

Spatial Relations between the Theatre and Its Surroundings

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Theater as a place, but also as a field of human and team activity involving the creation of performances performed in the presence of the viewer, has a centuries-old history. Among different hybrid cultural spaces, theaters have a distinct role linked to their complex functional and technological structure, urban, social, and even ideological function.

architecture

theatre

public space

1. Introduction

Cityscape experiences involve multisensorial and dynamic paths through the space. Space gains meaning only when places decorated by humans appear in it [1]. It is characterized by accessibility for the local community and newcomers, the life of the city is visible here, and there are symbols and the most important social, service, and cultural facilities [2]. Human paths are based on empirical and reiterated interactions between humans, urban and architectural environments that involve sensory, emotional, and personal reactions. The spatial relation between humans and architecture is deeply studied in the History of Architecture. For example, Le Corbusier emphasized the role of architecture in celebrating the movements of the human body [3]. His theory of "architectural promenade" classified architecture as "dead" or "living" in function in terms of the presence or absence of sequential movement (that can be ignored or vividly observed) [4]. Several other theories have been developed starting from these ideas [5]. For example, Giedion described space while moving through it; in his opinion, it cannot be experienced from a single position but only from primary experiential activities [6]. Similarly, Eisenman discovered the existence of two experiential times: narrative and durational time, which represent, respectively, the perceived and real times of an experience [7]. In the first case, human interactions and experience have an important role in understanding the space.

Human interactions within urban spaces are profoundly treated also by anthropology and the sociology of architecture. One of the most famous classifications is given by cultural anthropology, which divided urban spaces into "places" and "non-places". A "place" is assimilable, marked, and conveys certain values. It is characterized by a clear link between spaces, surroundings, and individuals. Here, people have «(...) a space that empowers their identity, where they can meet other people with whom they share social references» [8] (p. 77). Examples of "places" are historic cities, houses, and cultural buildings. Otherwise, a "non-place" is a neologism introduced by Augé for "spaces of transience" «(...) that cannot be defined as relational, historical and concerned with identity» [8] (p. 78). They are generated by the "supermodernity", an intensification of modernity due to factual (or time

acceleration) and spatial (or abolishing of distance due to media and transportation) overabundance as well as to the excess of self-reflexive individuality [9]. According to this definition, the substantial difference among them refers to the social relations between spaces. “Places” create a strong social and spatial relationship between people, while “non-places” are emotionally a nobody’s space characterized by “solitary contractuality” without any face-to-face social relation. They are also linked only to modernity, without any connection with the history of the original space. Examples reported by Augè of “non-places” are airports, railway stations, motorways, supermarkets, shopping malls, outlets, hotels, resorts, theme parks, multi-functional buildings, and toll roads [8]. “Places” and “non-places” are “opposed polarities” [8] (p. 79) because the first ones are never completely erased by the second ones that are never totally completed. The idea of “non-places” has several applications in architecture. For example, it is linked with the concept of “junk space” defined by Koolhaas as «(...) *what remains after modernization; (...) the body double of space, a territory of impaired vision, limited expectation, reduced earnestness*» [10] (p. 176). They have inevitably changed the image and the essence of contemporary cities, causing a disappearance of original meanings [10] (p. 177). Examples are airports, shopping malls, department stores, hotels, hospitals, theme parks, office buildings, and sports stadiums.

Another important aspect of spatial relations is related to the presence of people. There is no place without people. Thus, the identity of a contemporary space is a set of features of both spatial forms and manifestations of life, and the identity of a place is subject to interpretation [11]. In this view, the perception of “places”, “non-places”, or “junk space” is strictly subjective as people can interpret any location as a crossroads of human relations or as an alienation space [12]. Furthermore, human interpretations are affected by affective explorations, perceptions, and cognitions of the space activated by emotions [13]. Memory and imagination are in constant interaction. A participant in space experiences deals with many senses, the basic ones being sight, hearing, taste, smell, and touch. Thus, a cityscape is a dynamic image with sound and smell, which only together affect the atmosphere of the place. These senses convey information subjected to intellectual analysis in the context of life experiences, hence it can be concluded that each participant perceives the same space differently, and everyone remembers it differently. Therefore, urban and architectural design requires a deep study of the relationship between humans and their environmental stimuli to create well-being environments [14]. Good spaces are experienced with all senses. A multi-faceted analysis of the senses in the design process can bring about the effect of conscious management of emotions of future users of space [15].

