## Organic architecture of family villa in El Palol in Spain.

(picture: 02\_house\_from\_southeast.JPG or picture: 02\_el palol house\_south\_view\_HDR.psd)

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How can the spirit of the place enter into new designed building? How can our human being levels connect with the spirit of the place during constructing of the house? Which methods of creation help to improve both our human etheric forces and etheric forces of the place? How we can go with our destiny through the process of building our home? To answer these holistic questions, I try to go through process of organically designed family villa in north Spain (Catalonia).

The wish of investor, Mrs. Montse Soldevila and her children was to build a healthy holistic living house. They desire to use natural building materials and organic forms. Her wishing was also to have a house with feng shui principles and with geomancy, in which she is interested. She asked for implementing of sacred geometry too. One of the most important topic was for Montse to find a solution which will go well with her psyche and with her destiny. She has been looking for holistic concept.

Construction of the villa is planed to be part of bigger project of old monastery reconstruction in close neighbourhood. Place is situated in fertile lowland between villages Torroella de Fluvia and Sant Miquel de Fluvia, 9 km from Mediterranean Sea in Catalunia. The aim is to reconstruct monastery in the future and to build small spa, restaurant, accommodation and alternative holistic education centre there. The whole ground is very interesting, rare and unique place. Nearby monastery is river Fluvia and a small hill with cave, where is spring of very good water. This source of water is used for drinking and growing agricultural products there. Family of Mrs. Soldevilla plant and grow eco vegetables, lentils, grains and olives around the old monastery. Because she and her family would like to have a good supervision of the whole project she decided to build also her family villa there (you can see it on the picture of the model in upper left corner).

Method, which I used to create the whole project is called "participative projecting" or also "participatory project design". It is conscious engaging of submitter (client) into creative process. I prepared model of the terrain and let the owner and her son to shape forms of the house into concrete relations in architectonic model. Our goal was to let creatively arise living organic forms. We used plasticine for this forming. I offered them to plasticize shapes which will be reflecting character of the place, which will react on the shape of the landscape and which will show imaginative visions of the client. I accompany them as an architect. Collaborative workflow I influenced as little as possible. During the process of common work I became aware of and revised for example world (compass) directions. I helped to estimate proper scale factor and suitable placement into the slope of the terrain too. The fact, that Montse Soldevila got confidence, belief and freedom from me, helped her to have healthy self-confidence in the whole process. She worked with happiness, inventively and vividly. (pictures from: 00 1 investor begun.JPG up to 00 7 investor begun.JPG). This kind of work creates premises for client's connection with basic intention. Method of collective architectonic modelling support to follow right direction in our destiny, finding our personal I and create complete healthy state of our being. After ending the model (picture: 00\_architectonic\_model.jpg) I began to draw complex technical project.

The owner wished the house to grow out of local materials and to be healthy. Health was for her not only physical, I mean just only healthy building materials. She wanted to go deeper into the principles of health. She wanted to work more mentally and spiritually. I therefore grasped the question of "health" by including at the outset as much artistic creative processes for her as possible in the design process. The character of artistic processes was such, that I directly let the owner to create. For example creating the model of the house or some handcraft works in the house. She had understanding in those processes, it has made her and her son to be glad. She has had sense for concepts like " "etheric" or "life forces" and their connections with forming health. I let to handcraft works to be used and personally enjoyed by the owner during building construction. For example, I lead Montse and her son to help with clay plaster's work on the chimney in the first floor (picture: 00\_9\_clay\_plaster.jpg).

Intention of the owner was to create and to build some other new ecological houses towards southeast direction from monastery. There are planning to be several bungalows and small gym hall for guests and for participants who will be arriving to take part in holistic education in the future. All new houses will have green roofs and will be made from natural building materials. There is planned to be hotel supply in the north direction from monastery too. This supply area will be partly underground and will be connected with the hotel by tunnel.

