

Tomás García-García

Doctor en Arquitectura, Profesor
Contratado Doctor,
Departamento de Proyectos
Arquitectónicos,
Universidad de Sevilla, Sevilla, España
<https://orcid.org/0000-0003-4575-7683>
tgarcia@us.es

THE MASTER, SIGURD LEWERENTZ (1885-1975). EXPERIENCES AND ARTISTIC FINDINGS IN THE SANCTUARY OF ST. PETRI CHURCH IN KLIPPAN (2020)

EL MAESTRO SIGURD LEWERENTZ (1885-1975).
EXPERIENCIAS Y HALLAZGOS ARTÍSTICOS EN EL
SANTUARIO DE LA IGLESIA DE ST. PETRI EN KLIPPAN
(2020)

O MESTRE SIGURD LEWERENTZ (1885-1975).
EXPERIÊNCIAS E DESCOBERTAS ARTÍSTICAS NO
SANTUÁRIO DA IGREJA DE ST. PETRI EM KLIPPAN
(2020)

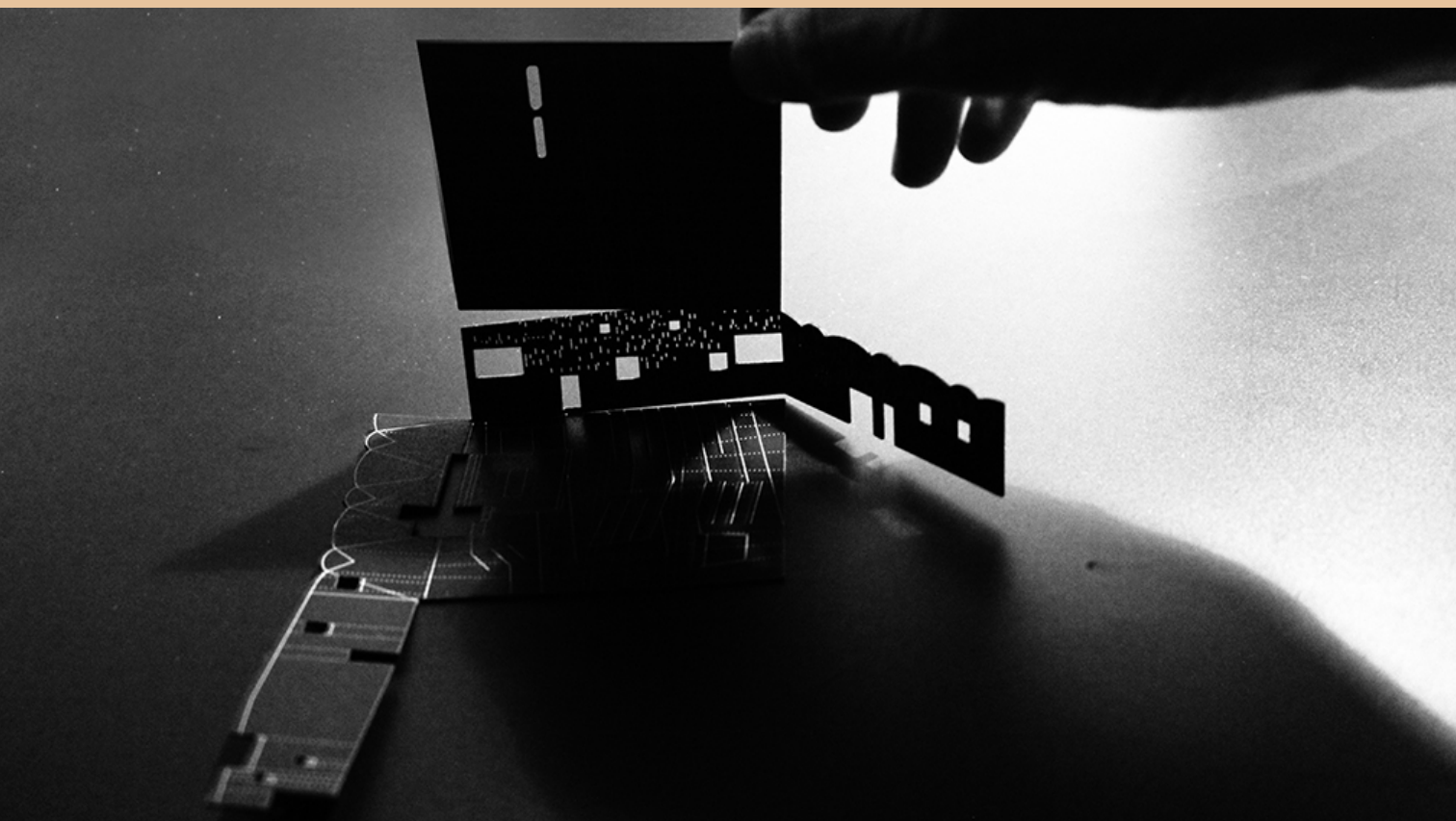


Figura 0. Sanctuary of St. Peter's Church in Klippan. Source: Model made by the author.

Work based on the results obtained from the doctoral thesis "Cartografías del espacio oculto. Laboratory of architectural experimentation". University of Seville, 2017

RESUMEN

En los archivos de Sigurd Lewerentz, en Estocolmo, se guarda un objeto inédito que el maestro llevaba guardado en una carpeta durante la construcción de la Iglesia de St. Petri en Klippan. Una fantasía volátil en forma de papiroflexia arquitectónica ideada por Lewerentz como delicioso cuento de obra. Un objeto de papel, delicado y frágil, que capta y expresa bien la esencia artística de esta arquitectura, como plegadura en tierra cocida, como estructura laminar de ladrillo que encuentra su resistencia en su forma origámica. Una fantasía etérea que permitirá observar el trabajo del maestro a través de los ojos de Alexander Calder, reconociendo en ambos la intención de hacer sensible el aire, de poner en tensión nuestros sentidos. Este relato, a modo de experiencia de vida con la arquitectura del maestro, hace público ciertos hallazgos espaciales y artísticos, musicales y móviles, a través del estudio y producción de los modelos y maquetas elaborados para el Santuario de la Iglesia de St. Petri en Klippan. Este espacio espera paciente un soplo, permanece latente esperando a oscuras que el aire le insufla vida. Este ensayo devela un hermoso instrumento, un sorprendente artilugio ideado por el propio Lewerentz; alambique de vientos que captura, conduce y concentra los sonidos de la propia naturaleza, los sonidos de Klippan.

