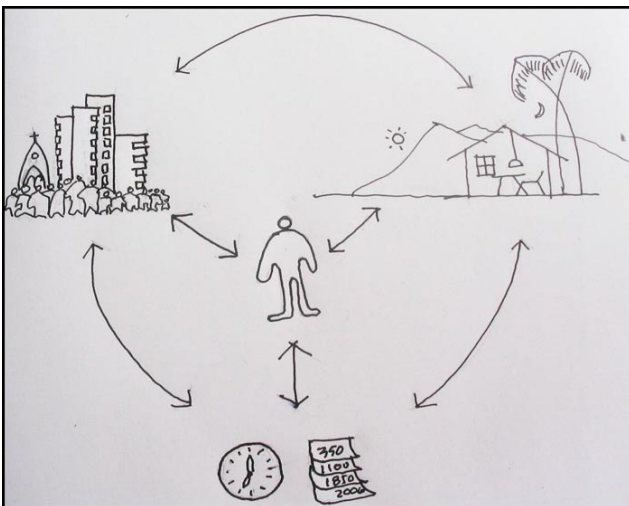


## Senses Workshop and its applications

### Observations on Architecture and Design

The Senses Workshop considers, based on experience acquired, that the protagonist in architecture is man and not the building nor the space. Architecture, including mere construction with the aim of: *"satisfying material needs: provide shelter for the various human activities,"* makes sense as long as it considers man an inherent part of itself. Its reason for being is not the building, nor even the space, man is its essential purpose. It is architecture for man that counts, this relationship is what brings life to it and makes it last, even if its function changes with time. This relationship is established through the senses, not through intellectual processes. These are naturally necessary to explain and facilitate the comprehension of the sensory phenomena, however it is not with them that the man-space or man-object relationship is established. Therefore, the best know-how, the best way of learning, the best education are achieved through the sensory experience.

The Senses Workshop suggests a definition of the kind of architecture that maintains its *"quehacer"* (work), its quests, and determines a clear aim: architecture is the relationship or interface (in very design-worthy terms) between man as the protagonist and space, context, and time.



The workshop considers how architecture begins to exist from the moment when man enjoys the space, through his feelings and perceptions, which translate into wellbeing and thus produce positive behaviour.

The workshop considers architecture to exist from the viewpoint of spatial pleasure. Wellbeing is produced by the architecture and not by the construction or the building, which are the solution only to protection. Quality of life, fundamental factor of architecture,

is achieved in the measure of this pleasure, which is experimented through the senses although it is explained in another way. Architecture as it is understood is a great contribution to humanity, but a large responsibility is implicated through this; here is where the sense of ethics lies. From this certainty, the sensibility acquired from the direct experience becomes necessary for the vocational formation of architects, as a means to spatial awareness.

On the other hand, **the workshop** shows up the interdisciplinary nature of architecture and design. But not merely as a relationship that is important to have with other disciplines, but fundamental and indispensable essence and substance.

## **Workshop description**

The Senses Workshop is a pedagogical, teaching, investigative, and educational proposal that suggests a new way of recognizing the architectonic and urban space with the use of each of the senses one by one and later, with all of them simultaneously. Likewise, it proposes a projective methodology, founded on the design of feelings and based on the conscientious sensory experience. Its methodology is experimental, exploratory, it is permanently created from the anxieties that arise within its own dynamics and in the foreseeing of new opportunities, borne directly from action.

It is a **proposal** in such that it is not considered an absolute truth but a permanent invitation to the exploration of the typical possibilities, of capital that is inherent in the human condition, and especially for habitat-related disciplines. **Pedagogical**, because it takes charge of the teachings and education, because it transcends the transmission of knowledge and goes deep into education it does not limit itself to the teaching but tackles the learning; orientating and directing it from the point of awareness of the potential itself. **Teaching**, because it imparts the knowledge that is product of the experience generously, but without pretenses or certainties. **Investigative**, because it puts forward interrogatives, worries, and is in itself a medium of experimental investigation, it is not based on a previous or any other knowledge, it attempts to investigate itself and contribute to the common knowledge. **Educational**, because it is not directed exclusively to the skills of a certain discipline, but to develop the innate capacities of the human being and place them in an obvious manner at the service of others.

## **Objectives**

General:

The prime objective of the workshop is to get to know the urban-architectonic space through direct experience.

Make the participant aware of his or her own sensory potential and turn it into a design tool.

