

## Chapter 12

# Musitecture: Musical Space, Spatial Music. Sonorous Thresholds in Time-Space Intersections

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**Abstract** The aim of this article is to share the author's inquisitive interest in architecture and music correlations, focusing on their aesthetic, interpretive and pedagogical implications. A symbiosis between both fields could suppose the dawn of the interdisciplinary Humanities: Musitecture. The architectural distinction between content and container, such as Louis Kahn's form and design, draws challenging analogies with musical meanings and signifiers, according to a semiotic approach. While architecture's raw material is space, music builds with time—both dimensions often overlapped as exposed by the theory of relativity. Thus, space is temporal; time, spatial. Musitecture introduces spatiality into musical time and temporality into space perception. Focusing on *El Albaicín* by Spanish composer Isaac Albéniz, the article depicts a constructive principle latent in both disciplines: contrast between opposites, conflict as the inner creative spark of an architectural place or a musical discourse. Interaction turns into a masked opportunity where thresholds become a fertile land for ambiguous and complex *mélanges*, in which an organic discourse can grow out of its intrinsic parts—organs. Motion, momentum, ecstatic, static, hypotactic, paratactic, temporal, timeless are results of a musitec-tonic approach through spatial temporality and narrative.

### 12.1 The Search for a Common Constructive Principle

This article has been motivated by the author's inner self-conviction—both as musician and architect—in the existence of numerous correlations between Music and Architecture. Such conviction is based on a personal conception of both spheres of study as a result of Time-Space intersections, in which a constructed, built,

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discourse is unfold. Both of them share a common constructive principle: undeniably present in Architecture, but latent as well in Music, conceived as:

[...] the artistic construction of time [...] with non-linguistic sounds. Therefore, as we can affirm that a sculpture [as well as a building] is made “with stone”, we could say that a musical composition [...] is made ‘with time’ (Azúa 2002: 216–24).

A latent, inner and underlying constructive principle, both in Architecture and Music, serves that very initial creative spark undeniably presents in both artistic attitudes. The share of constructive principle gives birth to an interdisciplinary approach to both humanistic disciplines, could be called *Musitecture*: a mixture of Music and Architecture, tied together through multiple correlations.

The difference between them relies on the raw material each of them uses to build, and the type of material used in their construction process. While Architecture’s raw material is space, Music models with time. However, time and space are two dimensions easily correlated, as the theory of relativity affirms. Thus, time is spatial, as space is temporal, which suggests us an interesting correlation between architectural space and musical time. The concept of *Musitecture*, thus, introduces a sense of spatiality in musical time, as it brings temporality in the perception of architectonic space.

Once suggested (1) the existence of a constructive principle in both Architecture and Music, many questions arise: (2) what do they construct with, which raw materials do they build with, (3) what do they construct, and (4) how do they do so?

## 12.2 What Do They Construct with?

Architects model space, architects manipulate the *contents*. The *container* is just the visible face of such manipulation, which leads us to the following question: what is space (see Fig. 12.1)?

It seems to be the negative of what is occupied, the distance between furniture, walls, ceiling, people... but it is not exactly so. It is an untouchable fluid, continuous air mass, a flux of atmospheric freedom, the immaterial support for movement, for life, for people’s activities. It is a fluid volume that architects, as designers, cut, model, give shape to with our hands. As a sculptor who cuts a sculpture out from a piece of stone. But with an essential difference: architects build spaces out from space, spaces that are experienced, lived by people, spaces in which people develop

**Fig. 12.1** Graphic showing the perceptive ambiguity between “figure” and “background” (drawing from Rasmussen 2007: 42)