The sensory perception of a place, perceived and interpreted to understand the environment, is analyzed in two cognitive areas: those related to intelligence and those related to imagination. Scientific advances in architectural experience perception concern the approaches of “neuroarchitecture” [16][17] and “neuroaesthetics” [18][19] that try to clarify the neural substrata of aesthetic responses. These approaches are currently used synonymously with “emotional design” [20] or “cognitive-emotional design” [21], but their difference refers to the objects of study: urban areas and buildings in the first case, and all design forms in the second case (e.g., devices, furniture, jewelry, buildings) [24]. Although subjective indicators are fundamental elements for individuals’ spatial experiences, it is proved that the human body responds to surrounding stimuli before a conscious interpretation of emotions and perceptions [22]. Visual perception of the context is the primary form of space interpretation [23], as it is estimated that vision is responsible for 80–85% of the information we have on the world [24]. Visual perception is sensitive to

spatial relations of shapes, dimensions, distances, colors, orientations, and movements [24]. Then, other sensations play a role of 15–20%. Visual dominance is natural, but multi-sensory perception is more effective. Despite this, many theories on spatial and architectural planning deal only with the analysis of visual impact. Visibility analysis is most widely practiced in urban planning [25][26] through multiple [27] and cumulative viewsheds [28], which, respectively, combine and overlap different spatial images. Visibility mapping is also used for determining the attractivity of a cityscape through the visualization of dominant landmarks [29]. Recently, the role of soundscapes in the attractivity of urban planning has also been analyzed [30]. More in general, the quality and attractiveness of these spaces are determined by their impact in accordance with the need and function, interaction with its participant, and the identity of the place [31].

Inside spaces, an increasingly common phenomenon is the emergence of hybrid cultural spaces, open to various activities as well as to users with diverse and often opposing needs. Multifunction can create conflicts between different elements, effects, plans, and performed functions [32]. Conflict is a natural phenomenon: it results from conflicting interests and expectations of users or decision-makers toward the same space. Moreover, thanks to their inextricable link to creativity, they can become a catalyst for the revitalization of a wider urban context [33]. Regenerative design is normally used to address new challenges related to environmental preservation, social engagement, human well-being, and economic development [15], as well as to solve negative impacts related to urban sprawl, touristic pressure, building abandonment, and climate changes [34]. Revitalization is not a new activity; it accompanies the process of shaping cities from the beginning of their existence. It has a significant impact on the development of civilization and updates functional and spatial standards [35]. One cannot talk about revitalization without adding value to what exists [14]. Thus, these apparently friendly spaces can minimize interpersonal conflicts with constructive dialogue, ultimately leading to generally positive solutions. Inside spaces, public spaces are multifunctional components of the urban structure. They have a physical dimension (private or public property) and a social dimension (activities and events) that are interdependent [36]. The high quality of public space gives the opportunity to create a higher level of social relations, «(...) it also ensures the cultural identity of the place, being an important element of the inhabitants' identification with the city» [36] (p. 12–13).

2. Spatial Relations between the Theatre and Its Surroundings

Among different hybrid cultural spaces, theaters have a distinct role linked to their complex functional and technological structure, urban, social, and even ideological function [37]. Theaters were selected as they are representative of several elements that have an impact on spatial relations and human interaction at urban and architectural levels. Architectural theaters can «(...) simultaneously denotes theatrical art, the place where the performances are held, and the social act of attending the performance» [31]. First, theatrical space concerns both the theater building and its surroundings. They are architectural places, divided into interior and exterior environments that have a clear influence on the shape of public spaces, surroundings, and urban attractiveness. Second, their entire area is defined by the performance space (also called “viewer plus performer”). They are a medium for experiencing an event, as well as for creating human interaction between space, people, and emotions.

They also have a political, cultural, and economic role in urban development, as they represent a historic period, with the expression of specific architectural and urban features, public representations, and urban expressions. From the semiological perspective, they are symbolic “*representational spaces*” according to their representation of space in the social practice or in the artistic dimension [38].