In order to meet these objectives, specific objectives are proposed in the following areas: perceptual, rational, projective, and of integral formation.



system; it is a purely sensory process. The perception is the consciousness that the organism has of the feelings and of the patterns and effects that are produced; it is situated in the brain. It is a step from the sensory to the intellectual, but it is clearly a process in which the intellect acts and processes the sensations.

As a result of these details an interaction between the subject and the object is developed through a medium; space. The subject, the workshop participant, knows the materiality of the object and the immateriality of the space, thus establishing his/her own idea of the architecture, understood from the point of view of its individuality and as part of a wholeness, through his/her own senses. This idea appropriated by the subject changes according to time and place circumstances. This way, the workshop defines the architecture as the permanent interaction between man, in the first instance, and space, time, and place.

Smell, hearing, touch, sight, and taste senses are considered fundamental in the workshop, each perceived in its own nature, yet also in its permanent interaction. It is precisely this interaction (synesthesia) that allows comprehension of the spatial totality as an essential unit.

Senses, although they have their own essence and their own dynamic, do not operate alone. The workshop intends to teach how to see with the nose, listen with the eyes, feel with the ears, taste with the skin; so to perceive from one sense in terms of another, from one of them in terms of the others and from all in relation to one. As when all are interacting (synesthesia). In this understanding and in this exercise, the workshop participant will recognize his/her own potential and will adapt it.

The workshop also has an interest in exploring the feelings that different sensations and spatial perceptions awaken, understanding them as a state of mind produced by them. Surely in these effects there is a fundamental objective for the architect, the sensations and perceptions that his/her architecture provides, will translate into certain effects: feelings. The characteristics and spatial conditions cannot be understood by themselves as architecture, although commonly it may be considered as such. Only when man inhabits the space and in it he feels a particular way, is when the architecture has gained meaning. When it produces this effect, directly influencing the human behaviour, does it acquire an ethical connatural meaning to its essence; it becomes responsible for its history; it becomes indispensable to life.

## **Cúpica**

The population of Cúpica is a rural subdivision of the municipality of Bahía Solano in the department of Chocó of the Republic of Colombia, South America. It is located on the Pacific Ocean on the North-Western side of Colombia.

Historically the population has had three settlements, arising from diverse circumstances. Originally, the settlement was at the mouth of the Cúpica River into the Pacific Ocean. Its population consists primarily of people from afro descent, whose main activities were fishing and wood exploitation. They developed agriculture and livestock as supplementary activities. It was a settlement that during many years developed in a spontaneous way, founded on the experience and ancestral knowledge of its people.

Its proximity to the water determined the way in which the architecture and the urban organization were developed. Somehow, the urban organization did not have a determined formality. It was established with respect to taste, comfort and the facilities that each family was after. In this type of organization it was essential that there be a close relationship between family members. Many of these families are related one with the other and they develop very close production and social activities.

The houses were featured by their wood construction, very easy to achieve and their very simple, practical, and inexpensive construction technology, known by all. Generally of one sole tier, which would be found elevated from the floor and supported by wooden stilts (palafittic construction). Each house was isolated from the others, with four free facades and gable roof with four pitches or in other words, with a slope on each of the four sides of the plan. The inhabitants call this type of roof: "round roof". The roof is significantly lengthened over the facades, producing great "splashboards" that protect the house from the sun and the rain, creating a large shade that is permanently cooling no matter the varying position of the sun. It is important to note the high rainfall that is characteristic to the Chocoana zone.

Otherwise, all the houses had at their disposal an outside space that, protected by the splashboard, allows the socialization of the family in permanent relation to the outside environment. This assured that socializing through conversation be one of the great values of the community. This space directly related to the kitchen that was in many cases outside the main construction.

The isolation of the different houses allowed the possibility of direct and natural ventilation. Such as their distance from the earth, establishes a vault of air underneath the house through which air flows without any obstacles. The interior of the house was very austere, with furniture and elements that were absolutely necessary and bedrooms corresponding to the family setting, generally one isolated room for the parents. Each house had its own land surrounding it where there would be a vegetable garden and some domestic animals such as hens or pigs.