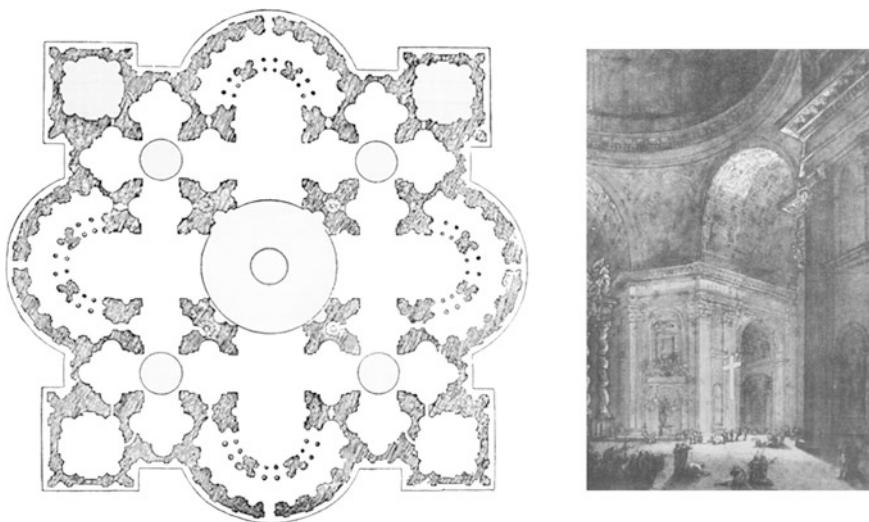


activities, spaces we can enter, exit or stay in. While a sculpture modifies its outer, surrounding space, architecture creates new accessible spaces.

Space is, thus, this void, seen through its outer solid surroundings (fullness), but in essence is a void air mass. A touchable, bendy, malleable empty fluid, defined by its opposite: a full solid. Such enriching opposition (reciprocally constructive, not destructive) between *container* and *contents* is essential to understand architecture (see Fig. 12.2).

A great building, in my opinion, must begin with the unmeasurable, must go through measurable means when it is being designed, and in the end must be unmeasurable. The only way you can build, the only way you can get the building into being, is through the measurable. You must follow the laws of nature and use quantities of brick, methods of construction, and engineering. But in the end, it evokes unmeasurable qualities, and the spirit of its existence takes over (Lobell 2008: 48).

Similarly, I consider music to be on the edge between the measurable and the unmeasurable, the tangible and the intangible: a piece of music lies asleep in the score until it is brought out by the performer's interpretation. Notes, dynamics, tempo and character indications are all physically written on a piece of paper, but what gives sense, meaning to them, what brings them into being is the time in between those precisely written notes, the underlying silent rhythmic pattern. Such temporal dimension is brought out of the timeless score by the performer's interpretation. Music, then, is built by time (as unmeasurable as space) but only seen through its solid, physical materializations: notes and indications on the score.



**Fig. 12.2** Bramante's plan for San Pietro in Rome (drawing by Louis-Jean Desprez 1782; from Rasmussen 2007: 46–7)

**Table 12.1** Support or condition for the measurable to turn into unmeasurable

	Support/condition
Architecture	Space
Music	Time

The “sculpture of time”, music, only revives each time it is played, because its pedestal is *execution*. [...] Schubert’s sonata does not exist in the score, which is a simple written memorandum. When there is no execution, there is no sonata, only printed notes as a silent memory and constant demand for execution. The score only is an ensemble of rules able to give birth to the sonata, as the plans of a building are only instructions to build it, but cannot substitute it. One cannot live in a plan (Azúa 2002: 216).

Space and time are the support or condition for the measurable to turn into unmeasurable (see Table 12.1).

### 12.2.1 *Form Versus Design in Architecture*

When you give something presence, you have to consult nature, and that is where Design begins. Form encompasses a harmony of systems, a sense of Order, and that which distinguishes one existence from another. Form is the realization of a nature, made up of inseparable elements. Form has no shape or dimension. It is completely inaudible, unseeable. It has no presence; its existence is in the mind. You turn to nature to make it actually present. Form precedes Design. Form is “what”. Design is “how”. Form is impersonal; Design belongs to the designer. Design gives the elements their shape, taking them from their existence in the mind to their tangible presence. Design is a circumstantial act (Lobell 2008: 28).

Drawing back to Architecture, we should consider the difference between the concepts of *form* and *design* that exposes the 20th century American architect Louis Kahn. According to his definition, what we usually refer to as *form* or *shape* should really be called *design*, referring to the precise physical characteristics of a material object, its geometry, proportions, color, and its concrete magnitudes such as length, width, height, surface, volume, weight, etc. On the other hand, *form* would then consist on the object’s inner existence or *raison-d’être* (opposed to its later presence), its intrinsic desire to be before its physical being.

Form does not have figure nor dimensions. “The ultimate design differs from the initial, but form remains” (Kahn 2007: 44; see Figs. 12.3 and 12.4). Once the *design* dimension of music and architecture has been already analyzed, I would like to consider the *form* dimension of both, under the umbrella of the concept of *Musitecture*, searching for this void, this never empty but full void, charged with untouchable meanings (though visible through their correspondent physical signifiers or signs).

