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Architectural Forms in Stravinsky's Music: Site-Specific Case Studies

Formas arquitectónicas en la música de Stravinsky: Estudios de casos específicos

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Abstract

Igor Stravinsky wrote: "We cannot better specify the sensation produced by music than by identifying it with that which the contemplation of architectural forms provokes in us. Goethe understood this well when he said that architecture is petrified music". Since the Middle Ages, architecture and music have cooperated. They have gone through their metamorphosis together, hand in hand. Their fusion has produced unique architectural and musical hybrids. A similar story connects Igor Stravinsky's The Concerto in E flat major for chamber orchestra "Dumbarton Oaks" or Canticum Sacrum, which was written for St. Mark's Basilica in Venice. This paper aims to provide a multidisciplinary approach to a deep connection between music and architecture. The semiology method allows us to find hidden ideas in musical and monumental works.

Keywords: Igor Stravinsky, Architecture, Music, Dumbarton Oaks, Canticum Sacrum.

Resumen

Igor Stravinsky escribió: "No podemos precisar mejor la sensación que produce la música que identificándola con la que nos provoca la contemplación de las formas arquitectónicas. Goethe lo entendió bien cuando dijo que la arquitectura es música petrificada". Desde la Edad Media, la arquitectura y la música han cooperado. Han vivido su metamorfosis juntas, de la mano. Su fusión ha producido híbridos arquitectónicos y musicales únicos. Una historia similar conecta el Concierto en mi bemol mayor para orquesta de cámara "Dumbarton Oaks" o Canticum Sacrum, de Igor Stravinsky, escrito para la Basílica de San Marcos de Venecia. Este trabajo pretende ofrecer un enfoque multidisciplinar de una conexión profunda entre música y arquitectura. El método de la semiología permite encontrar ideas ocultas en obras musicales y monumentales.

Palabras clave: Igor Stravinsky, arquitectura, música, Dumbarton Oaks, Canticum Sacrum.

Introduction

Architecture is as emotional, spontaneous, and intuitive as music. For example, Schelling noted architecture as music in space, a kind of frozen music (Schelling, 2013). Alternatively, Madame de Staël wrote in her novel Corinne, or Italy that the architecture of St. Peter's Basilica in Rome is like uninterrupted and fixed music (Staël, 2016). One can see in the four tiers a model of the four voices (the base is the bass, then the tenor, the alto, and the highest voice, the soprano), but it is speculative. A more accurate formulation may be another related to the laws of perception in music and the distribution of weight in architecture. All the load should be on the bottom, and the structure should be lightened at the top. If we look at the polyphonic score, we see that the upper voice is painted in detail and shallowly, and the lower voice is painted in more significant durations.

A recent study on Music, Space and Architecture at the Amsterdam Academy of Architecture (Voorthuis, 2012) states that architecture and music are produced in stages by ordering our environment in a design (the virtual space of a drawing or a composition). More than any other art forms, musical and architectural compositions remain most attached to this initial abstract origin since they both retain a highly abstract form (Murray, 1956). Although the essences of architecture and music are gracefully abstract, both can be highly influenced by external forces (Zuk, 1983).

Similarly, an architect may construct and visualize initial aspects or schematics of a building in his or her mind before transferring them to paper, using sketching and graphic notation to work out other design elements and details. In this way, the processes of developing a piece of music and an architectural design through experimental sketching and symbol notation systems are parallel (Zuk, 1983). Architecture and music strongly impact our immediate emotional states because they both exist in time and space (Martin, 1994). Most prominently, architecture and music create immersive experiences for their receivers (Holl, 2012).

Discussion about Frozen Music

Even Goethe (2014, p. 44) referred to architecture as frozen music: "I know-not-how streams from the airy tones whilst they move; all becomes melody. The columns, even the triglyph sounds: I believe the whole temple is singing." And this is not just an image: the two fields of art, architecture, and music, are closely related. Music is invisible, and architecture is inaudible, but one can see music and hear architecture by association.

