

POETIC, MUSICAL AND ARCHITECTURAL REGIONALISM

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Abstract. *Architecture and music and other disciplines, have their objectives and goals, and the respective means or ways to reach them. Mathematics and geometry are some of the essential means that permits architecture goes beyond reason to the land of emotion.*

*Wherever a thought can go back,
there is hope for tradition*
Derek Walcott [1999: 110]

As almost always, the width and breadth of this particular theme goes far beyond the constraints of a brief text. With that in mind one must select the most interesting aspects.

Let us start with the more general concepts.

To inhabit

To inhabit is the only option open to man to be in the world.² Therefore human's different ways of being and existing are forms of inhabiting and, of course, these are as varied as people themselves. Our personal way of inhabiting is similar to that of our fellow men but, fortunately, not the same.

Man's inhabitation of the world, delimited by the need to belong,³ manifests itself (or, if you will, is wrapped in "skins") through three principle factors: a time in history (modernity or the contemporary), a geographical place (regionalism), and a particular social group (certain political and economic social values). Our hypothesis is that these same "skins" or "wrappings" are then transmitted by man to the works he produces. In the present paper we will examine regionalism.

Regionalism

In this section we take a look at regionalism's principal aspects applied to our architectural work and also to some works of popular music.

In our analysis we find both tangible and intangible regionalism. The first refers to cultural factors of the inhabitants of architecture. Taking the word culture in its widest sense:

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² *Das Wohnen aber ist der Grundzug des Seins, demgemäß die Sterblichen sind* (Dwelling, however, is the basic character of Being, in keeping with which mortals exist) [Heidigger 1951].

³ A concept of the German philosopher Herder.

the collection of symbols, values, attitudes, abilities, knowledge, meanings, methods of communication and social organisation and material goods which make a particular society's life possible and which allow it to transform itself and reproduce itself from one generation to another [Batalla 1991].

From the anthropological viewpoint, culture is related to tradition – as Walcott stated in the quote I opened with – and inevitably with the geographical space in which it is situated. Through his activities man manifests and gives expression to his ways of life, customs, and traditions with an inevitable sense of “belonging”. We will call a space inhabited by a culture, a region.

That's why one can only ever talk about a national culture in an inclusive way, referring to a mosaic made up of many regional cultures. Man and culture, culture and tradition, culture and regionalism are indissoluble and inseparable terms.

Moreover, culture is expressed in a direct way through human activity, which in turn takes place in spaces which have been designed and built by architects. In other words, all the architectural spaces are containers, hives of activity, which at the same time are an expression of a particular culture.

The significance of the architect's task then is essentially to design and construct spaces which allow the true development – without manipulation or betrayal– of a particular society's culture. On the other hand, architecture – understood to be works or buildings – is born from human reflection on the necessity of survival in a wild and hostile environment and the need to protect oneself with a second “skin” which goes beyond man's biological skin. This makes architecture therefore not a chance or fortuitous invention but an essential and necessary one. Architecture as an inhabited thought.

Man, owner of a culture which prolongs itself through time, through tradition and the invention of architecture, transmits to both his links with time, place and the society which frame and define him.

Our proposal stems from the consideration that all architectural works are necessarily regional as are other artistic works such as poetry and music among others, as we will see in the following examples.

Architectural constructions are regional in the way that they respect and conserve the local culture of the place, by adapting to the environment's climatic conditions and by being sustainable by using low energy consumption materials and high efficiency structures. Raw materials such as earth, wood, stone, brick and bamboo are materials whose respective building techniques have been known for our people, since the beginning of time.

Other materials and their techniques are also appropriate for us, such as concrete and ferroconcrete, whose use has surpassed all geographical limits and which has been a trademark in particular of construction in the last century. Indeed its dominance has been heavily criticized:

The twentieth century will be known to posterity as the “age of steel and concrete”. It may also be known as the “age of ugliness” and perhaps by other unpleasant names as well, such as the “age of waste [Gordon 1978].

Poetry

We said the regionalism is present in music and poetry among other art forms. Let us take a look at some possible examples:

*The jet bores like a silverfish through volumes of cloud–clouds,
that will keep no record of where we have passed.
Nor the sea’s mirror, nor the coral busy with his own culture;
They aren’t doors of dissolving stone
But pages in a damp culture that come apart [Walcott 1999: 14].*

The silverfish, the sea’s mirror, and the coral busy with its own damp culture – could those images belong to an inhabitant of the Mediterranean or the desert? Or from a region where the sea’s mirror surrounds us, where its voice accompanies us and where its reflected light dazzles us?

