

# SONOROUS CREATIVITY WITH GAUDI'S TILE

PACS: 43.28.Hr

Francesc Daumal i Domènech Politechnical University of Catalunya (UPC). Avda. Diagonal 649 08028 Barcelona, España

Tel: 34 934 010 867 Fax: 34 934 016 426

E-mail: francesc.daumal@upc.es

#### SUMMARY

¿What would it happen if Gaudí entrust us to find the adequate sound for his pavement of Passeig de Gràcia (one of the most representative arteries of Barcelona)?

I made this question to some pupils of the non-obligatory subject "Acoustic Architecture" that I was teaching during the first six months of the course 2002-03 at ETSAB.

Obviously, we didn't find specific answers, but now we are surely interested in the best proposals following that they were designed with wide margin of sonorous creativity.

#### INTRODUCTION

They invite me to present you a comunication about "sonorous architecture". I take into my head to thinking that the best sonorous architecture of our life is which we generate with our feet.

Trying to show the relationship between the creativity and the sound we have to talk about sonorous pavements, I think it can be interesting to show the design process of something so simple in architecture like a pavement.

I chose the Gaudí tile, a concret piece placed as a pavement in the sidewalks of Passeig de Gràcia in Barcelona. The Gaudí tile, nowadays manufactured by Escofet pavements, presents an hexagon shape with a drawing in relief that allows to form most complex figures when you join the vertexes of three pieces.

### **PROJECTS**

I proposed that every pupil designed and made a tile. They could group together if they could get better richness than working individually like chords, melodies, etc. They had to present memory of one DIN A4 and a natural scale model that sounded like they wanted.

In the way of not concerning the design process, I prefered that the pupils presented the memory of the results obtained with the model, instead of doing it according the initial

intentions. However, some of them admited their failures, since you can imagine sound but it can be difficult to obtain this sound you have imaginated.

Below we expose the project ideas of some of this exercices, choosing twelve of them at random.



The original Gaudi tile



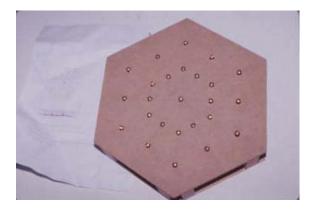
Laura Giménez Rebollo

Little trumpet under the tile with wharfages.



#### Susanna Pérez Garcia

In this tile only have influence the ending design of the higher face(part) of the piece: a sheet (bombada) on a wooden support. The sheet has an engraving with the Gaudí's tile drawing made with punches of different measures. In this way we obtained the sound of the tile in which only have influence the building material and the surface treatment without the incorporation of an external element.



# Yongsu Kim

The tile can generate different sounds in order to the different ways of footstep, in other words, the strenght, the rhythm and the characteristic weight. The sounds can be different by changing the acoustic material, too.



### Emma Sanz Manresa

In this project we propose a cork base for the tile for getting the deadening of the "impact sound" of the shoes. And different ending materials make the piece sound in a very different ways: wood, cardboard, plastic, cork and clothes. The ending choice depends on the space and ambient we want to create.



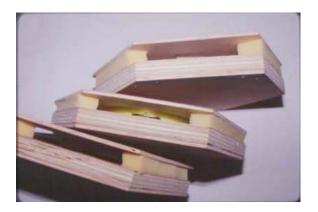
### Xavier Cristóbal Diloy

My desire is transmiting the sounds and sensations that recreate the nature as Antoni Gaudí did it in his time. The starting-point is a cloth container and granular elements (rice and chick-peas) for the packed smells, the differentiate texture and its loudness, we get an aesthetic and picturesque work. The intention is making a tile that transmits some insecurity and unbalance, something like a natural-terrain sensation. The loudness of this tile is soft as a whisper.



### Eduard Palao Valverde

We wanted that the tile expressed itself as the piece would do it if it could speak. So we looked for a constant and annoying noise as the tile's moan at being stepped on. We wanted a grey and inexpressive ending surface.



## Ariadna Clusells/Glòria Gou/Clara Griñó

Three similar tiles sound like a percussion game. The system that we have used is the same for the three pieces, a laminated wooden base and wooden supports too. We have used sponges to keep silent about the tile displacement. We have tried to find acoustic similarities with a battery, in the way that when people are walking they produce a symphony.



#### Iván Muñoz Anguita

The idea of this project is developing three aspects: the obtaining of the maximum sound absorption when you're walking, the vibration that transmits itself through the feet when you're stepping, and the interior sound that is like if you were milling the whole tile in little pieces, what we got (with) alluminium shavings between the plywoods.



#### Lúcia Vaz Pato

The starting-point of this project is to obtain a sonorous game beginning from two models made with two materials of different coefficient of sonorous absorption. We wanted to obtain a grave sound and other higher, and since this two models we got variations of the sound depending on the amount of emptiness and the different filling materials: Porofel and polystyrene. In that way we got very varied combinations.



### Eva Crespo Sánchez

The project tries to encourage people's restlessness by the obtaining of a characteristic sound. This sound is caused by a partial compression of the tile when you step on it, independently of the characteristics of who's steping on and his/her shoes. For obtaining it we have used sponges that permit this compression. The constructive scheme of the piece is composed of a superimposed cloaks of different materials. In this case, this materials are: wood, metallic sheet and plaster and we put a plastic bag between the sponges that sounds in a soft and quiet way.



## Patricia Anacleta Lupiánez

This project wants to obtain a daily sound, so we chose the sound of tinplate flattening. For the making of the tile we have put the tinplates between two wooden bases with a wharf under the tinplate for its quickly recovery to the initial position, and sponges to obstruct the interior mechanisms.

#### CONCLUSIONS

We don't want to prepare an exposition with the best exercices presented by the pupils, because they presented 30 and 8 of them are dumb now. But some of them have allowed, and even they allow yet, still explaining their emotions. With poor efforts the pupils show us that the sonorous creativity field is wide and that the foot can be the voice of lots of our cities' corners.