In the beginning of the project I attended to create mental space for her soul and spiritual connection with the place. We were walking around plot of seventy hectares together with members of her family. We walked around border of the plot step by step during three days. She, her daughter and her son placed new corner stones beside old ones in angles of the plot. We went mostly in silence. Client wished to be inwardly connected with her inner purpose, with her inner intention during this pilgrimage walk (picture: 17\_corner\_stone\_placement.JPG). From this time she knew her plot and all its corners...Later, she has been with joy and happiness walking around the whole property again. Montse is inwardly connected with the spirit of the place, she has knew, how look like all corners and fields all around the property.

Execution of family villa work led Mr. Arturo De La Maza and his colleague Mr.......(www.arkobcn.com). Realization of this house in El Palol is made from natural building materials. Mainly from wood, stones from the place and earth from the place (picture: 02\_1\_clay\_and\_stones\_from\_the\_place.JPG). Conception of the house has organic character. Rounded forms of walls and ceilings were designed to create soft and subtle atmosphere of rooms. Owner's wish was create curved shapes which do not push and are not sharp to our psyche. She already expressed her opinions during modelling the model of the house in the beginning of the process. The form of the house comes out of nature shapes and concur with slope of the plot. Slope of the plot is oriented to the south. About 100 metres in the west direction from the villa exist a cave with high quality spring water. Rising water is captured into cascades of constructed little narrow brooks and small lakes. One of small lakes is situated next to the house. It is used for swimming and for watering.

In the very beginning, I created for owner model of the surrounding landscape. (picture: 00\_0\_landscape\_model\_of\_the\_area.jpg). I included also the river into the model. There were fields and meadows on which they grow bio organic cereals, lentils and grass. And also their orchard with olives trees too. This landscape model has helped to the owner to be aware of character of

surrounded landscape and the spirit of the place. It helped us to place properly newly planned houses into downy terrain. This work helps also to take link to the level of elemental beings of the place. They create different moods on certain places of the plot. It is subtle way of connection with souls of nature, with spirit of the plot and with genius loci of El Palol place.

Basic character of organic forms were impressed into architectonic models through fine touching and contact with ending of our fingers...as human beings, we have the most connection with elemental beings through our fingertips. When we had been modelling model of future house from plasticine, there were present elemental beings of the place near by our fingers. They wish to cooperate on growth of new shapes. They wanted to be connected with newly formed Materia. Together with the owner and her son Alberto, we shaped model of the house through our fingertips step by step more and more exactly. It was creative process through which the whole form of the house was born. (picture: 00 model of the house from south west.jpg). Sculpting model from workable natural plasticine was chosen purposely. It is the way how can natural original creativity enter into design process. Client can express dynamics, vitality and vivacity and because model is seen during the process, it is possible to keep coherent shapes. Process of plastic work helps client to find its imagination about future shapes of the house. During creative activity and movement, client goes more into field of will and sphere of feelings. In conative (volitional) work is manifested playfulness and arise conception of inner pictures (imagination). This is the way, where the contracting authority can meet its spirit of imagination and is connected with her individual "I". Gradually, when modelling goes in detail, come out intuition and inspiration. New, unexpected suggestions of shapes are coming. There were for example overhanging shapes of the roofs and balconies of the house, which client began to create spontaneously as far as in the process. I helped her to keep the model in a proper scale and I was minimizing to influence her in her creativity. So the model kept the spirit of her ideas, and she stayed with him mentally. I also have the experience that the elementary Beings (or Spirits) of the place show their gratitude for being able to participate creatively in the whole process. These Beings are thankful that they were taken into account. They are then redeemed by maintaining good moods during construction and posing positive situations during the construction and during the next lifetime in the house.