This particular conformation of isolated houses where the city concept of street does not exist as such, gave people a concept of property that was very different to the urban one. Everyone could circulate anywhere; there was no differentiation between public and private. No "title deeds", each person knew what was his and what belonged to others. The organization and the property were based on respect towards others. The organization was not based on a predetermined "urban plan" but on a combination of relationships and bearings established by the implicit agreement of custom and the logic of common sense. The primary significance of organization was the relationship with sea and river water, given the main status of the citizens as fishermen. It was a strong society, consolidated in its own social and cultural values. The village did not have a water system since it used the river directly. Nor did it have electrical energy nor a system to manage solid waste. The people had solved these "urban" deficiencies with traditional systems that they had made use of with no inconvenience for over one hundred years.

In 1999 the River suddenly lost significant volume, the inhabitants could not understand how this could happen in the middle of the rain season. Going further upstream they discovered that such was the growth of the headwaters that the water dragging stones, trees and earth had formed a dam that was repressing the flow of water. Unfortunately the dam could not hold the great pressure and it broke causing an immense avalanche over the village that was totally dragged from its original place.

On this occasion there were few fatal victims, but due to fear the village did not settle back at the mouth of the Cúpica River. During that time they received no state aid in terms of relocation. They decided to look for a new and better location in which they could use the maximum of the little material and household possessions that they could rescue. After some attempts the community divided: one part settled four kilometers north of Cúpica on land that was later denominated: The runway (*la pista*). This land, by the seaside of approximately two kilometers in length, became separated from the coast every time the tide came up. This happens every six hours, which is to say that every six hours it turned into an island. In Cúpica the weather and life are governed by the tides. We will see how not taking this factor into account would subsequently affect adversely the social, cultural and economical changes resulting from an inadequate governmental planning.



### **CÚPICA – LA PISTA 2000**

The rest of the population located themselves in another place called Cacique located approximately three kilometers from “*La pista*”, close to the Cacique river and one kilometer from the coast.



### **CACIQUE.**

In both settlements the establishment developed in the image and semblance of the old Cúpica, however, the fact that the community had divided would bring subsequent consequences that were unacknowledged.

Similarly to Old Cúpica, it was only possible to arrive at *La Pista* and Cacique by sea. Although "*la pista*" receives small aircraft that in previous times used to serve in the traffic of drugs.

In 2002, the government, worried about the situation, decided to construct a new settlement and persuade the inhabitants to move. This village is now known as "*El Estero*" ("The Swamp"), one kilometer from the coast and accessible by a wooden boat that crosses the mangrove swamp that separates it from the coast. As before, the village is accessible only by sea and possibly by using "*La Pista*". The village is made up of 250 houses and approximately 1,700 inhabitants.

The village was built on concrete blocks with a plan defined by an urban grid sketch that shares a main space (*plaza* or park), in which there is a church that acts as a principal landmark. Roads divest from this space in two directions in straight lines arranged like a grid (without considering the topography nor the conditions or natural elements) faced by 9-meter front x 12-depth face lots with houses conjoined on one side, leaving the other side isolated.



## EL ESTERO

Surely the urban designer and architect had never known the sea or the traditional palafittic construction of the zone, nor the technology or the culture of the wood, just as they didn't dig deep into the particular spatial arrangement that was unique to the community. Perhaps the only recoverable thing from this new village was its electrical energy infrastructure, the water and sewage system, although the latter nonetheless flows into a river it contaminates and subsequently arrives at the sea. On the other hand, the inhabitants had solved these matters, perhaps through a better system, over a hundred years ago.

In my point of view, a new disaster has been constituted, perhaps worse than the previous one produced by nature. Worse, because there could have been adequate planning implemented upon the physical surroundings, the environment and especially in the human and cultural condition of a village that deserves respect. Even more so following a catastrophe produced by flooding.

From our perspective the current problem, caused by inadequate planning, is centered primarily on the following aspects:

- The people's sense of property was totally modified, resulting today in social conflicts that are product of the doubt of a new system.
- The inadequate urban system creates new urban and social relationships that are producing lack of trust and assurance.
- The design of the houses does not allow people to have their own orchard space, which allowed them self-sustainability, then generating the need to search for other sources.
- The distance to the sea changes the essence of the fishing village.
- The urban distribution of the city brings all the problems of the city.
- The loss of the social spaces and the arrival of television produce social isolation, out of context information, drug and prostitution issues.
- The conjoined houses with no physical or acoustic isolation deteriorate the family relationships.
- The location of the families was predetermined; it broke the connections of family organizations and resulted in a rush of locations with respect to a "commerce" that began to appear to generate new employment.
- The unknown and imported construction system, as well as the materials, makes any enlargement, remodeling or modification very complex and therefore having to resort to the traditional techniques thus producing horrible and inadequate combinations.