It is difficult not to evoke the images and metaphors of another author of different latitudes and of another beautiful language, about the same sea and white sailing boats. The poet says:

*Ce toit tranquille, où marchent des colombes
Entre les pins palpite, entre les tombes
Midi le juste y compose de feux
La mer, la mer, toujours recommence
O récompense après une pensée
Qu’un long regard sur le calmes de dieux.*

(This calm roof where doves glide,
Between the pine trees beats, between the graves,
Fair midday, whose brilliance illuminates,
The sea, the sea always recommencing
Or rewarding after a thought
That of a long reflection on the tranquility of the Gods) [Valery 1933]

In Spanish we refer to the sea with masculine gender, *el mar*, however to refer to it with a feminine gender as in French, *la mer*, certainly sounds more poetic. The sea as a calm roof, where the white sails appear, as doves gliding over its quiet surface.

But let us get back to our insular writer, observing now small details pertaining to many towns in our countries:

*Nuestras casas están a un paso del arroyo
El barandal del porche tiene latas rojas alineadas
La altura de un hombre pasando es la misma de sus puertas
Y las puertas mismas, no son más anchas que ataúdes
A veces, talladas en sus grecas, pequeñas medias lunas*

(Our houses are one step from the gutter.
The porch rail is lined with red tins
A man's passing height is the same size as their doors,
and the doors themselves, usually no wider than coffins
sometimes have carved in their fretwork, little half moons)
[Walcott 1991, 26].

A profound and true reflection that, emanating from the short circular paths of an island, traveled to the immeasurably long paths of the world, showing that there is no opposition between regionalism and internationalism, nor between a millenary tradition and a modern day tradition.

And this is the lot of all the wanderers, this is their fate
that the more they wander, the more the word grow [Walcott 1991, 26].

In less poetical words, we often say about architecture that “the more you discover about it, the more you realise, not what you’ve learnt but what you have yet to discover”. *Ars longa, vita brevis*.

As you will see, the examples are inexhaustible. Walcott’s testimony is supported by the Mexican writer Alfonso Reyes: “The only way to be usefully national is to be generously universal” [Reyes 1993: 150].

Architecture and music

As Nexus followers know, one can make analogies between both disciplines. Perhaps the most well known is that of the German author von Schelling (1775-1854), when he wrote, *Architektur ist überhaupt die erstarrte Musik* (Architecture in general is frozen music), which drove to Goethe to write:

A noble philosopher spoke of architecture as frozen music; and it was inevitable that many people should shake their heads over his remark. We believe that no better repetition of this fine thought can be given than by calling architecture a speechless music [Bailey 1893].

As we can see, both authors identified in architecture a musical quality which is inherent to it, as in both architecture and music there is a particular internal order. In architecture there is a spatial order, expressed in a geometric way and in music there is a temporal order, expressed rhythmically. Space and time. The order of the simultaneous, and the order of subsequent events. In the spirit of von Schelling and Goethe, I will dare to give my own definitions:

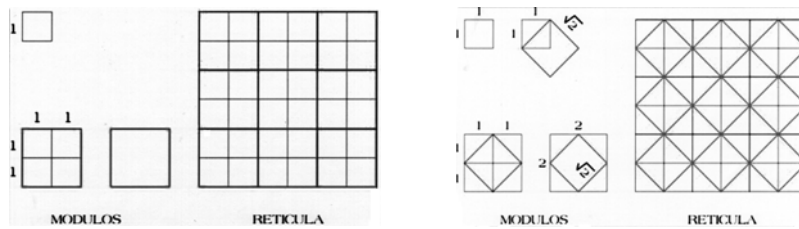
Architecture is music held in space

and at the same time,

Music is architecture sonorous in time.