Upon completion and approval of the model, an architectural study was made (pictures: from 03 00 south wiew.jpg till 03 07 19 westview.pdf). Then the scale and character of the house were further verified by drawing into photographs of the place. (picture: 03 07 20 Montse house view3.jpg a 03 07 20 Montse house view4.jpg ). It was only afterwards technical drawings had begun (pictures: from 03\_08\_15\_section\_aa.pdf that till 03\_18\_Ground\_Floor\_Plan\_at\_Socle\_Level.PDF).

(reference to the review of the implementation drawings: https://www.arc.cz/en/portfolioitem/2010-family-house-in-el-palol-spain/#Example\_of\_the\_Implementation\_Documentation

After completing the architectural model of the house, we have scanned its final shape with a 3D scanner. We then used these data to keep and use external shapes. The vividly modelled model has been gradually transformed into reality. During our computer work doing executive project, I consciously recalled the hand-held initial artistic processes. I talked about them to my employees and colleagues in my studio. This way I kept contact with the spirit of the emerging art work during computer work.

Even though the shape of the house is demanding (difficult), thanks to sophisticated execution documentation, implementing firms have been able to produce and realize complex shapes. Construction of the house was enjoyable and the owner of the house was very satisfied. During the construction I was doing supervision and together with the members of the implementation team, I have solved the more demanding details of the building on site (picture: 15\_construction\_of\_wooden\_lamelas\_under\_facade.jpg). It was difficult technically reflect the design details of the vividly shaped facade. Finally, together with a team of Spanish and German natural builders, I joined into the solution to do several layers of wooden slats (lamellas).

Wooden lamellas were covered with coconut mats. These mats serve as an outer plaster carrier. Outside plaster is made of local clay and local sand. It has three layers. The first is purely clay. The second one has a 10% lime admixture. And the third layer contains 30% lime. Thus, the façade retained the colour and material character of local clays and remained resistant to rains (because of the lime in the plaster).

The house is oriented to the south by its broader side. It has a large roof overhang to secure it from the south. The project was inspired by the basic principles of feng shui. The main principles of feng shui include a large and distinctive entrance and free centre of the house. Therefore, the entrance hall is so spacious and includes a large curved staircase to the first floor. Entrances, halls and stairs are the "breath" of the house. Soon after the completion of her new home, Montse painted the picture, which is in the window between the hall and the dining room. She has expressed her joy and enjoys living in the house. I wanted to support her, her family and her energy, so she could have luck in her life to continue into another project of reconstruction and completion of the surrounding monastery complex.

The ground plan of the house also influenced the requirement of harmonic proportions. The depth and width of the house is 1: 1,618. The ground plan of the house is 16.6 x 10 m (picture: 03\_03\_Montse house sacred geometry 1.jpg and 03\_04\_Montse house sacred geometry 2.jpg). Due to the warm Spanish climate, the house has a grassy green roof. It absorbs much summer heat. Thanks to the grassy roof and roof overhangs, the house does not overheat in the summer (picture: 16\_green\_roof.jpg). The shady mood over the southern terrace on the ground floor helps create a wooden pergola with climbing plants (picture: 04\_south\_groundfloor\_terace.jpg).

The aim was to create a sensitive building in harmony with nature. The client's wishes were to use local building materials in a modern way and to create a healthy and softly shaped structure. The form of the house addresses (reach) the human soul and the human etheric body through the use of living organic shapes. Above all, the use of so-called "double-overturned surfaces (areas)" (picture: 03\_double\_curved\_areas.jpg). If one observes and look to these lively shapes in his surroundings at architecture, he strengthens and moves his life etheric body and supports strengthening the will of man.

The house is an energy-saving low-energy wooden construction. It is designed from healthy natural ecological materials, stone, wood and clay. For example, stones for sheds are collected on their own ground 100 meters from the shores of a nearby river. Stones have been traditionally used to build up local villages. Stones are halved and the flat sides are facing the viewing side. The house has an all-wood construction made of spruce-glued wooden beams. The floor construction and roof beams are

made of laminated solid wood panels (picture: 13\_construction\_of\_wooden\_floor.JPG and 14\_construction\_of\_wooden\_roof\_beams.JPG).