Palabras clave: Sigurd Lewerentz, St. Petri en Klippan, maqueta de obra, Alexander Calder, Italo Calvino.

ABSTRACT

In the archives of Sigurd Lewerentz, in Stockholm, there is an unpublished object that the master kept in a folder during the construction of St. Petri's Church in Klippan. A volatile fantasy in the form of architectural origami devised by Lewerentz as a delightful storyteller of the construction site. A delicate and fragile paper object, that captures and expresses well the artistic essence of this architecture, as a baked earth fold, as a lamellar brick structure that finds its resistance in its origami. An ethereal fantasy that will allow observing the work of the master through the eyes of Alexander Calder, recognizing both the intention of making air sensitive and putting our senses on edge. This story, through a life experience with the master's architecture, makes public certain spatial and artistic, musical, and mobile findings, through the study and production of the models made for the Sanctuary of the Church of St. Petri in Klippan. This space waits patiently for a breath, it lies dormant awaiting in the dark for the air to breathe life into it. This paper unveils a beautiful instrument, a surprising contraption devised by Lewerentz himself; a wind still that captures, conducts, and concentrates the sounds of nature itself, the sounds of Klippan.

Keywords: Sigurd Lewerentz, St. Petri in Klippan, site model, Alexander Calder, Italo Calvino.

RESUMO

Nos arquivos de Sigurd Lewerentz em Estocolmo existe um objeto inédito que o mestre guardou em uma pasta durante a construção da Igreja de St. Petri em Klippan. Uma fantasia volátil na forma de origami arquitetônico concebida por Lewerentz como um delicioso contador de histórias de canteiros de obras. Um objeto de papel, delicado e frágil, que capta e expressa bem a essência artística desta arquitetura, como uma dobra em terra cozida, como uma estrutura lamelar de tijolo que encontra sua resistência em sua forma de origami. Uma fantasia etérea que nos permitirá observar o trabalho do mestre através dos olhos de Alexander Calder, reconhecendo em ambos a intenção de tornar o ar sensível, de colocar nossos sentidos em tensão. Esta história, na forma de uma experiência de vida com a arquitetura do mestre, torna públicas certas descobertas espaciais e artísticas, musicais e móveis, mediante o estudo e produção dos modelos e maquetes elaborados para o Santuário da Igreja de São Petri em Klippan. Este espaço espera pacientemente por um soplo, permanece latente, esperando no escuro que o ar lhe dê vida. Este ensaio revela um belo instrumento, uma surpreendente engenhoca concebida pelo próprio Lewerentz; um alambique de ventos que captura, conduz e concentra os sons da própria natureza, os sons de Klippan.

Palavras-chave: Sigurd Lewerentz, St. Petri em Klippan, maquete de obra, Alexander Calder, Italo Calvino.

INTRODUCTION

1 The object is kept at the Architecture Museum in Stockholm, in the collection of special material with the reference AM 1473-205-04. The value of the documentation presented in this article lies in the inaccessibility of the object, since it is not allowed to be consulted in the room and only leaves the museum on rare occasions, on the occasion of relevant monographic exhibitions about the Master, Sigurd Lewerentz. The last time was in 1973. Its presentation in this journal has, therefore, an unpublished and exclusive nature. The reproduction rights have been granted by ©Arkitekturmuseet, Stockholm.

2 The gray folder in which Sigurd Lewerentz carried the paper model to work can be consulted in the reference AM1966-05-6612 of the Stockholm Architecture Museum.

Figure 1. The Church of St. Petri in Klippan, 1966. A planimetric survey and paraffin wax model made for this research (2017). Unprecedented layout of the ventilation system infiltrated into the sheets of the perimeter walls: in gray, the layout passes horizontally, hidden by the underground technical galleries. The black dots correspond to the vertical ducts that are inserted precisely through the brick sheets, peeking out into the empty space as suggestive periscopes (see also Figure 12). Source: Prepared by the author.

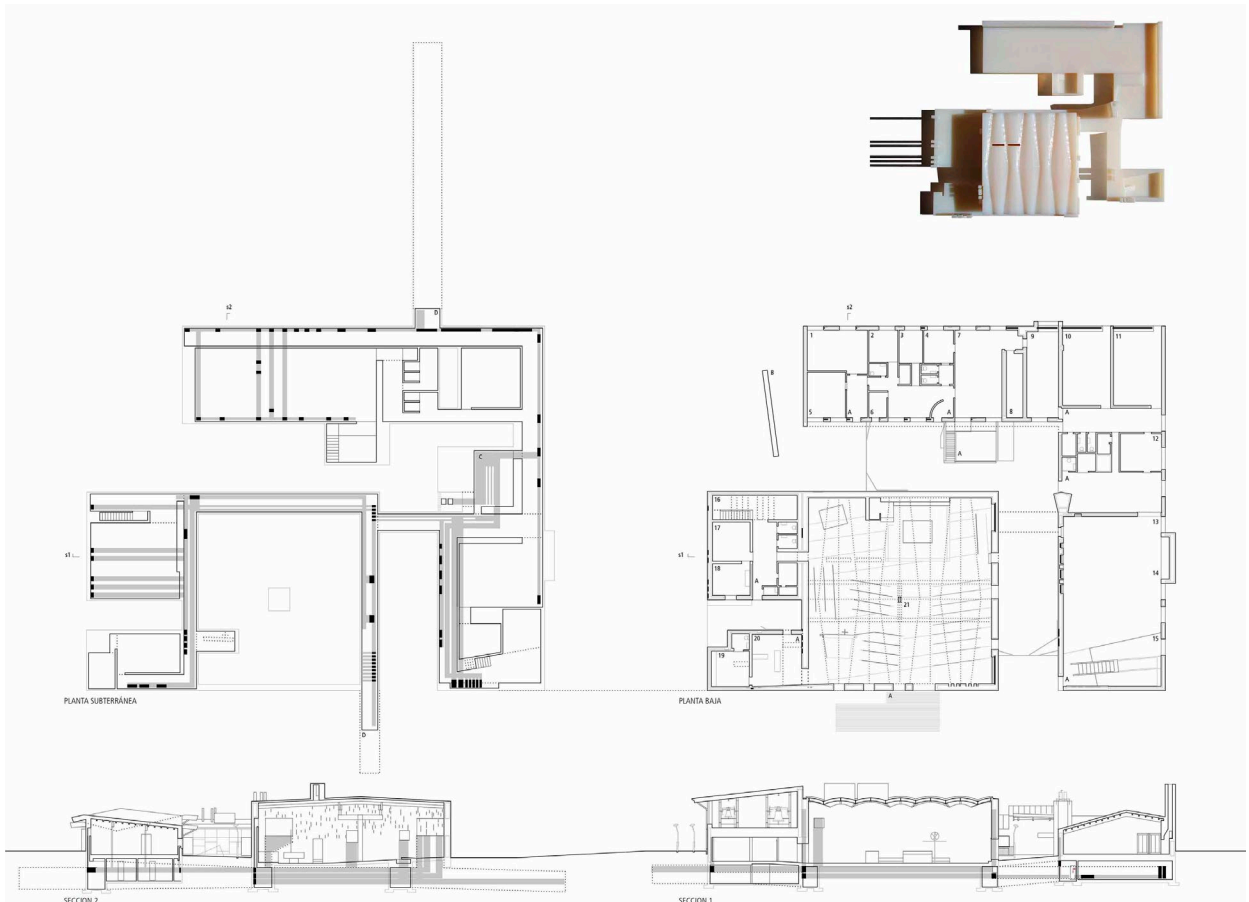
THE OBJECT: REF AM1473-205-04, STOCKHOLM ARCHITECTURE MUSEUM (2017)