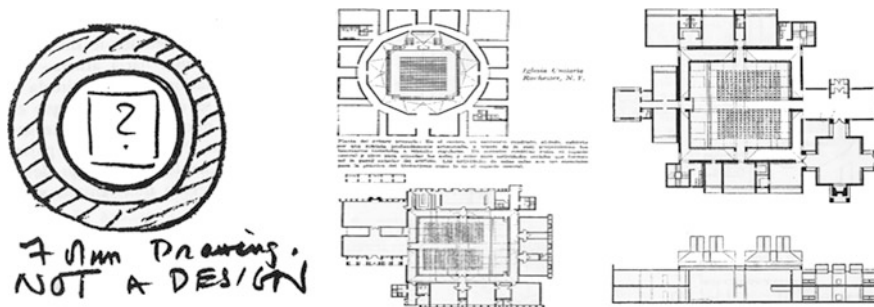


Fig. 12.3 Kahn's Unitarian church, Rochester, New York (drawing from Kahn 2007: 13–15, 44)

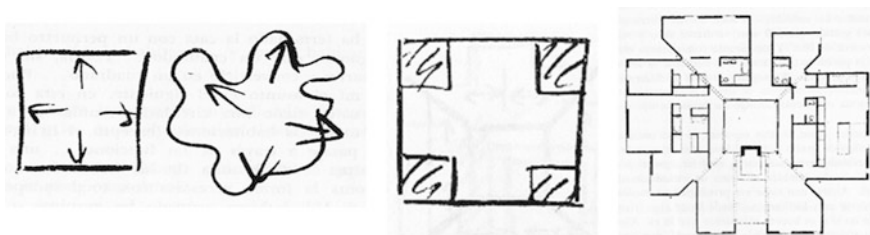


Fig. 12.4 Kahn's Goldenberg house, Rydal, Pennsylvania (drawing from Kahn 2007: 38–41)

### 12.2.2 Meaning Versus Signifier in Musical Semiotics

The image of physically visible outer surroundings that enclose a concave void full of (“unseeable”) meanings draws an interesting parallel between architecture’s *form* and *design* and semiotics’ *meaning* and *signifier*, applicable to music according to a semiotic approach. Thus, once as listeners/performers we listen to/see a melodic interval of a descending minor 2nd (*topos* or musical sign, *signifier*), a dysphoric context is awoken in us, scenes of dramatic tension and suffering come to our minds (*a meaning*), invisibly hidden behind the former physically visible printed/audible, measurable, objects on the score. Such *signifier* depicts a musical *topos* which can be found from 16th century madrigals until contemporary music, without interruption: the rhetorical figure of the *pianto*, result of a conjunction of music and text, serving the weeping or crying of the singer (Fig. 12.5).

- **Pianto** or descending minor 2nd (in mm. 62–3).
- **Breath in loose, improvisatory style** (in m. 85) (Fig. 12.6).
- **Exclamatio** or **jaleos** of the fictive audience to cheer up the fictive *cantaor* (in mm. 117, 119, 121, and 123) (Fig. 12.7).
- **Example of love duet**

Fig. 12.5 Isaac Albéniz. *El Albaicín*, example of *pianti*, mm. 62–4 (score fragment from Albéniz 2000/1909)

Fig. 12.6 Isaac Albéniz. *El Albaicín*, m. 82–6 (score fragment from Albéniz 2000/1909)

Fig. 12.7 Isaac Albéniz. *El Albaicín*, mm. 117–24 (score fragment from Albéniz 2000/1909)

The melody is presented by a female high voice (soprano; *con anima a tempo*, m. 165) and then a male voice (tenor) responds with the same musical material (*endehors*, m. 173) (Fig. 12.8).



Fig. 12.8 Isaac Albéniz. *El Albaicín*, mm. 162–77 (score fragment from Albéniz 2000/1909)

The narrow melodic range of the *cantaor's* thematic sections, as well as its conjunct melodic progressions, are indicators of a traditional Spanish Andalusian genre *cantejondo*, inheritor of the Peninsula's Arabic cultural influences. Its melismatic character indicates absence of syllabic text.

– **Quejío**

Tension is reached by melodic iteration (repeated notes), while distension is achieved by ornamentation, in an opposition between momentum/potential energy and movement/kinetic energy (Fig. 12.9).

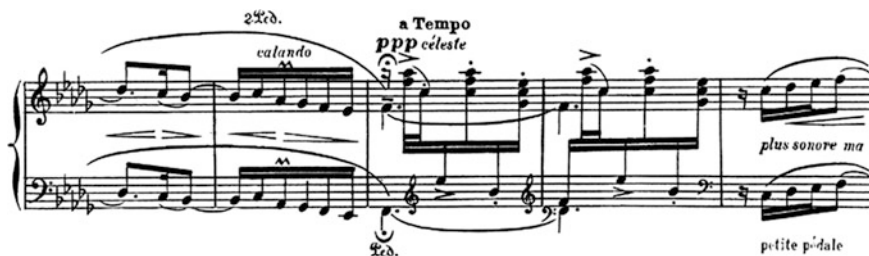
– **Adversatios**

Comments, improvised instrumental reaction to the *cantaor's* recitation *a paloseco* (Fig. 12.10).

