NEXUS CANARIAS

The term "architecture" has been interpreted by certain scientific disciplines to define that which goes beyond commonplace structure. It has been suggested, that "architecture has its final mimetic 'ratio' in rodent excavations, in complex ant's constructions or in honeycombs and nests."1 However, it is with reference to the atom of a solid, that we usually speak of the molecular structure of architecture. Yet, the architectonic qualification lies precisely in whether we can conceive of a space as habitable. To "inhabit" consists in developing habitual actions and ways of living. Therefore, "inhabitation" requires a space, even an environment - bounded, limited because to "inhabit" something requires that it possess a dimension: the dimension of "inhabiting."

If this is the case, however, we can

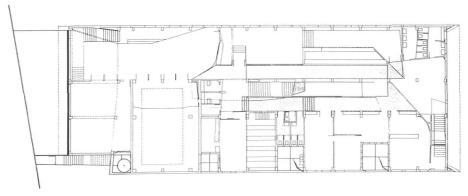
The Borderlands:
Between
Architecture
and Music

not attribute the possibility of creating the conditions necessary to generate "habit", exclusively to architecture.

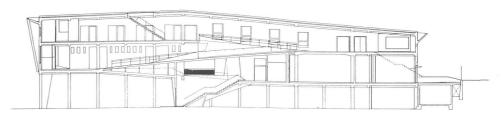
Music is also able to "envelop" us. Thus, one way to establish a link between music and architecture, lies precisely in the idea of habitat, because music too creates habit, that is, gives shape to a space that must be habitual and habitable. This suggests a primary

difference between, on the one hand, music and/or architecture (both of which establish themselves in an environment); and, on the other, other figurative iconic art forms. As Eugenio Trias states in his book "La Lógica del Límite" (The Logic of Limits), "it is [music's] destiny and vocation to create a mechanism of sound, time and space." We thus come to understand that music's primary function is to inhabit the ear, that place where, according to legend, Tom Thumb dwelt; that tiny spiral which harks back to the intimate immensity inside the architecture of the snail's shell, the swirling form of which resembles the flowing of the wind within the trumpet, the very form that allows it to produce its characteristic sound.

For all this, music has always taken the flowing of water and wind as its paradigm. Schubert compared music



Proyecto 1990. Autores: J.J. Espino Durán y M.J. Feo Ojeda.





with the brook, the archetype of the musical flow. However, if we study the conventional cartography of a river, we notice that it is traditionally represented as a line. Similarly, in the graphic documentation of architectural construction, in the blueprint of architecture, walls are represented as lines. But, the existence of another series of subjective cartographies, leads us to understand the journey as the basis for the writing of complex planimetric surveying: here, architecture is defined as a space thought out for movement. for the flow of its inhabitants. We can go even further to suggest that architecture. like the city, is ruled by laws which bring it closer to a state of fluidity than of solidity.

The roots of the archaeological vocation which architecture and music share, are to be found in the myth of the cabin, with its condition of mobility and its provisional nature, both of which are in opposition to solidity. The city's cores move about according to the socioeconomic conditions which control the life of the metropolis. Places which were once centers, are now fringes, and vice versa. This process has involved complex urban rehabilitation in the form of conversion projects and the re-use of outmoded areas which were longer able to serve the needs of the contemporary city. Herein lies a fluidity that is shared with music, a fluidity suggested by the many terms shared by descriptions of architecture and music: composition, harmony, key, measure, beat, tonality. texture, lines, point, counterpoint, chromatism, scale, proportion, interval, sonority, vibration, noise, silence, order, time, rhythm, flow, entrance, leitmotif, planes, instruments, passages, length,

height, depth, resolution of continuity, figures. numbers, mathematics, formula, division, fraction, modulation, series, concomitance, serialism, what is ascending and descending, repetition, fugue, variation, etc. These commonalties might well be understood to suggest that the architect approaches his project in much the same way as the composer.

The continuity of existing spaces in Mies van der Rohe's Brick House, or the parallelism established between those who descend the spiral stairway and those who descend the ramp in Le Corbusier's Ville Savoye, speak of the effort which architects put into developing projects on different levels with different functions. This creation of parallel structures at different levels is to be found equally in the several planes of sound and melodic counterpoint lines in musical compositions. Perhaps the idea of the continuity of space is best illustrated by the flowing passages of Frank Llovd Wright's Guggenheim Museum in New York, passages inspired by Bramante's helicoidal stairwell at the entrance of the Vatican Museums. In this architecture, we discern the snail's shell, the channels of the ear and the swirling form of the trumpet. Its musical fluidity originates in the seed-shaped fountain which, like Sullivan's seed, marks the beginning of a journey, a journey which draws to its close in the splendid skylight which covers and illuminates this impressive work, with its quality of sound-time-space.