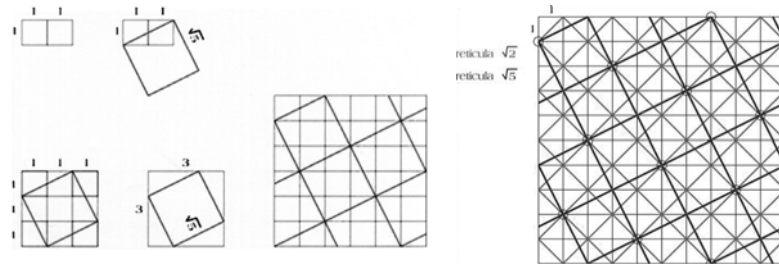
In architecture the geometric order of space is achieved through orthogonal net structures or frameworks ever since Jean-Nicolas Louis Durand [1802] published his compendium of lessons of architecture. I don't think that any other guide, or support for teaching how to design, has ever been as universally accepted in architecture schools. It is so much the case, that just over two centuries later it is still being used in many schools around the World. In his classes Durand "permanently makes use of ruled squares or grids, which gave rise to modern millimeter paper".

An indispensable tool for all designers alike.



DURAND'S orthogonal grid

The grid root of TWO

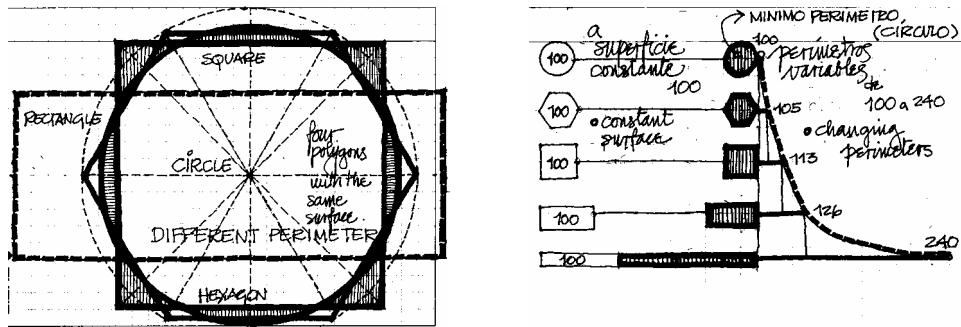


The grid root of FIVE

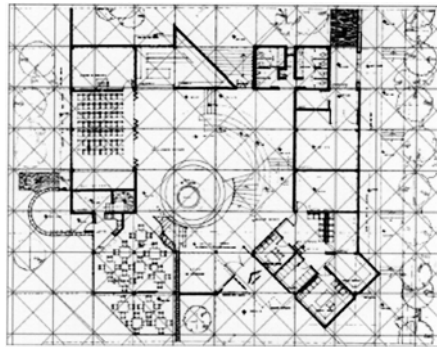
The three grids show common points

In search of rationality and economy – to cite Durand – in our line of work we use the orthogonal grid as well as another two grids, one based on the diagonal of a square ($\sqrt{2}$) and another based on the diagonal of two squares, ($\sqrt{5}$). These numbers, as is well known, are incommensurables, that is, they do not have an exact linear measurement, but besides that they are numbers with interesting properties, one of which is that they can be defined geometrically with absolute precision.

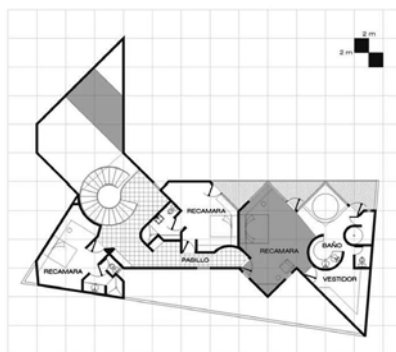
As a consequence, the wrappings or covers of our spaces are polygonals. There are two reasons for this geometry, polygons as shapes, are more efficient with regards to their perimeter to surface ratio, as are polyhedrons in relation to their surface to volume ratios.