During the weeks we were consulting the Lewerentz archives at the Stockholm Architecture Museum, not a single day passed without at the end of our working day asking Anika Tengstrand, research coordinator, to let us have in our hands a paper model made by the master during the execution of the works of the St. Peter's Church in Klippan (Parra-Bañón, 2018) (Figure 1).

Among the documents kept in the archives of Sigurd Lewerentz, there is a piece that surprises by its uniqueness. It is a grayish folder, which seems to be handmade, kept with the curiosity of an antique dealer, which is part of this collection because it contains in its thick pages, handmade drawings made during his daily visits to the work, sketches that accompanied his long conversations with Carl Sjöholm, the foreman. When opening the folder something is missing, the rusty signs of several clicks reveal that there was something stuck inside, something was detached leaving its trace².

One morning, we discovered with surprise that, on our work table, Mrs. Tengstrand had confided something to us the night before. From among the objects kept in the master's personal archives, she had taken out a box built by hand with wooden panels, sewn with string, and personally labeled by the architect. That strange object held inside the folded yellowed, very worn cardboard model that we had sought so much, that as she warned us, we had to handle it with care (Figure 2).





Legend: 01. Children's Room, 02. Visitors Room, 03. Visitors Room, 04. Parish Office, 05. Games Room, 06. Kitchen, 07. Administration, 08. Archive, 09 Council Room, 10. Meeting Room, 11. Confirmation Room, 12. Kitchen, 13. Parish Hall, 14. Hearth, 15. Stage, 16. Choir Room, 17. Changing Room, 18. Sacristy, 19. Waiting room, 20. Wedding Hall, 21. Sanctuary. A Access, B Wall, C Machine room, heart of Klippan, D Park branch hypothesis.



Figure 2. Left: Site visit. Lewerentz with his folder in his hand talks with Carl Sjöholm, work foreman, in Klippan (1966). Right: The closed box manufactured by Lewerentz. Two handwritten inscriptions. On the side cover: Klippan Kyrka. Arbetsmodell (Klippan Church. Work model) and on the top cover: Arkt. S. Lewerentz. Skanor. AM 1473-205-04. Source: Image taken by the author, at Arkitekturmuseet, Stockholm (2017).

Inside that gray folder, which the master kept the last months of the project, was a small carefully folded white cardboard model that, when opened, extended its shapes in space. Like those children's stories that, when staged, stretch out into the air, forming an animal or an enchanted forest, the white model built a fragment of the interior space of the sanctuary of St. Peter's Church in Klippan in the air of that room. I still remember that moment, that wonderful moment when Anika slowly unfolded the object on our work table.

METHODOLOGY

INTERACTIONS WITH THE OBJECT: DRAWINGS IN THE AIR

This paper provides a methodological position based on experience, observation - with the five senses - and interpretation, from which to understand the work of the master Lewerentz to, subsequently, express what has been learned, and what has been discovered, in a creation derived from the original. A methodology, perhaps, counter-dogmatic and freed from the scientific canons in its approach, but that seeks to contribute to approach the architectural thinking that underlies the studied work.

Somehow this paper shows our admiration for a literary character: he is the Marco Polo of those Invisible Cities created by the Italian writer Italo Calvino (1972), that young Venetian who tirelessly traveled around the most exotic places in this world. I confess my admiration for that Marco Polo who tells us how, having just arrived at the palace and without knowing the dominant language, had to resort to some peculiar tools to be able to communicate with Emperor Kublai Khan upon returning from his travels. His hands and the objects brought back formed images in the emperor's head, which evoked the adventures lived and the wonders discovered in his missions.

Every city, space, and refuge were redrawn by Marco Polo and mapped again as an offering to talk about his discoveries. As the seasons went by, Marco Polo became familiar with the language. His stories were now the most accurate that the Great Khan could have imagined. However, the emperor continued to ask him to stay silent, to place in front of him those cartographies, as actions loaded with scenography, objects, and models that delighted the emperor with representations of unknown architectures. I would like to think that this paper will turn the reader into the emperor while reading, and what I find most interesting, will fulfill my desire to be Marco Polo during those moments.

The model is kept in the museum's archives inside a wedge-shaped wooden box, sewn with string by the master and labeled by hand



with the inscription "Klippan Kyrka. Arbetsmodell". A packaging, perhaps recycled, exhausts the clever volume of the object and subjects it to a certain internal tension, to the point of having to fold its base to store it inside. On opening the box and removing its contents, the object stretches slightly away from the board in an attempt to spread its shapes into the air:

The object needs a certain human push, to stay upright it requires the slight pressure that our hand transmits, transforming our action into its internal energy. This object is like a delicate puppet theater, a miniature theater patiently waiting to come to life. The model is assembled using thick cardboard as its base, on which the last drawn floor plan of the sanctuary's inner space has been glued. The last documented version of this drawing was made in May 1966, just a few months before the church's inauguration, and it is surprising that some essential elements of the liturgical rite are still not in their final position³ (AA.VV., 1987) (Figure 3).

Three more cards end up defining the object, reconstructing the perimeter brick walls that enclose the narrative. The two sides do not cover the entire floor plan to facilitate its folding and the third is finished with the wavy cutout of the ceiling's profile. The rest of the pieces - altar, organ, pulpit, bishop's seat, and clergy's bench - are placed inside the scene and appear and disappear with a certain independence, being able to be unfolded one by one as the narrative progresses or remain absent from it if the story's narrative so requires (Figure 4).