The knowledge of the above mentioned problems provided a great opportunity to delve into the problematic in the Senses Workshop.

### **Application of the Senses Workshop in Cúpica.**

The methodology of the Senses Workshop was applied in the following manner:

Initially, sensitization exercises were undertaken, through which the participants became aware of their sensory potential in order to recognize the space. Sensory exercise individual to each sense and of interaction or synesthesia of one with another or others and of all simultaneously were used.

An exercise for each sense was conducted:

Concerning the ear, firstly to listen in movement and secondly hearing the space from a determined position. Concerning touch: understanding the material, its texture and temperature, as well as the environment perceived through the largest of the organs of the senses: the skin. Smell by captivating olfactory sensations becoming aware of the corresponding perceptions. The sense of sight by seeing, from a hill neighboring the village, how the sun rises over the architecture and understanding how the shape exists somewhat as the light appears. The taste exercise was developed by learning to prepare the fish, from the cleaning to the cooking, combining with the learning of the preparation of coconut rice.

With these sensory exercises, the participants acquired sufficient potential to then "feel" the village and in this way understand its problems. Immediately, from this potential, and along with participants from the community, sensory exercises were conducted with each sense and concluding with synesthesia exercises (All the senses) along with a sensory



surveying and mapping where the process proposed by the Workshop was stated: **feelings-perceptions-moods-behaviours.**

Within this surveying we could summarize with respect to each sense:

**On hearing:** The impact of the sound of the television, the sound systems, the lack of privacy between the homes. Change in social and family customs that lead to behaviour that is out of context.

**On touch:** The bad condition of the Access Bridge to the village, product of lack of maintenance. The bad condition of the roads, with ditches that carry waters, molehills of material that do not allow easy circulation and are a danger to the children. The rain on the sidewalks deteriorates the floor and facade surfaces due to lack of splashboards.

**On smell:** The constantly bad smell produced by the inadequate rubbish and solid waste system. The bad smell in the homes due to lack of ventilation. Bad smell product of water forming pools in the roads (the drainage system is not yet resolved). Smell of domestic animal excrement (there are no longer any house orchards).

**On taste:** The inadequate kitchens inside the houses, with no ventilation, with no rubbish or solid waste system. The inclusion of commercial food and beverages inadequate for nutrition and that create the need for new requirements that did not exist before. The introduction to the consumer society.

**On sight:** The unpleasant aspect of the houses caused by the visible concrete blocks with no finish detail. The joy of color became lost. The people that had seemed calm before, seemed more agitated and anxious now.

Based on this “sensory surveying and mapping” of the village, the guideline program for the future development of Cúpica (today *El Estero*) was conducted with the projective methodology proposed by the Senses Workshop.

These are in summary:

- Rubbish and solid waste collection plan, along with an educational campaign.
- Housing improvement plan with an architectonic project that takes advantage of the construction and infrastructure, but projects extensions into second tiers without invading the land or the lateral isolation. Promoting home orchards. Also achieving privacy between the housing.
- Communal, cultural, educational, recreational facilities plan.
- Implementation of productive projects.
- Road improvement plan.
- Arborization plan.

Additionally, some detailed projects emerged from these guidelines that the School students in their professional practice semester have begun to implement in their work with the community. Within these projects it is worth mentioning:

## **Mompox.**

The village of Mompox is located in the Bolivar Department on the banks of the Magdalena River, the main fluvial artery in Colombia. Since its original colonial era, Mompox played an important role in the development of the country. Its strategic positioning and its status

as a port city made it a place where a promising future that would extend to the whole region was foreseeable.

However, the river's main branch changed direction of flow thus joining other very important rivers: the Cauca and the San Jorge. This incident in the first third of the nineteenth century resulted in the loss of the fluvial importance that Mompox held during that era, now that the inlet of the river Magdalena in its current location is practically no longer navigable. However and paradoxically, Mompox, surely due to this circumstance, has preserved its original state with practically no significant change. Due to this it was declared a "World Heritage" in 1995. The city of Mompox has, for this reason, developed into an important tourist attraction.