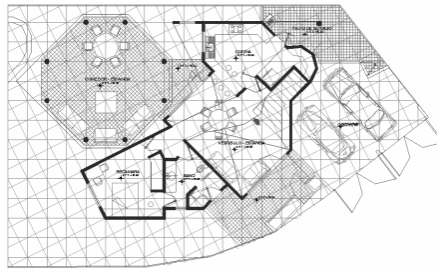
Over position of four polygons with the SAME SURFACE. To constant surface the perimeters change: 100% for the CIRCLE; and 240% for the large RECTANGLE



Administrative Center, Jalapa, Veracruz. Arch. Alfonso Ramírez Ponce, designer and builder. Left, Modulation with 45°, 90° and 135°. Right, main atrium: a circle inscribed in a square



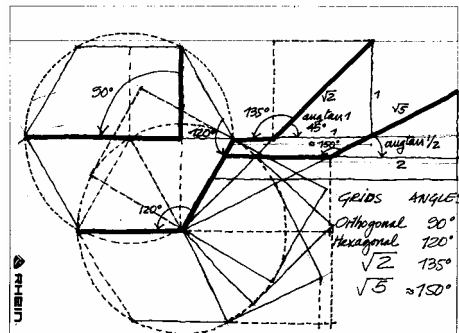
House in Cuernavaca, Morelos, México. Arch. Alfonso Ramírez Ponce. Left, plan with application of the three grids: orthogonal; $\sqrt{2}$ and $\sqrt{5}$; Right, master bedroom



House in Cocoyoc, Morelos, México. Arch. Alfonso Ramírez Ponce, designer and builder.
Modulation with the three grids

In other words, as you increase the sides of a polygon, you reduce its perimeter in relation to the contained surface area. Thus, the most efficient form, with the minimum perimeter is the circle, which is defined as a polygon with an infinite number of sides.

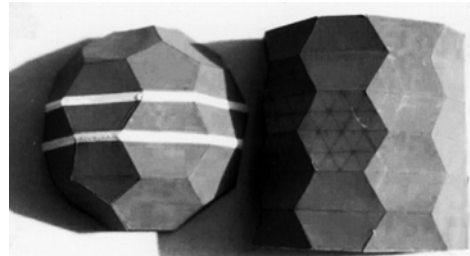
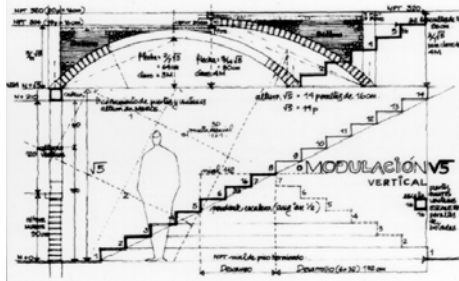
The other reason is intuitive and is displayed in some of the works of the architect Frank Lloyd Wright that do not use the orthogonal pattern, since it is not the best wrapping for adapting to the movement of people. His alternative proposal is the hexagonal network which has internal angles of 120° .



Angles of the different grids: Orthogonal, 90° ; Hexagonal, 120° ; $\sqrt{2}$, 135° ; $\sqrt{5}$, 150°

Now of course, with squares, space is organized in its horizontal or two-dimensional projection, but generally, this modulation does not include the space in its third dimension, only some building elements. The woven net with its model, $\sqrt{5}$, fulfils its three dimensional function in our works and is expressed by way of the reiteration of small module of 16cm.

These determine some spatial wrappings and covers, the steps and footsteps, the heights of doors and windows, the spring lines and the rise of the vaults, the levels of the floors in vertical buildings, and other measurements of the main building elements.



The module of 16cm is present in the general plan and, vertically, in the stairs – both rise and run –, the height of doors (13 Modules = 2.08m) and windows, and in the different heights of the leaned brick vaults (spring line 14 Modules = 2.24m ($\sqrt{5}$)). The modulation exists in the three dimensions.



House in México City. Architect Alfonso Ramírez Ponce, designer and builder. Section of the truncated icosahedron as cover of the swimming pool. All the individual pieces are of the same dimensions, only their position changes

Music and architecture

In the ordering of time through music, we also come across beats or “rhythmic modules”. If architecture’s modules are geometric and measure space, then in music they are sonorous modules and measure time.

Let us remember that one of the pioneers in attempting to measure space and time was Galileo, by way of “points”, *pontos*, and “times”, *tempos*, and one of his techniques for measuring was actually with music, as he was also a magnificent lute player.

As we know, we hear music by way of the musical instruments, just as in the same way we see architecture by way of the building materials. Both music and buildings regionalise, that is, they tell you where you are.

It's often said that if there were any language that could be considered universal it would be music. The whole world listens to music far beyond the diversity of language. But allow me to show you some, amongst many possible examples, which reiterate the universality of musical language but which at the same time cannot help but reveal their unmistakable regional origins.