Figure 3. The open box, Sanctuary of St. Peter's Church in Klippan. Folded cardboard model and hand drawings by Sigurd Lewerentz, 1966. Source: Image taken by the author, at Arkitekturmuseet, Stockholm(2017).

³ The floor plan, dated May 1966, can be seen in folder 40, AM 1966-05, Sheet N° 42.

The following information is on the label: Floor plan. 1:20 Scale. 2H Pencil. Drawn by M. Papadopoulos MP, Skanör 7/1/1966. Next to the label a further date records modifications made to the floor plan: justerad 4.5.1966.

Figura 4. Above: Sigurd Lewerentz on a site visit with his friend Klas Anshelm, Klippan (1966) Source: Sigurd Lewerentz Archive, Arkitekturmuseet, Stockholm. Left: The master sitting on one of the chairs in the Sanctuary. On his legs, his umbrella, and the rigid folder where he kept this model. Right: Next to the pulpit, he listens to his friend's explanations. Below: Interactions with the object. The model moves with the impulse of our hand. Source: Image taken by the author, at Arkitekturmuseet, Stockholm (2017).



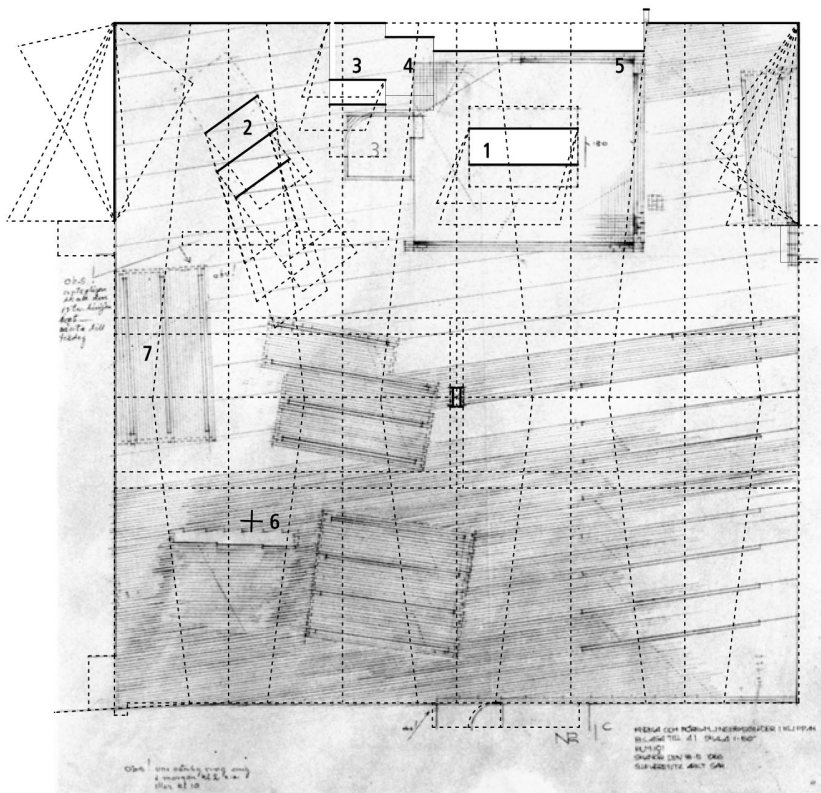


Figure 5. Base drawing of the model. Position of the pieces on the floor plan - May 1966. The vibrations of the elements when interacting with the object have been marked on the drawing.
Legend: 1. Altar, 2. Organ, 3. Pulpit (two positions), 4. Bishop's Seat, 5. Clergy Bank, 6. Baptismal Font, 7. Choir. Source: Drawing made by the author (2017) on the base plan of the project (1966).

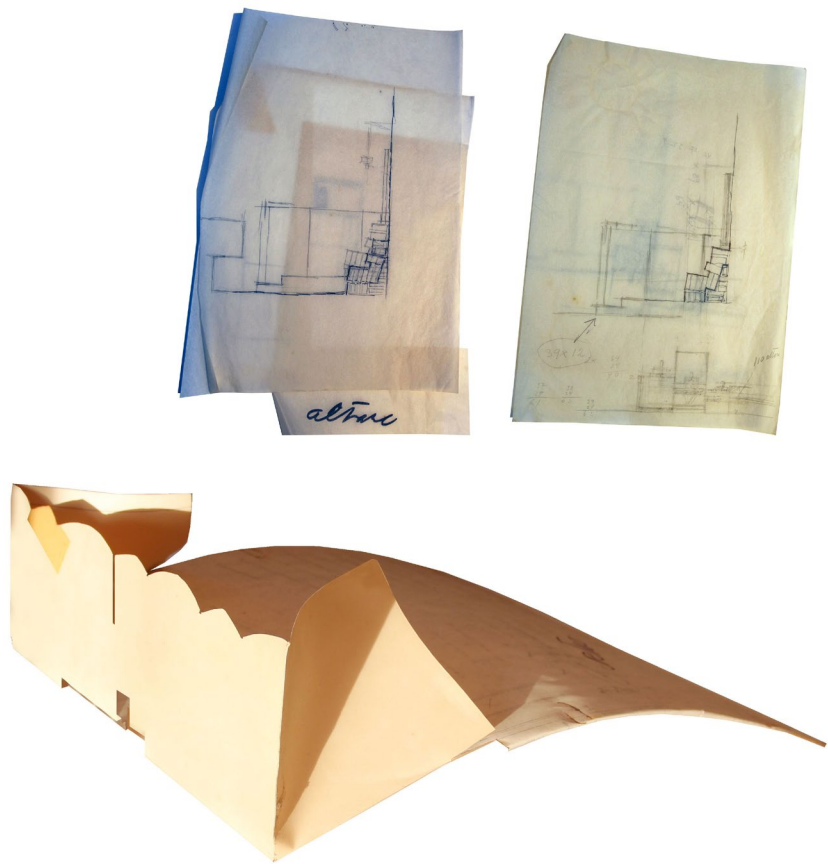
THE EXECUTION OF THE OBJECT: THE BASE DRAWING, CUTS, AND FOLDS

The altar and the organ are placed, and their position in the model coincides with that of the base plan and with the one that will finally be built. It is the pulpit, the bishop's seat, and the clergy's bench that plays around in the model flirting on the floor plan with the liturgical table. This deviation between the pieces is curious, this interference between the drawn and the shapes that finally unfold in the air when opening the model. In the drawing, the pulpit, which acts as a support, is placed next to the altar, on one side, glued to it, while the bishop's seat and the clergy's bench simply do not exist, they are not drawn. Finally, the three elements - pulpit, bishop, and clergy - form a single unit and are represented in their final position, displaced to the background of the scene, forming part of the cardboard's edge (Ahlin, 1987) (Figure 5).

