facade, and so it does not contest the theater's facade [11]. Therefore, the reconstruction project "divided" La Scala into two parts, the first part being the Piermarini architecture, which was cleaned of all annexes, and on top of that the second part - "abstract and modern language perceived as a technical component" [10]. In this case there is no contraposition because two parts of the building look so much different and self-sufficient that it seems inadequate even to compare them, as they speak absolutely different "languages" of architecture. Looking from the square in front of the theater, the historical building is in the foreground, whereas the modern annexes are only somewhere in the back, do not enter into a dialog with the Piermarini's theater's historical facade, do not contest it, are perceived as separate buildings, which is why they look sufficiently natural for the city.

Another difficulty of operating historical theaters is high risk of combustion due to the use of wooden constructions - throughout history, theaters often burnt [12]. Unlike a planned reconstruction when the time to develop a project is virtually unlimited, a fire is always unexpected and requires immediate reaction. La Fenice - a theater built in Venice in the end of the XVIII century - burnt in 1996 [9]. It required urgent restoration. The question how to restore the theater was never submitted for public or expert discussion. Similarly to the case of St Mark's Campanile, the city authorities decided to restore the theater "com'era e dov'era." The St Mark's Campanile case is often referenced by theoreticians and practitioners of Italian restoration when talking about reconstruction or recreation of lost objects [13]. Campanile is a widely known example of complete recreation of an object (1902-1903). It was completed before the adoption of the Athens, Venice, and Washington Charters, which prohibit such recreations. The Charters are a product of established views, opinions of the community; however, despite the charters, in the case of a landmark - the La Fenice theater - the authorities turned back to a more traditional approach.Traditionally, the name and the site have a symbolic meaning in the religious sphere. In the medieval times, a new temple was considered the same if it was built on the same site and had the same name. This centuries-long approach appeared relevant even in the end of the XX century. We can see it actualized in the restoration of one of the secular symbols of the city - the La Fenice theater, only the former two criteria are now complemented by the third one - similarity of the exterior of the original building and the new one.

Theater reconstruction works were performed by the crew of architects guided by Aldo Rossi. The project may be divided into three parts for clarity: part one - accident-prevention works on drying and conservation of the surviving part of the theater (after the fire, the theater remained uncovered for almost a year; this resulted in additional damage); part two - constructive works, i.e. new roof construction, recreation of walls and wooden constructions of the auditorium, reconstruction of the stage, as well as the reconstruction of interiors of adjacent buildings for administrative purposes; part three - decoration. In these circumstances, when the decision to recreate the building in the former form has been adopted and is not subject to review, this latter part seems the most interesting and

1 It ought to be mentioned that in Italy, the state protection usually covers only 50+ buildings. By the time it was demolished, the Piccola Scala was 48.
representative. Despite large-scale reconstruction works, a lot of attention and detailed exactitude were given to conservation of the remaining parts: almost all the existing molded decor elements, artificial marble of the walls and remnants of the marble floor were preserved. In the Sala Dante (December 13, 1836), which was decorated with frescoes depicting scenes from the poet's pieces, remnants of the frescoes were fully preserved, and where the murals were destroyed, the space was tinted and left empty [14]. The lacking elements were drawn there in the sketch style. This hall was restored using the critical-conservative approach [15] corresponding with the latest restoration theory trends. At the same time, the authors decided to recreate the auditorium's interior using a draft of the historical interior at scale one-to-one: all the destroyed decor of the auditorium was recreated using the preserved photographs and gilded. However, the new gild will never feature the patina typical of historical Italian interiors, because in theaters, the patina appears due to cinder and smoke produced by candles, while nowadays theaters are electrified and equipped with new conditioning systems. The absence of the patina is virtually the only marker of a recreated interior. The authors of the restoration, perhaps, unwillingly follow principles of Article 12 of the Venice Charter, according wherein modern additions must be distinguishable from the original. This restoration project is rather eclectic - two exactly opposite approaches to restoration were applied within one building [16].

The completed project of reconstruction of Shakespeare's Globe theater is the most curious and rare case of interaction of the historical heritage and new architecture. Usually, the matter is the preserved value, but in that case, everything was performed the opposite way - the priority was given to the symbol - the idea of a great theater, which required tangible embodiment. The idea to restore the theater destroyed in 1644 appeared in the end of the 1960s, and in 1970, Sam Wanamaker established the Shakespeare's Globe foundation with the purpose of restoring the theater in its initial form of 1599 [17]. The historical material for the reconstruction had been being gathered for many years, and the Rose Theater that was partially unearthed by that time was used as an analog for the recreation. In 1997, the theater was fully recreated 750 feet (ca. 230 meters) away from its initial location. In order to build it, materials and technologies of the end of the XVI century were used [18]. The Shakespeare's Globe became the first theater in 200 years to have a thatched roof. Thanks to the study of natural materials, the seemingly forgotten art of nailless woodwork was restored. Therefore, the work on the initially non-material part of the heritage became an innovative activity (to some extent) promoting the development of modern architecture and extension of building options.

3. Conclusions
Specific details of operating historical theaters do not allow to fully follow principles of the Venice Charter during restoration and reconstruction of cultural heritage sites. Generally, the critical-conservative approach is applied; however, functional complexity of objects dictates specific conditions that do not correspond with the principles of modern restoration. Virtually, the most widespread option is a combination of different approaches within an object to preserve the heritage. Stylistic restoration as an approach satisfying demands of broad population groups and requirements of the collective memory remains rather popular. The idea of architectural recreation resonates with the society when it comes to symbolic objects. In these cases, the modern architectural language is either not used or plays a secondary role. This means that although contemporary architects generally follow principles of the Venice Charter, they also find ways to use more complex techniques of instilling the cultural heritage of the past in the context of modern cities.

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