## MOMPOX

On the other hand, the deviation of the main branch of the Magdalena River made up what is known as the "Momposina Depression", which is a great island in-between the two branches. This depression that houses, apart from Mompox, other villages of lesser importance, has as a main characteristic its mucky condition. During a large part of the year the overflowing river floods the Momposina Depression that in rainy season, which occurs many times a year, results in the bad conditions of the habitat being worsened.



The housing in the whole of the Momposina depression as well as the communal facilities equipment, were not considered for these circumstances, which means that these conditions can be considered as a **permanent disaster** that has not yet been seen to as such.

This paradox led the Senses Workshop to consider a great opportunity to apply its methodology in search of solutions that others had probably not found.

## Application of the Senses Workshop in Mompox.

A tour around the swampland during full rainy season was conducted. In the case of Mompox, the Senses Workshop focused on a sensory surveying and mapping of the Swamp in the Momposina Depression using synesthesia or all the senses simultaneously, given the short time and the climatic and mobility difficulties. Nine interdisciplinary work groups were allocated, made up of pairs or threes of architecture and industrial design students that in company of people within the community would detect: feelings, perceptions, moods and behaviour.

Of the main conclusions found in this sensory surveying, it must be highlighted that people's good mood, despite their enormous difficulties, can be felt along with their happiness, human warmth and social solidity. It is due to this that in its projective phase, the Workshop did not suggest general guidelines but developed nine projects of concrete application that were later presented and delivered to the Mompox Town Hall, which showed a great interest in its implementation. Through this, the Senses Workshop is able to go beyond its academic objective and transcend reality, making important contributions to the country and generating models that could very well be applied in any context. From these projects it is worth mentioning:

- Amphibian House, that moves up or down within its own actual static structure according to the different levels of flooding.
- Variable Paths, that allow the village to circulate without the inconveniences by hard paths, mud-free during every season of the year.
- Tourism and Culture Center, that sails through the *Ciénaga* (Marsh) displaying its own value and making the most of the tourist influx flowing through Mompox.
- Education Centre, which similarly to the previous one takes the opportunity of education to the Marsh inhabitants.
- Mobile Health Unit that provides the *Ciénaga* community with a service that otherwise would not exist.
- Collection Centre for the different products in the community.



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### **Author's Biography**

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*Name:* ALFONSO SOLANO DE FRANCISCO

*Date of birth:* SEPTIEMBRE 20 DE 1946

*Place:* BOGOTÁ COLOMBIA.

*Major:* Architecture

*University:* Javeriana

*Graduation Year:* 1970

*Masters:* Landscaping

*Work Experience:*

- Design and construction housing 1968 – 2007

- Architectonic work published on S.C.A No. 9 yearbook.
- Awards on national architecture contests.

#### *ACADEMIC EXPERIENCE:*

- Architecture Programe Director 1995 - present, Pontificia Universidad Javeriana Bogotá, Colombia
- Professor at Pontificia Universidad Javeriana, U. Católica, y U. Piloto, Bogotá, years 1973 a 2007
- Honor distinction on 1999 of Pontificia Universidad Javeriana, Bogotá.
- National honor distinction of Teaching Social Work With Meaning. National Professional Council of Architecture and Related Professions. October 2007.
- Distinction: Order Juan Antonio Pardo Ospina in class Commander, issued by the Institute for Blind Children.(Instituto de Niños Ciegos) November 2007
- Invited professor during the Internacional Workshop on 1996, 1997, 1998: Holand, France, Italy, Switzerland and Spain.
- Design and Implementation Project Genesis at the Pontifical Javeriana University, School of Architecture, for knowledge management architecture and industrial design.
- Design and Implementation Project Vertical Locating, at the Pontifical Javeriana University, School of Architecture, on the problem of forced displacement by violence in Colombia.
- Design and Implementation Workshop Sense methods, sensory awareness of space and design new proposal, with more than 26 workshops held at national and international levels.
- Implement Student Office for development projects social projection, in the six months prevocational practice.
- Presentations and national conferences: Bogota, Cali, Medellin, Cartagena, Barranquilla, and international in Spain, England, Mexico, Cuba, Panama, Guatemala and Ecuador, among others.
- Associate Professor Javeriana University 1995-2007. Professor design area workshops on different levels, Jobs Grade, Project Directorate Locating, Student Office

Alfonso Solano de Francisco  
 Associate professor  
 Architecture Programe Director  
 Pontificia Universidad Javeriana  
 Bogotá Colombia