In their design for a building which houses a Teaching Center, Canarian architects Juan José Espino Durán and Manuel Feo Ojeda have explored this borderland between music

and architecture. The result is an architectural piece and a musical piece which bear interest in the implied linguistic convergence of these two artistic disciplines. The building is located on the university campus at La Laguna (Tenerife, Canary Islands). The musical piece has been reduced to the rhythm of a quartet for flute, piano, violin and cello, in which the motif of a more complex score is configured. As one listens to this music, it becomes evident that no melodic line has been left to chance. However, the final composition is not the result of having observed and moved an architectural picture to a pentagram which is subsequently harmonized (as Heitor Villa-Lobos did with his profile of San Francisco), nor is it a musical diversion which takes certain signs as its theme (as did Ravel in his exploration of the letters in Haydn's name). Rather, the architects have sought the existing spaces which architecture and music share. To do so, they have used the signs of a common linguistic system, ever mindful that the building not only contains currents of movement, but is itself externally shaped as a result of these internal flows.

The building is elevated on pillars, and only touches the ground through a narrow body which stems from the sixth facade and is reminiscent of an animal's belly, and which provides access from the apartments to the interior passageway circuit. According to the architects, this section could be the animal's testicles, invoking a clear reference to the 'seed' that gives rise to the Guggenheim's ramp passage-way. Separate drain-pipes channel rainwater, which flows along the roof in two slopes.

In the interior, the classrooms are arranged in two lateral bands, while the large nucleus of circulation situated in the middle permits movement through the entire building in an discontinuous way, by means of successive ramps. The need to bind the resulting volume within the area, results in the zigzag effect of passageways, which remind one of the tubes of a trumpet (an instrument which would be impossible to play in any other form, because of its length).

The concept of the building as a single organism encapsulating continuous space, culminates in the roof. As we climb the stairs, which take us up to the natural space, we cross under the skylight which illuminates the center of the building - and suggests the light of a knowledge which finds its source in nature. The result is a reflection on time and space, its leitmotif the careful design of the passage-ways and the perception of the building in foreshortening, from both the interior and the exterior. Since the ground-level of the building is insufficient in coping with all the demands of the contemporary city, we are forced to create areas of elevation which do not obstruct mobility, bearing in mind the fact that the city, and to a lesser extent the building, must allow fluid circulation. As Paul Virilio notes in "Claude Parent, Paul Virilio 1955-1968 Arquitectos": "The inclined plane represents this basic geometric principal. As is more generally accepted in the field of geology, we have used nature for a long time to solve problems of trajectory and flow; in acoustics, hydraulics and engineering (doors and adornments) this method of continuous elevation is commonly used." He goes on to say that, "This mode of elevation and of distributing space allows

us to isolate habitable areas without creating overwhelming obstacles. Without 'closing off' with walls and enclosures, it allows us to integrate the circulation of the living area, while the mode of vertical elevation decomposes these two uses by adding the strange body of the 'stairway'."

That one of the architects who designed this project (Juan Espino), was finishing his degree in piano at practically the same time as he graduated in architecture, makes sense of the convergence between these two disciplines in the building under discussion. Once the two architects had agreed on the precepts of this project, they worked on bordering stylistic theories which would include even the aesthetics of the car (Ferrari, Lamborghini, Bugatti). When it came to putting the design on paper, the counterpoint of the lines of the project were forged as melodic lines and the hollow spaces of the facade as musical notes, thus playing with the heights, the rhythms and the spaces between the windows, while at the same time responding to the function of the interior of the building. By recourse to the chosen abscissa and ordinate, the height of the building was divided into three dodecaphonic octaves, semitone to semitone. In time with the horizontal axis, the rigid equidistant pillars play the role of the dividing lines of sheetmusic. Thus, the musical composition opens a specular dialogue with the section and the height of the project: as we stroll through the building accompanied by the score, the music tells us what is happening above, below and in the exterior of the passage-way space. The work may be interpreted to

its end; or in the reverse direction, to the point where we stop walking.

This is not a matter of reducing architecture to numbers so as to discover a relation between architecture and music, as it was in the experiments of Xenaguis. Rather, it is the formalization of a complex structure in architecture and/or music which, by existing in the border regions, produces an obvious linguistic contribution to both fields. Although the existence of this route through the building seems Baroque, it may remind us of the drama that underlies Haydn's symphonies. It is, in fact, a path towards light, with no return (unless we retrace our steps or succumb to the gimmick of the stairway. which is unavoidable in case of fire). The musicality of the building balances and vet maintains the independence of all the voices. A large pedal makes constant reference to the ground, to the terrain; which is to suggest that the dominant atonality certainly doesn't preclude the existence of harmony. which is unusual in contemporary scores. What may be of most interest, is the distancing of the dodecaphonic, serialist approach from its numerical logic, which maintains that each note is a consequence of the preceding one. Through this distance, a randomness and a subsequent sense of doubt are added to the subjective wanderings of each person. The determination of the end of the work, of its length, and even of its development, is left to the spectator. While the musical motif engenders a one-way journey through the building, which is reflected in the enclosed documentation, this is ultimately nothing more than an interpretative option.