I would like to suggest, thus, that there exists a correlation between architectural *form* and musical *meaning*, as well as between *design* and *signifiers* or musical *signs*. In both cases, such “measurable” objects or constructions are the physical and visible presence (*praesentia*) of an unmeasurable, abstract, signifying essence (*essentia*). The question which arises now is why; for what purpose are those *signs* or *designs* put together (carrying their *meaning* or *form*) by a builder—either a composer or an architect (see Table 12.2).



Fig. 12.9 Isaac Albéniz. *El Albaicín*, example of *quejío*, mm. 69–71 (score fragment from Albéniz 2000/1909)



**Fig. 12.10** Isaac Albéniz. *El Albaicín*, example of *adversatio*, mm. 72–6 (score fragment from Albéniz 2000/1909)

**Table 12.2** Correlations between architecture and music

	<i>Essentia</i>	<i>Praesentia</i>
Architecture	Contents	Container
	Form	Design
	Unmeasurable	Measurable
	What	How
Music	Meaning	Signifier, sign

### 12.3 What Do They Construct?

Both architecture and music build a *discourse*; a successive presentation of different elements following a signifying order or sequence.

I think that a plan is a society of rooms. A real plan is one in which rooms have spoken to each other. When you see a plan, you can say that it is the structure of the spaces in their light (Lobell 2008: 37).

They need, though, a dilated dimension to let that sequence or ordered display of elements to be presented and developed: here enter time and space dimensions. Music needs time to dilute its elements and make correlations between them. Architecture needs space to let transitions between different rooms take place, to let their users circulate from one room to another (Fig. 12.11).

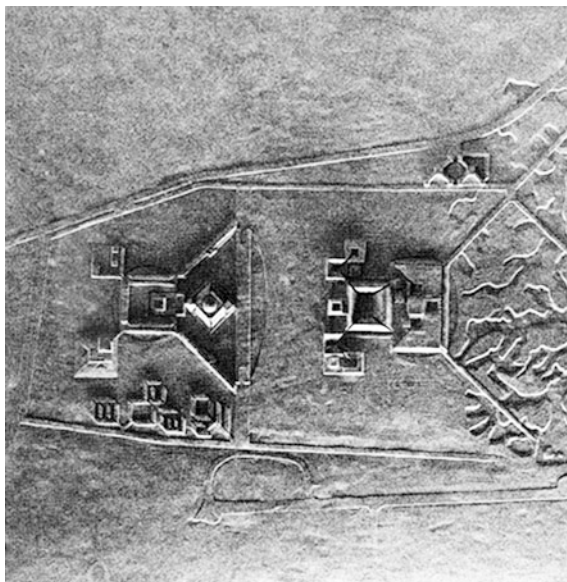
### 12.4 How Do They Construct?

Once answered the question about what do architecture and music construct with, which raw materials do they build with, we could question ourselves about how do they do so, how do they both construct such *discourse*, what proceedings do they follow for such purpose. And the answer is, once again for both architecture and music: *contrast*, *conflict* between opposites as the driving force of a *discourse*.

I would add the adjective “organic” to the previous affirmation: “organic” *contrast* between opposites. Organicism is well known in architecture, especially



**Fig. 12.11** Model of the Sher-E-Bangla-Nagar Master Plan, Dacca, Bangladesh (early version) (photo by George Pohl; from Lobell 2008: 37)



embodied in the works of Frank Lloyd Wright (USA), Alvar Aalto (Finland) or Erik Gunnar Asplund (Sweden), for instance. I like to think of organicism as the ability of something to grow out of itself, from the development of its intrinsic parts or organs. Similarly, in music, *discourse* is built out from an initial conflict between two different contrasting elements, but instead of constructing two different independent discourses, one for each contrasting element, such initial conflict becomes the spark for growth through interaction, conflict turns to be enriching for each one of both elements, and the result is a global holistic *Discourse* where the whole contains more than its separated parts. Interaction turns into a masked opportunity where thresholds become a fertile land for ambiguous and complex *mélanges*, in which an organic discourse can grow out of its intrinsic parts or organs, for example see Frank Lloyd Wright's Hanna-Honeycomb (1957, hexagonal pavement module) or Reisley house (1951, triangular pavement module).