The house is insulated with 40 cm fibre-wood wool. The walls are breathable, diffuse open. Outside walls have a layer filled with unburnt bricks from inside (picture: 12\_construction\_of\_master\_bath\_room\_window.JPG). Unburnt bricks well accumulate heat and cold, ensuring a steady indoor temperature in the house and regulating atmospheric humidity. All internal plasters are from local clay. They were left in their natural colour.

Inside clay plasters were made by Joachim Reinecke (www.embarro.com), along with Xavi Puig, who made Moroccan stucco on the walls in the bathrooms. The consultant for clay mixtures was Prof. Dr. Ing. Christof Ziegert. (www.zrs-berlin.de). Facade wooden parts, windows, doors and interior floors are made of oak wood. Everything is impregnated with natural oil. The main heating is wall (radiant). Warm water for heating and hot water is created by wood pellets boiler, supplemented with solar collectors. To support creating the warmth and home atmosphere, there are two fireplaces for using wood in the house.

Traditional craftsmanship is used on the building. For example, an inside stone wall or outer wall were hand made from broken stones which were collected on banks of the river (picture: 07\_dinning\_room.jpg and 06\_entrance\_hall\_and\_staircase.jpg). The bathrooms were made of waterresistant decorative plaster Tadelakt (so-called Moroccan stucco), (picture: 10 master\_bath\_room\_first\_floor.JPG and 11\_second\_bath\_room\_first\_floor.jpg). The whole house has inside walls and an internal surface of a main outside wall made of unburnt clay bricks. This ensures thermal accumulation. Heat accumulation from wall heating in winter. And accumulation of cold during night ventilation in summer. This saves energy in winter for night-time heating. And it helps to make cooler pleasant temperature during the day in summer. Throughout the house, sleeping and regenerating is amazingly good. It is mainly due to clay plasters and natural wood surfaces without lacquers. The wooden surfaces are painted with natural oils. Plastics are not used in the interior of the house. Clay plasters and natural wood surfaces maintain a pleasant microclimate in the house. The air thus naturally contains plenty of healthy beneficial free negative ions. Two open fireplaces and a nearby pond beside the house helping to create free negative ions too. In the interior of the house you can feel (smell) natural oak wood and occasionally, most of the evening, the smell of the sea is coming into the house ....

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It is possible to view the entire realization in detail at: https://www.arc.cz/en/portfolio-item/2010-family-house-in-el-palol-spain/#Finished\_Building

The implementation process is shown at: https://www.arc.cz/en/portfolio-item/2010-family-house-in-el-palol-spain/#From\_the\_Construction

The architectural study of the house and the architectural model can be viewed at: https://www.arc.cz/en/portfolio-item/2010-family-house-in-el-palol-spain/#Study

The building permit project can be viewed at: https://www.arc.cz/en/portfolio-item/2010-family-house-in-el-palol-spain/#Project\_for\_the\_Construction\_Permit

The preparation of the whole hotel project and the creation of the architectural and urban model can be viewed at: https://www.arc.cz/en/portfolio-item/2010-eko-hotel-el-palol-spain/#Study

The basic project of the hotel can be viewed at: https://www.arc.cz/en/portfolio-item/2010-eko-hotel-el-palol-spain/#Basicproject\_documentation

The hotel's implementation (executive) project can be viewed at: https://www.arc.cz/en/portfolioitem/2010-eko-hotel-el-palol-spain/#Implementation\_Project

The location and the site of the future development of the hotel can be viewed at: https://www.arc.cz/en/portfolio-item/2010-eko-hotel-el-palol-spain/#From\_the\_Construction

Work with the subtle earth energies of the landscape and of the place (geomancy) can be viewed at: https://www.arc.cz/en/portfolio-item/2010-eko-hotel-el-palol-spain/#Geomancy\_and\_production\_of\_the\_environment