Relationships between the theater and its surroundings may be different, depending on the adopted artistic vision. The building is usually the border between the real and unreal worlds, and the environment is one of the stages of experiencing the entrance from the real space into the fictional space, but also the exit from the fictional space. It is a buffer between the real world and the unreal world, the world of theatrical experiences. Additionally, site-specific, relational, and peripatetic performances have changed conventional theatre architecture, creating performance spaces where spectators are relocated and reoriented in relation to the surroundings [39]. The mission of theaters changed significantly over the years, from the ancient Greek theater to the contemporary IMAX and multi-space theaters. Presently, theaters are characterized by multi-functions for hosting multiple events [37]. In this way, they represent together “places” and “non-places”. Such modifications also affect their surroundings, which change according to architectural programs, performances, and social interactions. These modifications also affect public spaces that can interact, but that can also remain isolated. Connections with theater architecture and urban plan or their lack may be the result of an intended action in a given space, but they can also be an unplanned effect.

To adequately understand the role of the space of theatres, it is vital to delineate their concept and development. Theatre space has undergone several changes over time, related to different aesthetic theories and historical periods. In the origin, classical theaters were wide open-air theater stages composed of the proscenium, and the curtain (Greek and Roman theaters) [38]. The earliest Greek theatres were built as open-air end-stage theaters around a central market square (*agora*), using wooden stands for straight-line seats (*ikria*) to be easily removed. From the urban point of view, this design was supported by a hillside. This model was used for a long-time during the Greek, Roman, and Byzantine periods, sometimes changing out the wooden structure for a stone structure. From the 5th century, U-shape stages were added to rectangular or round stages, to create space for the scenery and the orchestra (*logeion* or *proscenia*). Sometimes, the presence of a porch improved the monumentality of the architectural design. This shape was confirmed also during the Renaissance period, where arose the use of existing buildings, halls, and hospitals for hosting theaters. The real innovation referred not to the building itself but the scenery, thanks to the use of the perspective that aimed at re-creating the classical *scaenae* using semicircular amphitheaters. This conformation changed only in the 16th century with the circular Elizabethan playhouses, where courtyards and domestic areas were used for dramatic representations. The use of automatic sceneries from the Baroque period also had an impact on backstage space, introducing new shapes such as horseshoe, bell, elliptic, also thanks to their acoustical properties. After that, theaters are divided into open-air or fully enclosed spaces. A simplistic categorization individualizes four basic forms [40]: (i) “*arena stage theatres*” with a central stage, also known as “*theatre-in-the-round*” although the stages can be round, square, oval, octagonal, or irregular (e.g., Greek and Roman amphitheaters); (ii) “*open stage theatres*” that eliminated the curtain space to dissolve the scenic illusion between spectators and actors to favor their communicational flux (e.g., Théâtre Libre, avantgarde theaters, or contemporary “*site-specific performances*” theaters); (iii) “*end-stage theatres*” with stage and proscenium on only one side (e.g., proscenium or Italian style theater); and (iv) “*flexible stage theatres*” with the

stage that changes according to the representation. Inside the latter category, the street theater uses unconventional spaces, such as open areas, railway stations, offices, and unused buildings to display the theatrical performance according to the idea of transparency in the artistic process [38]. Theater buildings follow this internal shape, adding several services for the audience, such as offices for administration, and touristic purposes, facilities for heating, ventilation, and air conditioning, and services for cleaning and maintenance [40]. The 20th-century theaters completely changed this linear history of design. New ideas were developed, from the recreation of Greek theatres inspired by archaeological excavations (e.g., “total theatre” of Walter Gropius) or Elizabethan theatres (e.g., the open-air Old Globe Theatre in San Diego) to the creation of adaptable spaces or the use of several different design styles. In this context, urban surroundings are influenced by building features, that also change urban configuration and planning. In general, their location depends on land availability, central position, economic factors, or the presence of infrastructures, but in many cases, the presence of the theater influences spatial relations at the urban level. This aspect was not addressed by the literature, creating a gap in the study of the spatial relationships between the theatre and its surroundings.

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