In this way, this nice little theater is definitively formed by a cardboard base, on which the drawing of the floor plan is glued: three pieces of cardboard close the scene, three objects of the liturgy, the altar, and the organ that appear centered on it, and the pulpit, bishop's seat and clergy's bench set, which are moved to the background of the scene. The rest of the elements that are part of the floor plan drawing were not placed in the model because they were already executed on-site, although it would really have been fascinating to contemplate on the stage the deep crack opened in the knoll of the baptismal font, the slight elevation of the choir paving, or the gentle scratches on the sloping floor for the grouped placement of the wooden chairs.

DISCUSSION

Figure 6. Sanctuary of St. Peter's Church in Klippan. Rear of the model and drawings of its construction. Sigurd Lewerentz (1966). Source: Photographs taken by the author.



I would like to now draw the reader's attention to the beautiful quality of the object: its construction, the way it is thought out, and its cuts and folds. It is an amazing object to be seen, not only because of its formal appearance or the way its handling is proposed but fundamentally for the way in which it is thought out. There is no glue, no joints, what there is, is a piece of paper that is cut in a certain way so that, once folded, it can build the shapes that we want to see in space. There is no trick, there are no double backgrounds, what there is, is a simplification of the shapes so that when folded and unfolded their silhouettes are recognized: an organ is three membranes that vibrate in the air, an altar is its section, and a bench, a fold on the paper.

When observing the outer face of the model when it is upright and just gazing at its underside, we appreciate the cuts and traces that have been left on it by the objects that pose unfolded inside. Traces, remnants, and wounds, hidden secrets of some surfaces that build a way of looking at the object, a coming and going passing from inside to outside, from the visible to the hidden (Soriano, 1999) (Figure 6).

Thus, there is a discrepancy between the inner shape of the object, bent and folded to build a bench, a pulpit, and an altar, and the outer box that would wrap it if the master had also built its outer sheet. Between both planes there would be no solid, no mass, not even a

porous filling of amphorae and pebbles, between both planes there is an almighty air that circulates and makes the paper membranes resonate, a dense and dark air that connected to the ventilation system of the building emits, sometimes, a sweet and indescribable sound that moves and transports the visitor to the origins of architecture (Merleau-Ponty, 2010).

These are the last months of the project and the master is focused on solving the relative position between the objects of the liturgy, their form, and essence, on researching the procedure and the rite, recreating the altar as a liturgical table, as a monolithic stone on which the rest of the elements revolve, in what he himself called the principle of circumstantial. The inner sheet of the wall lacks the holes and fissures, and the delicate incisions that with epidermal surgery were made by the master in the brick are not in the model to increase the sound quality of the space and circulate the condensed air inside its walls. It is a pity that these micro-cracks that eliminate the echo and favor air circulation inside the sanctuary are not represented in the model, as well as the pattern of perpendicular channels that run along the back of the wall's inner sheet for the natural ventilation of the building (García, 2012).

In short, and as a closure to the open discussion in this article, this paper model is the last known work document prepared by the master. The plans ceased to be updated as of May 1966. However, Lewerentz continues to project with this object. This is the true value of this folded paper: an unpublished graphic document documenting the last changes made by the master in the execution of St. Peter's Church in Klippan, for many his masterpiece. This article, therefore, sheds light on a valuable material of a relevant figure in the Western history of twentieth-century architecture (Calvino, 2018), through a precious object, ingenious and complex in itself, used as a sheet of his thoughts and a storyteller of his work.

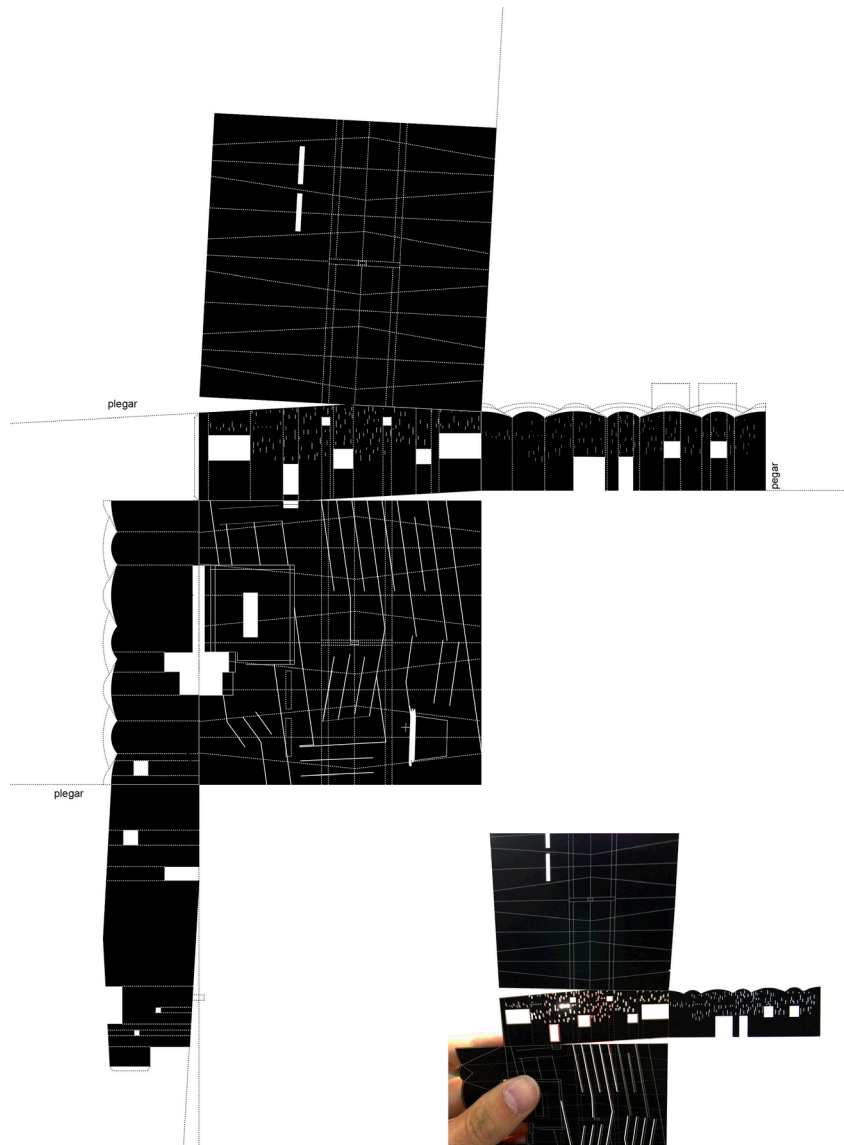
THE REPLICA OF THE OBJECT: BLACK CARDBOARD AND AIR

For this research, we have rebuilt the object with our own hands, completing the missing elements, and calling to the stage, the characters who were dismissed on that occasion (García, 2017). I propose to the reader a thinking game as a mental gymnastics exercise. It should be made of black cardboard and cutting tools, including a scalpel. It will be necessary to print the template that accompanies the text, think carefully about its cutting, and indicate its folding edges (Figure 7).