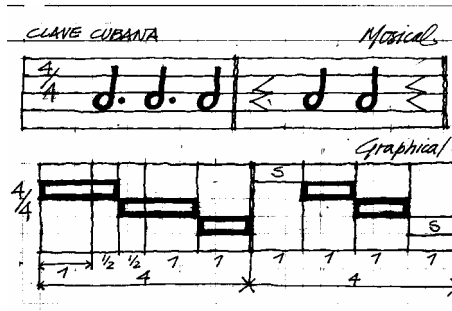
In the arena of musical language, as in the earlier examples poetry, rhythms and harmonies are at work that denote their regional origins. The harp is an instrument which is only played in Mexico, Colombia, Venezuela and Paraguay. The harp sings the melody according to a rhythm or "module", the timing is 6/8, which can be demonstrated by way of a percussion instrument called a "Bombo".



all the notes have the same value .

Musical examples: 01 Cascabel 02 Barlovento 03 Moliendo Café

Another tempo is 4/4. It is the timing that identifies a musical gender called Bolero, a musical expression common to many countries in Latin America. Dozens of books have been written about the Bolero. Here let us just say that we define the Bolero as a feeling that is sung with differing shades: in the tropics the rhythm is dominant; in Mexico the rhythm gives way somewhat to the melody and lyrics, which are almost always romantic, dealing with the eternal conflicting relationship of love between man and woman. Many of our Boleros are exaltations of feeling and sometimes reproachful "... of love and against them".



Bésame mucho Consuelo Velázquez

Bolero $\text{♩} = 80$

Bé-sa me, bé-sa-me mu-cho, co-mo si fue-ra es-ta no-che la ú-ti-ma vez.

Bé - sa - me, bé - sa - me mu - cho,

que ten - go mic-dó, a per - der - te, per - der - te des - pués.

Verdad amarga Consuelo Velázquez

Bolero $\text{♩} = 80$

Yó ten-go que de - cir - te la ver-dad aun-que me par-ta, el al - ma;

no quie-ro que des - pues me juz-gues mal por pre-ten-der ca - llar - la.

Musical example: 04 Noche de ronda

On reaching at the Antilles and the Caribbean, the Bolero acquires a rhythmic tonality played with another percussion instrument known as “La clave”.

Musical examples: 05 María Bonita; 06 Capullito de alhelí; 07 Son de la Loma

Finally, in Mexico appears a subgender of Bolero, the country or ranch Bolero, which is generally played by the Mariachi, a musical group with guitars, violins, harps, and trumpets in its modern version.

Musical example: 08 Si nos dejan**References**

- BATALLA, Guillermo Bonfil. 1991. *Pensar la cultura*. Alianza Editorial México.
- DURAND, Jean-Nicolas Louis. 1802. *Précis de leçons de architecture données à l'Ecole Polytechnique*. Paris
- GORDON, J.E. 1978. *Structures or Why things don't fall down*. London: Da Capo Press.
- HEIDEGGER, Martin. 1954. Bauen Wohnen Denken. in: *Vorträge und Aufsätze* (Pfullingen: Neske. Translated by Albert Hofstädter as “Building, Dwelling Thinking,” in *Poetry, Language, Thought* (New York: Harper and Row, 1971) pp. 145-161.
- REYES, Alfonso. 1993. *La X en la frente*. UNAM, México.
- SAUNDERS, Bailey (trans.). 1893. *Maxims and Reflections of Goethe*. New York: The Macmillan Co. Accessed in *Masterpieces of German Literature Translated into English. In Twenty Volumes / Jacobs, W. W., 1863-1943, Project Gutenberg*. <http://infomotions.com/etexts/gutenberg/dirs/1/1/3/6/11366/11366.htm>.
- VALERY, Paul. 1933. *Le cimetière marin*. Gallimard Edition. Paris.
- WALCOTT, Derek. 1999. *Midsummer*. Spain: Huerga and Fierro editors.

About the author

Alfonso Ramírez Ponce has a Master’s in Architecture, and is a designer, builder, professor, writer and lecturer. He lives in Mexico City and teaches in the National Autonomous University of Mexico (UNAM). His specialization is the use of the “leaning brick” technique to build economical vaults and domes, following the traditional technique with innovations in the shapes coverings, an argument he presented at Nexus 2004 in Mexico City.