In an article for the Musical Times, Higgins (1925) compares music and architecture, saying that while the two are radically different art forms, they are evidence of man's ability to create a form. But not only a researcher who hypothetically thinks about the relation between architecture and music but musicians as well. For example,

American musician David Byrne has come a long way from playing at a small New York club to a packed house at Carnegie Hall. The connection between music and the space in which it is played has always interested him. In 2012 the musician even presented his book How Music Works (Byrne, 2017). He reflected on how music changes to suit the specific space. However, music not only adjusts itself to the space in which it will be played but also shapes it. In 1877 the British art historian Walter Pater (2010, p. 155) remarked, "All art strives to become music" and architecture, of course, is no exception – built on rhythms and harmony, it consists of chord equivalent elements: columns, arcades, galleries, etc. – but there are several outstanding architectural projects conceived as frozen music.

Here we will provide several examples. The Italian architect Manfredi Nicoletti proposed one of the projects to build an opera house. This project was heavily influenced by traditional Italian opera architecture. Contrary to its name, the wave is not only the literal wave of the Gulf of Cadiz, on whose shore the building was to be located but also the sound wave that spills melody over the audience. The transparent glass roof acts as a dome, sealing off the music and shielding it from the aggressive external marine environment. At the same time, it minimizes the length of sound waves, thereby increasing the flexibility of the entire ensemble. Manfredi Nicoletti was able to realize his concert hall in Kazakhstan. It is not as musical externally, but even here one can trace how the architectural form is formed under the influence of music.

If when viewed from the front the building seems unnecessarily rough or harsh, when viewed from above it resembles a clam shell - they used to be used as musical instruments, among other things -. The architectural bureau of Zaha Hadid realized the actual opera house in Cardiff. Another clearest example of how music gives birth to architecture and vice versa is the Philips Pavilion designed by Le Corbusier for the Brussels International Exhibition in 1958. The architect worked on it with the Greek composer and architect Yanis Xenakis. By the time he began working on the pavilion, Xenakis had already formulated his hypothesis of how music takes architectural form. He said: "Architecture embraces the three-dimensional space in which we live. Convex and concave surfaces are essential to both the aural and visual realms. The main thing here is the observance of proportions" (Xenakis, 1992, p. 206).

It was an architectural experimentation comprising a concrete form and an internal immersive experience where the composition Metastasis was performed. The Phillips Pavilion designed by Xenakis is often cited as one of the more influential precedents for the connection between architecture and music. Last but not least, Steven Holl's Stretto House in Texas was based on Béla Bartók's composition Music for Strings, Percussion and Celesta in 1991. The Stretto house is located adjacent to three ponds made from concrete dams. The sound of the water flowing over the dams is reminiscent of stretto

in music, where one musical phrase overlaps another. The house is divided into several sections from one space to another, like the musical piece. It allows the movement of time to evolve in different ways. It also allows us to explore the architecture design approach beyond its disciplines by understanding that music is felt and can inform the emotional quality of the architecture.

Igor Stravinsky was fascinated by painting, sculpture, architecture, and rhythm. Mikhail Druskin (1983, p. 101) remarked, "isn't that the reason for Stravinsky's long-standing fondness for ballet, its graphic purity of movement, and his interest in the rhythmic emphasis that changes mimic gestures into speaking ones?". Perhaps, yes. Stravinsky was very rhythmic. He wrote: "Music is that which architecturally occupies a certain segment of time... in dance... the body means nothing until it fills time as music does. The gesture is meaningless (Stravinsky, 2021, p. 56).

This paper aims to consider Stravinsky from the perspective of a composer who often worked with architectural forms within his musical work and how to perform them. The works in guestion could be called site-specific works, although each has its typology: 1) Music as sacral architecture. Here we consider a sacred structure (temple) as a visual-semiotic unit capturing essential religious-cultural contents; 2) music as landscape architecture, where the garden and park structure become a musical form and can organize the aesthetic side of the living environment; 3) music as social architecture is spaces where music is the main component, as in a theatre or concert hall, but rather an accompanying form for other activities; and 4) musical work as kinetic architecture, in which the musical parts and components are designed so that their parts can move without violating the structure's overall integrity.

We will analyze each of these types according to one of Stravinsky's musical works.