With his hands, Wright illustrated two different conceptions of Structure: above, the organic conception, with its intertwined elements; below, the ancient constructive system of beams and pillars. He opted for the former, defending the idea of fusion—conceived as the action of melting different metals together, obtaining a result with unitary character, in which everything is mass, everything sustains everything, everything is structural, built by addition, by accumulation, by solidarity or cooperation. As happens in Romanic and Gothic churches, where we cannot know if the edges/nerves sustain the vaults or if, instead, the former are sustained by the latter (see Fig. 12.12).



**Fig. 12.12** Frank Lloyd Wright, 1953. Candes (Indre-et-Loire), Church of St. Martin, France (photo by M-Audrain; courtesy of Editions Arthaud, Paris; Juárez 2006: 80)

### 12.4.1 Architectural Contrast

In architecture we could distinguish between two different layers where contrast becomes the *leitmotiv* of the design process: the “projectual” or conceptual (*form*, pre-text) and material (*design*, *text*) layers.

In a conceptual layer, during the very first stages of every design process, in front of a blank paper, as an architect one throws lines of energy, thinks through diagrams, where measures are not exact, as an attempt to think while drawing, to translate abstract ideas into something visible to be able to work with them. One thinks of different kinds of spaces, varying spatial qualities to define different rooms or atmospheres. We are in the domain of *form*, *design* has not yet come on stage.

The project of a building must be readable as a harmony of illuminated spaces. Each space [room] must be defined by its structure and by the character of its natural light (Kahn 2007: 17).

Louis Kahn would differentiate between served and servant spaces, the latter ones serving the former ones. In a house, for instance, the living-room, the dining-room and the bedrooms would be served spaces, “served” by the hall, kitchen and bathrooms, which would be servant spaces (see Fig. 12.13).

Considering the servant ones as spaces that the user needs to cross in order to get to the served ones, we usually talk in terms of *static* and *dynamic* spaces. Following the previous example, the main rooms would be static spaces, as corridors and stairs would be dynamic. The architect, in this stage, asks the spaces what do they want to be, not yet what do they exactly want to look like. We don’t have a plan; we rather work with sketches, outlines. Rasmussen defines diagrams or sketches as “lines of energy”.

Once *form* (the spaces’ vocation) is clear, the architect enters the material sphere, where he will decide the precise materiality of such spaces, the precise physical

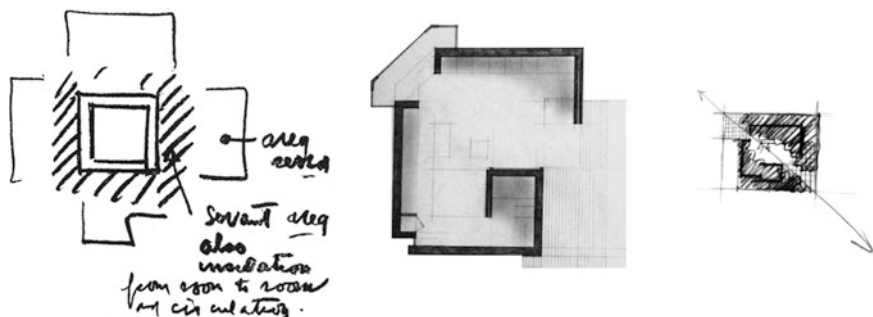


Fig. 12.13 From left: Kahn's servant/served spaces diagram (drawing from Kahn 2007: 41); Kahn's Salk Institute, La Jolla, California (drawing from Lobell 2008: 83); own project: prototype of a compact house

materials he will use. The architect Peter Zumthor insists on temporality of materials in a sense which seems very similar to musical consonance and dissonance (see Fig. 12.14).

You can combine different materials in a building, and it comes to a point where they become too distant from each other, they do not vibrate together, and, later, at another point they are too close [...] the consonance of materials (Zumthor 2006: 27–8).

I like to use Kahn's opposition between *stereotomical* and *tectonic* materials. The former ones—like stone—are very conditioned by their weight and rigidity, thus, tied to gravity; tectonic materials—like wood—are lighter and their logic of combination relies on fixing elements, nails and screws (see Fig. 12.15). Personally I always look for a conceptual dimension or discourse in my designs; particularly regarding materials, the following project shows the duality between closed, darker, servant spaces materialized with Stereotomical rude concrete walls, and opened, lightly, served main rooms defined by a lighter tectonic wood structure of pillars and beams.