I propose, then, to start with the work: first, the floor, mark its slight inclination towards the altar, carefully fold that edge to make a bench, lift this tab where the organ is, and cut its cracks and scratches following the drawing proposed in the fold-out. Now we slightly lift and squeeze

RESULTS

Figure 7. Sanctuary of St. Peter's Church in Klippan. Template to recreate the replica of the object. Source: Prepared by the author.



the scalpel until we tear the cardboard: this is the baptismal font; here we bring the cutter with pressure to the very edge: this is the choir. I propose, then, to continue with the vertical planes, this is where the essence of the object is, to cut out the hollows, the windows, and the ventilation holes, the large and small ones, to also cut out the tiny niches for the missal. I ask for a certain concentration because it would be necessary to precisely mark the numerous micro-cracks practiced in the inner sheet of the enclosure; it is essential to spend the time needed on them because their result will be surprising. Finally, we would like to incorporate in the back of the cardboard the beautiful pattern of open perpendicular channels inside the brick factory: now it is time to lift our construction to check that the whole accurately assembles.

Let us look now at the drawing of its ceilings. Here the reader needs to trust us. We ask you to have confidence in our drawing, and that you stick to the cut in the silhouette of our fold-out. Look carefully at the drawing

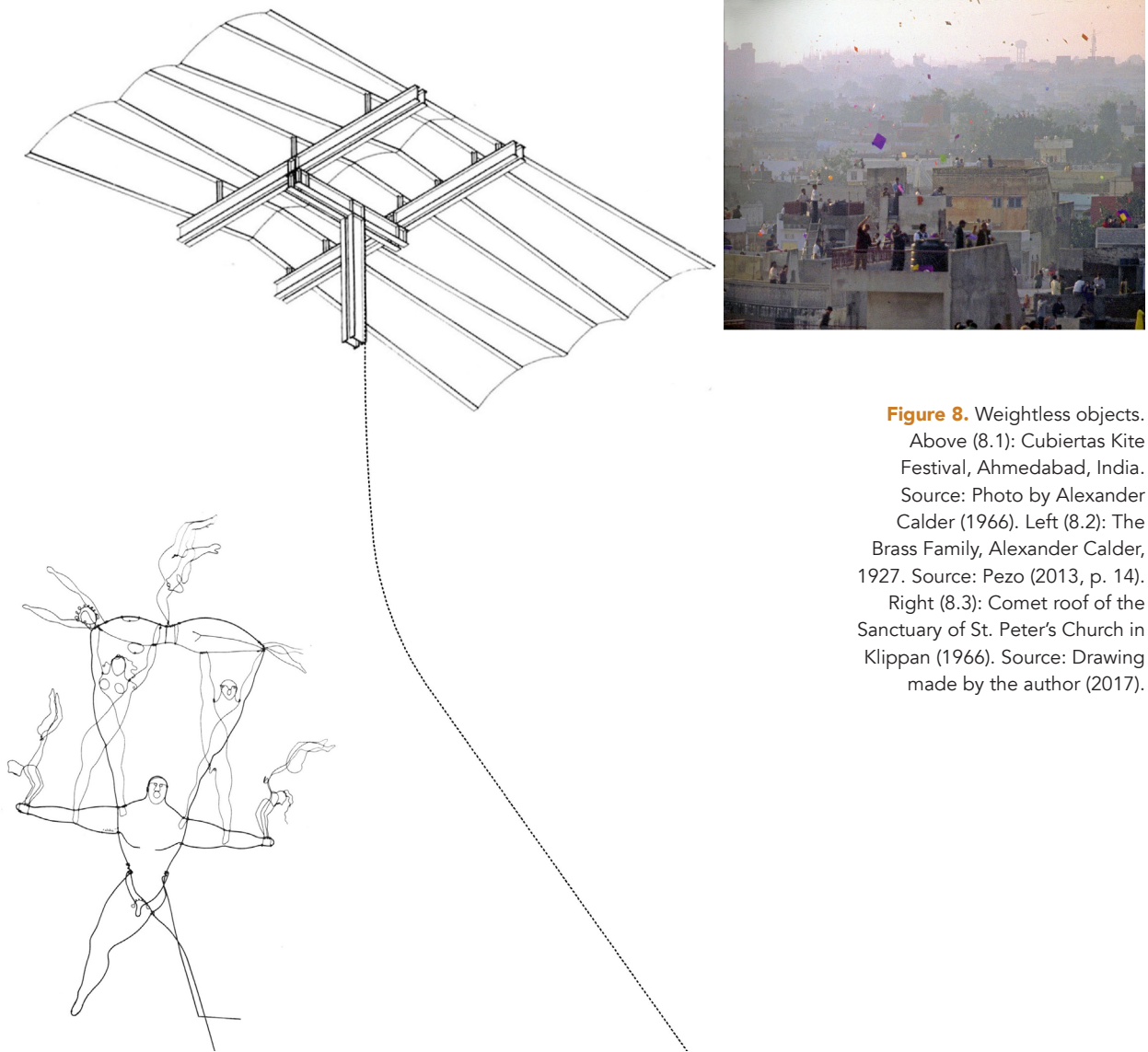


Figure 8. Weightless objects.

Above (8.1): Cubiertas Kite Festival, Ahmedabad, India.

Source: Photo by Alexander Calder (1966).