Music as a Sacral Architecture

Here it is interesting to investigate the paradigms of semiotic transfer of sacred meanings: transfer of idea, image, and copying. Sacred architecture in question has a functional and aesthetic load and a semiotic function, acting as a means of communication in both senses of the word: as an object of socio-cultural communication, and as a sign complex.

During the mature Renaissance, composers begin to work more intensively with the architectural context. First, this concerns the authors of the Venetian school, which formed in the second half of the 16th century around Andrea Gabrieli and his nephew Giovanni Gabrieli in the Venetian Cathedral of St. Mark. This basilica was in plan a cross with many galleries, where the Gabriele's arranged the brass players and choristers. The audience sat below and watched the sound move from gallery to gallery. The echo effect, where the exact musical phrase was repeated from

several different points, was often used on such occasions.

Interestingly, five hundred years later, Igor Stravinsky also turn to the architecture of San Marco and in 1957 write the oratorio Canticum Sacrum for chorus and several instrumental groups distributed in space for the Venetian cathedral: Canticum Sacrum in five movements, plus an introductory dedication. Some critics have suggested that the Canticum Sacrum bears a solid structural relationship to that of the basilica, the five principal sections of Stravinsky's piece relating directly to the five domes of Saint Mark's. Both the central dome of the church and the central movement of Canticum Sacrum, are the largest and most structurally imposing. Furthermore, in this movement, Stravinsky chooses to depict the three Christian virtues (Faith, Hope, and Charity), perhaps corresponding to the central dome of Saint Mark's.

Music as a Landscape Architecture

Here we draw a parallel between the Dumbarton Oaks estate and Stravinsky's work of the same title, the most striking example of Igor Stravinsky's neoclassical style. In 1938 the Bliss couple commissioned Stravinsky to compose on their 30th wedding anniversary. The composer was invited to the Dumbarton Oaks estate (Washington) to discuss the commission. Stravinsky was so impressed by the beautiful gardens surrounding the house that he decided to base his Concerto on the structural layout of the gardens. Beatrix Ferrand designed the project.

She worked at a time when landscape art was beginning to take on a professional framework. Her goal was to extend the garden planning and design culture to large areas, turning garden art into landscape art. The composer admitted that his Concerto was modeled on the Brandenburg style. However, despite the many similarities to the texture of Bach's Brandenburg Concertos, the fresh originality creates the uniqueness of this music. Dumbarton Oaks continues the series of concert compositions of the 1930s. A more detailed analysis might show which musical phrases from the piece have a similar form to the landscapes of the estate and its gardens.

Music as a Social Architecture

In this paragraph, we will talk about several works devoted mainly to vocal and piano miniatures, which Stravinsky created for the occasion, for home entertainment, and other not-too-serious occasions. However, almost all of them are miniature masterpieces. "The pieces are intended for the atmosphere of a music hall or a cafe-concert", Stravinsky wrote to Ernest Ansermet (Stravinsky, 2021, p. 58). It was no accident that Stravinsky turned to such a small entertainment genre. The future composer's father shone on the opera stage at the Mariinsky Theatre, and his mother, as a pianist, accompanied her husband during concerts. Together with his brothers, Stravinsky witnessed

the gathering of the entire artistic and cultural elite of St. Petersburg in their home – Liadov, Rimsky-Korsakov, Cui, and Stasov – and even Dostoyevsky came to visit. The creative atmosphere in which the future composer grew up subsequently influenced the formation of his artistic tastes and the diverse form and content of his musical works.

Later in his youth, together with his younger brother Gurii Stravinsky future composer often attended Rimsky-Korsakov's playful house concerts. Stravinsky sought to create such a domestic music hall, a playful musical space for his children: sons Sviatoslav and Fyodor and daughters Lyudmila and Milena. The sons became prominent cultural figures: Sviatoslav became a virtuoso composer and pianist, and Fedor became an artist. One of the cycles of entertaining or social music is Five Easy Pieces for piano in four hands. Stravinsky's eldest children, Fyodor and Mika (Lyudmila), were the cycle recipients. "I wanted to instill in them a love of music, masking my pedagogical goals by composing very easy parts for them and more difficult ones for the teacher, in this case for myself; in this way I hoped to excite in them a sense of genuine performing complicity" (Stravinsky, 2010, p. 71).