### 12.4.2 Musical Contrast

Musical discourse, as well, is built through *contrast* or the affinity/opposition between two different characters or moods.

What seems to me essential in musical analysis—and what should be done very carefully—is the fact that although the very final goal is to catch the *discourse* of a musical piece, what we should do very first and little by little is to look at the music measure by measure and pick each by each the specific, precise elements or ingredients we find all the way through the piece. Once such ingredients have been detected (seen by their physical presence, their *designs* or *signifiers* on the



**Fig. 12.14** Peter Zumthor's Thermal baths, Vals, Switzerland, 1996 (drawing from Zumthor 2006: 27–8)



**Fig. 12.15** Own project. Residential landscape community, Olot, La Garrotxa, Catalunya

printed/listened score), then we would put ourselves narrative, look for correlations between those ingredients and try to find a *discourse* (its *form* or *Meaning* as an addition of singular *meanings*), with its causalities and possible consequences. The point of view of the performer/listener/analyst (the inverse of the composer) would

**Table 12.3** Opposition of moods or character

Hatten, Monelle	<i>Gang, Gänge</i>	<i>Satz, Sätze</i>
Schönberg	Firm	Loose
Plato	Mimesis	Diegesis

be deductive: *design* first, then *form*; *signifiers* first, then their individual *meanings*, and finally the global *meaning* or *discourse*.

In the conceptual layer (in the domain of *form*), we would find very often 2 contrasting sections, defined by opposition of moods or character: thematic *Gänge* versus transitional/non thematic *Sätze* (Monelle, Hatten), firm versus loose (Schönberg), mimetic versus diegetic (Plato); instrumental/dance versus vocal/lyric; dynamic/ecstatic vs. static, syntactic/hypotactic (prose) versus paratactic (poetry) (Mak 2006: 263–306; see Table 12.3).

Such conceptual or atmospheric dimensions would be materialized by means of their designed *signifiers*, signs or *designs*, in a material layer. I would like to use Isaac Albéniz's *El Albaicín* (from his cycle *Iberia*, 3rd book) to illustrate it (see Table 12.4).

**Table 12.4** Instrumental *falseta* versus vocal theme in Albéniz's *El Albaicín*

Instrumental <i>falseta</i> (Spanish <i>flamenco</i> )	Vocal theme ( <i>a paloseco</i> or accompanied)
Preparation/Reaction to ( <i>adversatio</i> , comment)	Thematic
Firm	Loose, improvised
Instrumental, rhythmic ( <i>falseta flamenca</i> )	Vocal ( <i>Cante Jondo</i> ), lyrical
Dry, percuted, sharp	<i>Legato</i> , singed
Jumping, disjunct melodic progression	Conjunct melodic progression
Danced (dance: <i>bulería</i> )	Singed ( <i>recitativo</i> : free)
Rhythmic accentuation (hit, percussion)	Prosody, poetic metric, recitation
Syllabic	Melismatic
Choked, choppy, <i>sospiri</i>	Continuity, lyrical
Diegetic (3rd person, narration, prose)	Mimetic (1st person, imitation, poetry)
Excited, Dionysian	Melancholic, grieving, afflicted, Apollonian
Dynamic, ecstatic (coming out of itself)	Static (restrained, time stops)
Moved, precipitated	Cyclic, iteration, repeated notes, insistence
Hypotactic, syntactic (Cicero)	Paratactic (Seneca)
Complex sentences (prose)	Verses (poetry)
Main clause followed by subordinated clauses	Short phrases without conjunctions
Grammatical associations	Associations with rime, meter, images
Narrative, argumentation	Images, no argumentation, no narrative
Temporal, causal relations	Timeless landscapes or emotional status
Period (antecedent, consequent)	Enumeration
Links by hierarchy, order	Links by addition/repetition
Movement	Momentum, movement without movement
Synthesis of different ideas	Expansion of a closed, autonomous idea

Fig. 12.16 Isaac Albéniz. *El Albaicín*, mm. 1–4 and 69–71 (score fragment from Albéniz 2000/1909)

However, despite such “organic” contrast between both different characters/moods, the global discourse is built by their reciprocal interaction, and there are several traces or incursions of the one over the other:

– **Common melodic interval**

Melodic interval 4th in the contrasting sections (Fig. 12.16).

– **Incursions of the instrumental accompaniment into the vocal theme**

*Adversarios* or comments. No *interruptios* (see pedal in m. 73) (Fig. 12.17).

– **Accents in the conclusive section of the theme, *pesante* Tempo** (Fig. 12.18).