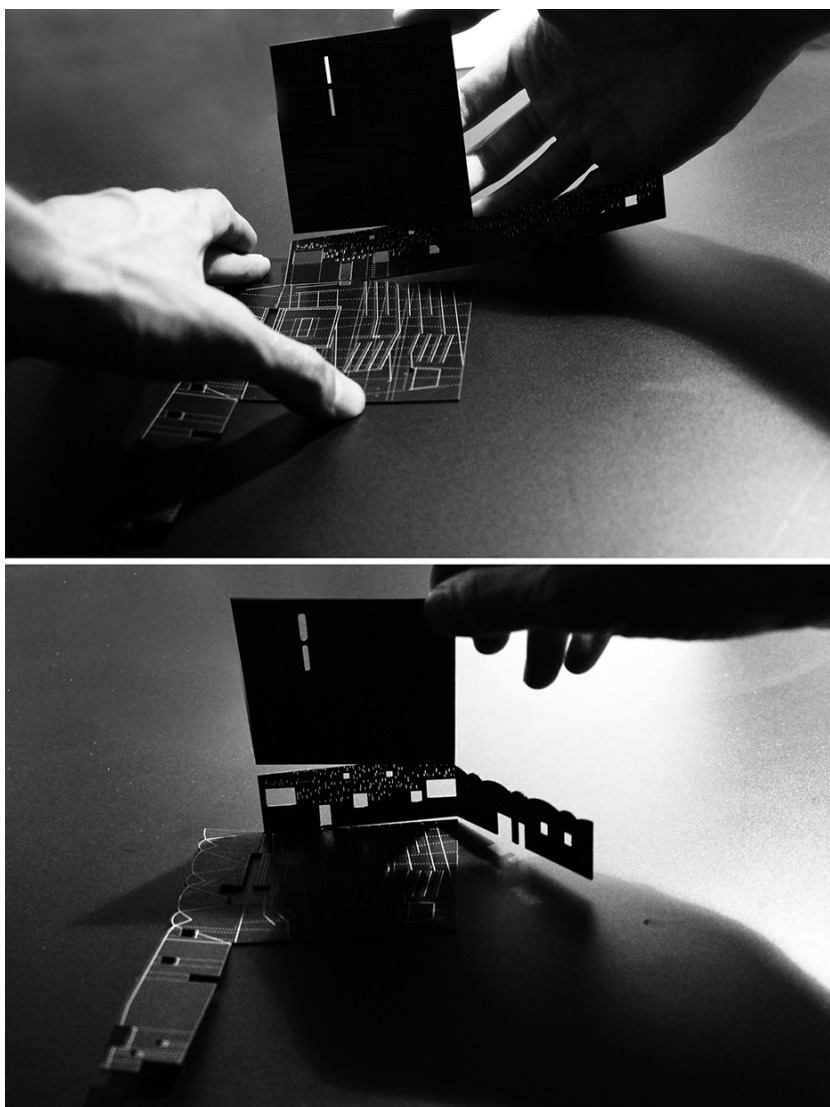
Left (8.2): The Brass Family, Alexander Calder, 1927. Source: Pezo (2013, p. 14).

Right (8.3): Comet roof of the Sanctuary of St. Peter's Church in Klippan (1966). Source: Drawing made by the author (2017).

of these ceilings. The drawing of the ceilings of Klippan's sanctuary reveals an idea of floating. The objects appear suspended in space, they remain like those figures of Calder, weightless, hanging from the ceiling. I like to think that all things hang from this ceiling, no matter how heavy they seem. In the words of Carlos Puente "ten vaults, ten commandments, and four half vaults that added to the others add up to twelve, twelve apostles" (2006, p. 53). Vaults are built just like the floor and the brick, water, and earth walls. Twelve metal struts hang from this ceiling, on which, in turn, two large beams and a huge pillar are attached in a kind of extreme balancing act. All this spatial contraption seems to hang impossibly from the darkness of space in a kind of Brass Family (Giménez, 2004).

Lewerentz reverses the idea of gravity by hanging from the ceiling as much as he needs to. Things do not seem to be resting on the ground but all of them amazingly float, no matter how heavy they may be. Below, the void; above we are surprised by a comet-roof that inflates with the entry

Figurae9. Sanctuary of St. Peter's Church in Klippan. The replica of the object, a black model made by the reader of this article. Source: Model made by the author.



of the air from the plain of Skane and that needs this metal contraption of beams and pillars as weight and lead to avoid blowing away. Calder was in India, he did not want to miss the kite festival that is held in Ahmedabad. He traveled accompanied by his wife and was invited by Gira Sarabhai. From that trip, Calder brought back nine sculptures that the American created there. I like to think that one is missing in the series, the tenth one remains in Klippan, a huge comet that floats in the sky, and that Lewerentz tied forever to this earth (Figure 8).

I suggest the reader, once the replica is finished, make it resonate, take a breath and cover the holes with their fingertips, and gently blow the model until it works. Let us turn our gaze to this paper fantasy and look at it under this idea. Klippan is then revealed beautifully as a paper box filled with air, air blown in from the walls of the space itself, through the grooves and incisions made in its walls. A wonderful wind instrument that inflates this space, inflates its vaults, tensing its delicate surfaces (Vogel, 2011) (Figure 9).

THE CONSTRUCTION OF THE ETHEREAL: THE SOUNDS OF KLIPPAN

We have seen Alexander Calder many times entertaining with his kites, absorbed in his study with his elongated windmills, all toys vulnerable to the slightest breeze. I like this photo of the artist where he appears in his studio photographed as a croupier, like a conjuring magician blowing something he has in his hands before making it disappear. His right hand tenderly holds a delicate object, a tiny wind toy that blows with extreme delicacy. I imagine the image an instant before, a few seconds before Calder holds his breath filling his lungs with as much air as possible, an air that in the photograph seems to be dosed gently to keep its flow uniform. Calder's breath is a prolonged and harmonious breath, sustained over time. Calder's lungs are like that almighty machine that we have had the opportunity to listen to in the Klippan subsoils (Figure 10).

I like to observe the work of the Master, Lewerentz, through the eyes of Alexander Calder. Both work by hand with the wind, in both the intention of making the air sensitive, is recognizable, of putting the senses into tension. Both remind us that every object has a tactile reality and that such a circumstance makes it impossible to disassociate the construction of perception. In Calder, it seems as if everything has come down from the ceiling, in Lewerentz only remains on the ground what did not have the ability to fly. There are architectures that are more than a built form, there are architectures that recreate themselves in their apparent uselessness, by putting our senses into tension, which contributes unpretentiously to better inhabit the world (Holl, 2011).