Later, Stravinsky made an orchestral version of both light cycles, composing two suites from them, and loved to conduct them himself.

Music as a Kinetic Architecture

The last and perhaps most exciting type I highlight is dynamic or kinetic Architecture. In the space of this dialogue, one of the dominant ideas becomes the desire to break down the boundary between the stage and the viewer and to include the viewer in the direct artistic event. This occurs through the immersion of Tale of the Soldier in the immediate historical context of an era, such as the tragedy of Auschwitz, the escalation of the Cold War conflict, the student protests of 1968, or the end of the low-intensity civil war in Italy. Stravinsky's theatrical and musical work surprisingly combines a tragic narrative reflexed through a satirical, comedic perspective. This chamber work, whose construction dates back to the traveling circus or touring theatre, consists of several short dances: tango, waltz, and even ragtime.

The chamberness of production allowed it to be shown in various Swiss villages. An exceptional feature of this work, very clearly articulated by Igor Stravinsky himself, is the meta-contextuality of the piece and its ability to be considered in a system of diverse meanings and different eras. The composer intended to relate the piece to any era and, simultaneously, to 1918, to many nationalities and none in particular. Igor Stravinsky, Charles Rameau and Ernest Ansermet used the grotesque and irony as a universal language. This has led to a variety of productions all over the world at different times, giving rise to a whole range of new readings of the work. This is evidenced by sometimes relatively polar theatrical forms such as circus show and

mono-performance, burlesque and non-professional street theater, ritual puppets and clowning. The task of stage directors, artists, and actors becomes a direct appeal to the reality in which they find themselves, and its insistent evocation and disembodiment.

Among the productions were ballets by Jiří Kylián and Maurice Béiart. In 1984, American illustrator and animator created an animated film, using music and textual background, combining line techniques and associations with Kandinsky, Mondrian, and Art Deco styles. There were even Ian McKellen (narrator), Sting (soldier), Vanessa Redgrave (devil) in the 1990 version - live recording with the London Symphony Orchestra conducted by Kent Nagano -. Furthermore, in 2018, Roger Waters, one of the founding members of Pink Floyd, released an adaptation of Tale of a Soldier on the Sony Classical Masterworks label. The accentual and rhythmic element in Stravinsky's music is perhaps its most important distinguishing feature and the most valuable thing with which this composer has enriched the musical world. His works are so plastic that they can be stretched and compressed, forming. As a result a montage of various types of movement. It is a skillful musical topography.

Conclusion

The global cultural processes that took place during the 20th century gradually led to the convergence of all the arts, sometimes to the point of erasing the boundaries between them (Murray, 1956). Literary and philosophical concepts developed among architects, artists, and musicians repeatedly emerged, becoming independent cultural phenomena. Such phenomena were reflected in each of the arts, acquiring its form and content. In all kinds of art, the most important are parameters and attributes such as form, dimensions, space, color, texture, light, time, movement, etc.

Moreover, it is true that those kinds of arts, which are considered static, may have signs of dynamic arts (for example, performing arts), and vice versa. For example, architecture, static in its nature, may have compositional elements that make it dynamic, or kinetic elements. "Music, like architecture, is an immersive experience – it surrounds you. One can turn away from a painting or a work of sculpture, while music and architecture engulf the body in space" (Holl, 2012, p. 4). At the same time, a theatrical production or a ballet can be very static, almost sculptural, possessing tectonics, and these are already categories of architecture.

In discussing musical space, Robert Morgan (1980) writes in an article entitled Musical Time/Musical Space that people who listen to music have the impression of the different phrases and voices that occur in music because of tonal space. Tonal space defines a structure by grouping sounds relative to one another. In this way, Morgan argues that a musical composition defines its own space.

Architectural Forms in Stravinsky's Music: Site-Specific Case Studies

Stravinsky is primarily an experimentalist, but a creator of new forms. It is not surprising that one can easily find architectural motifs in his music and draw quite apparent parallels. This direction in his work has yet to be sufficiently explored, but could potentially be a great study.

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