– **Incursions of the vocal theme into the instrumental accompaniment**

Conjunct melodic progression (characteristic of the vocal theme, in mm. 58 and 60) (Fig. 12.19).

Fig. 12.17 Isaac Albéniz. *El Albaicín*, mm. 72–6 (score fragment from Albéniz 2000/1909)

Fig. 12.18 Isaac Albéniz. *El Albaicín*, m. 281–4 (score fragment from Albéniz 2000/1909)



Fig. 12.19 Isaac Albéniz. *El Albaicín*, mm. 58–61 (score fragment from Albéniz 2000/1909)

– **Pianti in modulating sequences**

Vocal tries to express itself over rhythm regularity in mm. 62 and 63 (Fig. 12.20).

– **Which materials is the Introduction built with?**

*Adversatio* or comment during the instrumental *falseta* may be seen in mm. 64 and 240. Instrumental *falseta*'s material (mm. 1–48) has the same melodic design as in mm. 49–50 (Fig. 12.21).



Fig. 12.20 Isaac Albéniz. *El Albaicín*, mm. 62–4 (score fragment from Albéniz 2000/1909)



Fig. 12.21 Isaac Albéniz. *El Albaicín*, mm. 1–4 and 49–51 (score fragment from Albéniz 2000/1909)

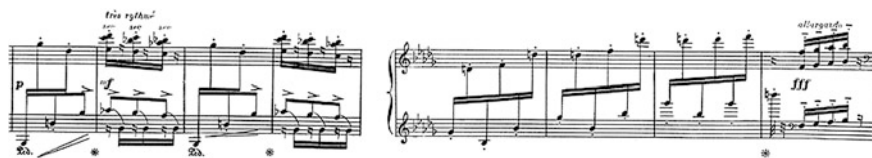


Fig. 12.22 Isaac Albéniz. *El Albaicín*, mm. 313–6 and 322–5 (score fragment from Albéniz 2000/1909)



Fig. 12.23 Isaac Albéniz. *El Albaicín*, mm. 327–30 (score fragment from Albéniz 2000/1909)

- **Which materials is the Epilogue built with?**  
Accorded coexistence of both contrasting materials (Fig. 12.22).
- **Coexistence, not synthesis**  
Separating breaks or pauses (Fig. 12.23).

## 12.5 Musitecture: Temporality and Spatiality as a Discourse

Once space has been defined as architecture's raw material and time as music's, both serving to a common constructive principle whose final goal is the plot of a spatial/musical discourse, built by means of contrast between opposites or their affinity/opposition—simultaneously in both a projectual/conceptual (*contents, form, meaning*) and material (*container, design, signifier*) spheres, we should ask ourselves how do all the physical ingredients (with their carried significance) constitute a unity, how are they perceived as a whole that makes sense. In other words, (if you let me use a culinary metaphor): what is the sauce that melts together the ingredients in the discourse or recipe? We could agree that musical discourse is temporal, as architectural discourse is spatial.

Spatiality would be the fluid dimension that would melt, dilute and relate all the different ingredients, architectural elements or various spaces between each other, adding the multiple singular *forms* (enclosed in their respective physical *designs*) and turning them into a perceptible unity, what we would call a building, with its general material *design* and conceptual and *formal* image or *Meaning*.





**Fig. 12.24** Isaac Albéniz. *El Albaicín*, a narrative transformation, mm. 69–71, 165 and 253–6 (score fragment from Albéniz 2000/1909)

As art, architecture creates inhabitable places where mortals settle. Therefore, space must be covered with signification (Azúa 2002: 47).

Construction is the configuration of a whole with sense, out of multiple particularities (Zumthor 2009: 11).

Similarly, musical discourse is held together through temporality. The perception of a piece's addition of singular printed/physical/listened elements (with their related immaterial meanings) as a whole, as a bigger unit, confers a general signification to the piece, being its discourse perceived as narrative. Temporality implies causal-consequence relationships between the elements in the discourse, as well as the concept of transformation as a result of the interaction between contrasting elements.

The initial dysphoric B-flat minor (m. 69) tries to run away to the relative D-flat major (m. 165) and is finally transfigured at the reprise (m. 253), turned into a B-flat major (see Fig. 12.24).

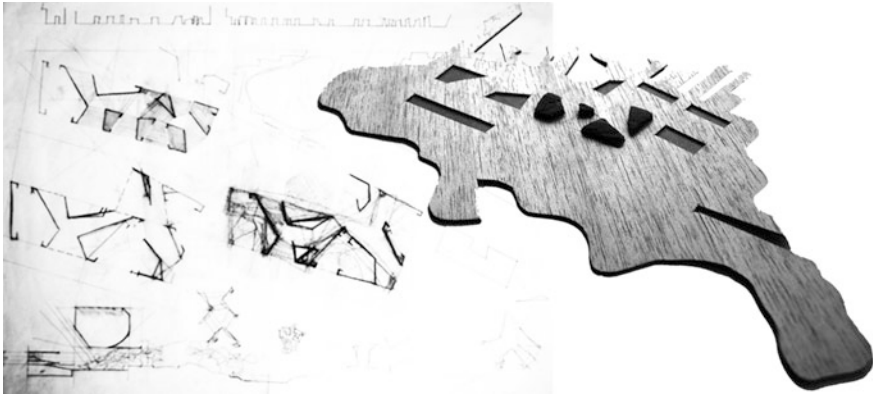
The narrative global design is a big *crescendo* from minor to Major mode, like the traditional *per aspera ad astra*, from deep darkness to the light. Thus, a transformation as occurs in most of instrumental romantic pieces.

Such conception of temporality encompasses directly with the architectural idea of walk, itinerary, Le Corbusier's *promenade architecturale*. Once architecture incorporates the dimension of human activity and displacement, movement through space, time melts with space and contributes to the perception of space by its user. Moreover, spatial *promenade*, as temporal *transformation*, imply a direction between two different points or poles: an initial status or beginning, and a final status or end (see Fig. 12.25).

Thus, architecture is also temporal; music is, as well, spatial. Kahn (Lobell 2008: 32) talks about spatial tonality as the transition from darkness to light, from narrowness to height, in the same terms of musical transition from silence to sound, with the rich and multiple gradient of greys in between, or intervallic relations between sounds, conceiving illumination of spaces as musical harmony.

Space has tonality, and I imagine myself composing a space [...] attributing to it a sound character alternating with the tones of space, narrow and high, with graduating silver, light to darkness (Lobell 2008: 32).

Light is the creator of any presence (Juárez 2006: 189).



**Fig. 12.25** Own project. Hybrid building in front of the future Sagrera's Park, Barcelona. Apartments, children day-care centre, restaurant, gym. Ground floor conceptual model, process diagrams

## 12.6 Musitecture: Sonorous Places. Territoriality in Music

The superposition of music and space, harmony and illumination, embodies a transversal conception of tonality, a musitectonic quality of time-space intersections or *atmospheres*. Peter Zumthor depicts the concept of *atmosphere* as follows:

I enter a building, I see a space and I perceive an atmosphere, and, in a few seconds, I have a sensation of what it is. The atmosphere appeals to an emotional sensibility [...]. Architectural quality is only a matter of the ability of a building to move me or not (Zumthor 2009: 10).

The architectural concept of *site*, transposed to music, would give birth to a new musitectonic concept of *musical site*, following the principle of territoriality. We need to point out the difference between *site* and *place*, which relies on the meaningful dimension that architecture brings into a site when there is an integration within the context where it inserts itself.

[...] That would just be a house on a hill. To experience the hill, be of the hill, you must build into it (Reisley and Timpane 2001).

Borrowing, again, words from Frank Lloyd Wright, integration demands to the text/intervention comprehension and continuity with the context or surroundings, so that once the text/intervention/building is finished it seems to have been there always, belonging to the site to the point that neither the initial site/context nor the isolated building could exist without each other (see Reisley and Timpane 2001). When such imbrication occurs, there is a new topological dimension of discourse, which turns a simply physical *site* (empty of significance) into a meaningful *place*.

**Table 12.5** Topology in musical narrative and architecture

Architecture	Site	Place	Topological, spatial
Music	Isolated elements	Narrative	Temporal

Music, considered as the art of time, [...] changes our perception of space, transforming the here and the now. Sound contributes to the process by which environments become places, places with a particular atmosphere (Palmese and Carles 2005: 126).

Thus, we could suggest a parallelism between a topological conception of architectural place in relation to its context with musical narrative, implying temporality and causal-consequence relationships between its (transforming) organic parts. While the condition of place is achieved through a spatial integration between *text* and *con-text*, musical narrative is the result of an accumulation of meaning or significance through temporality (see Table 12.5).

Architecture, as well as spatial, is also musical. Such music is played by the water. The importance of walls is that they isolate us from the streets' outer space. Walls create silence. From that silence you can make music with water. Later on, this music surrounds us (Palmese and Carles 2005: 127).

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