In Klippan, Lewerentz increases the size of the inventions devised in IDESTA to that of the building itself, turning the project into the design of a novel technical artifact, a kind of air machine built with metal lines. Lewerentz makes a fantastic wind instrument for St. Peter's Church in Klippan, an ingenious machine made of steel pipes and filaments, where hidden inside the sheets of the wall is one of the mysteries of this amazing place (Pallasmaa, 2006).

It is a work of extraordinary precision and skill that, at times, borders on goldsmithing and that makes us think that we are dealing with the work of a master goldsmith. This architecture breathes, sounds and the objects created in our research reveal their essence, serving as a conclusion to this article. We measure its filaments, mark its branches, and then extract them, draw them free, print them on paraffin wax, and mold them in methacrylate to study their geometry.

As a conclusion to this article, we propose to recreate a scale model of this instrument that confirms the starting hypothesis. The elaboration of the paraffin wax model by means of a 3D printer at the FabLab of the School of Architecture of Seville has allowed us to venture into the construction

CONCLUSIONS

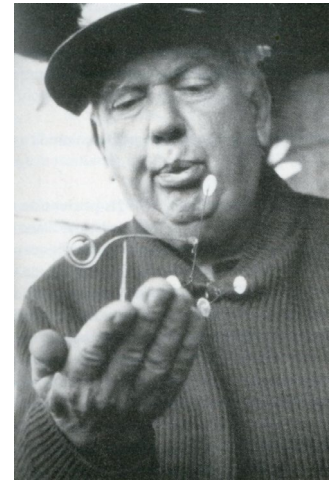


Figure 10. Breath. An instant held in the lungs of Alexander Calder. Portrait with a small mobile, the same year Lewerentz made his model (1966). Source: PEZO, M. 2013, p. 20.



Figure 11. The Church of St. Peter in Klippan (1966). Source: Methacrylate model made by the author (2017).

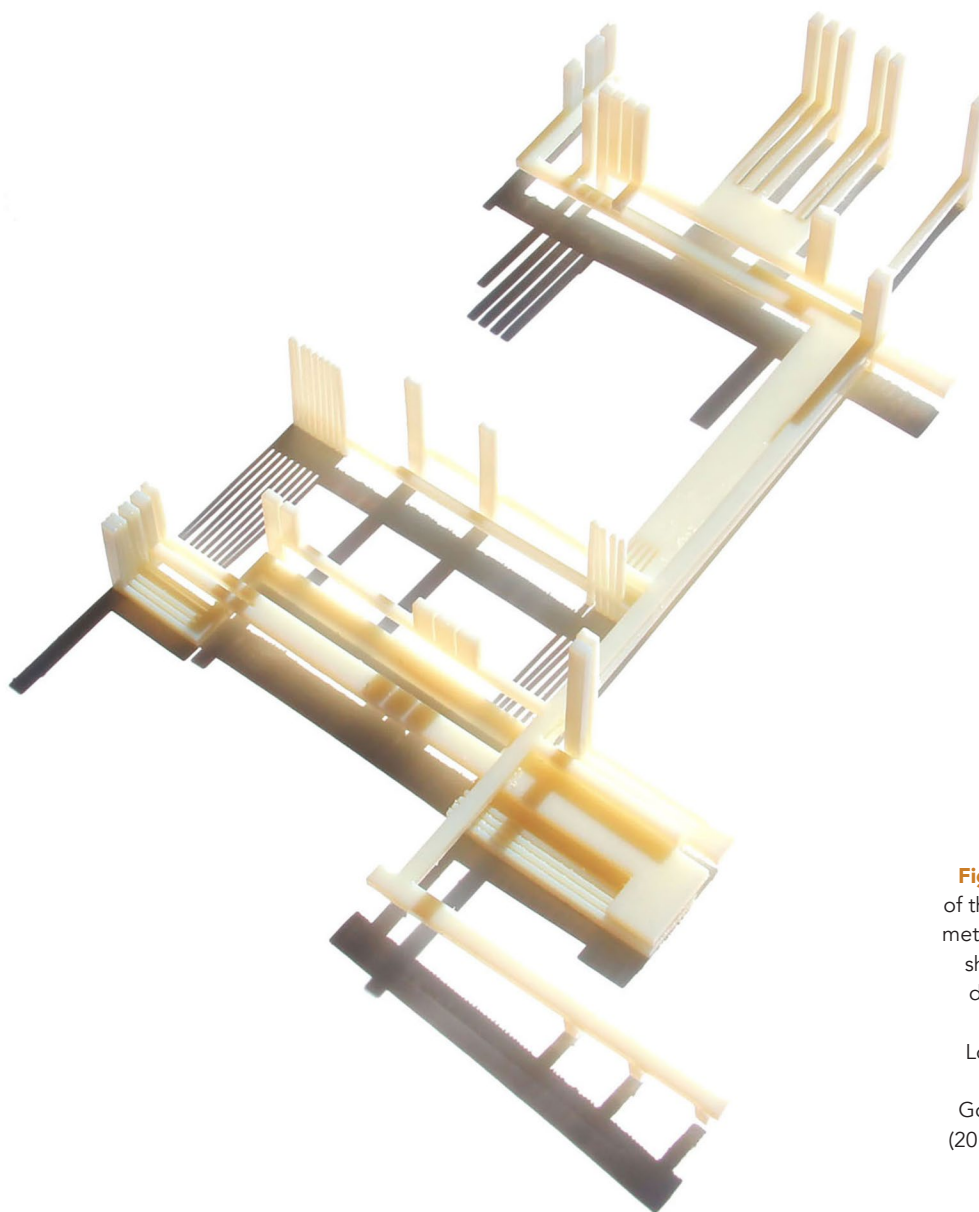


Figure 12. Paraffin wax model of the wind instrument. Material metamorphosis. QR code of the short film made by the author during the process of making the object, in MICROGER, Lost Wax Microfusion, Parque Empresarial Arte Sacro, Goldsmithing, nave 23, Seville (2017). Source: Model made by the author.

of the object in metal using the lost wax Microfusion technique. The master can never see it like this, as an isolated, artisanal, and artistic object. The materiality of the piece allowed us, with patience and a metalworker bit, to empty the inside of some filaments. When we bring the instrument closer to the mouth and blow gently, the sound takes us back to Klippan. The short film recorded during the process culminates with this kind of sound emanating from inside the matter (Figure 11).

This space waits patiently for a breath, remains dormant waiting in the dark for the air to breathe life into it. This story concludes with the scale recreation of this contraption: a wind still that captures, conducts, and concentrates the sounds of nature itself, the sounds of Klippan (Figure 12 and Figure 13).

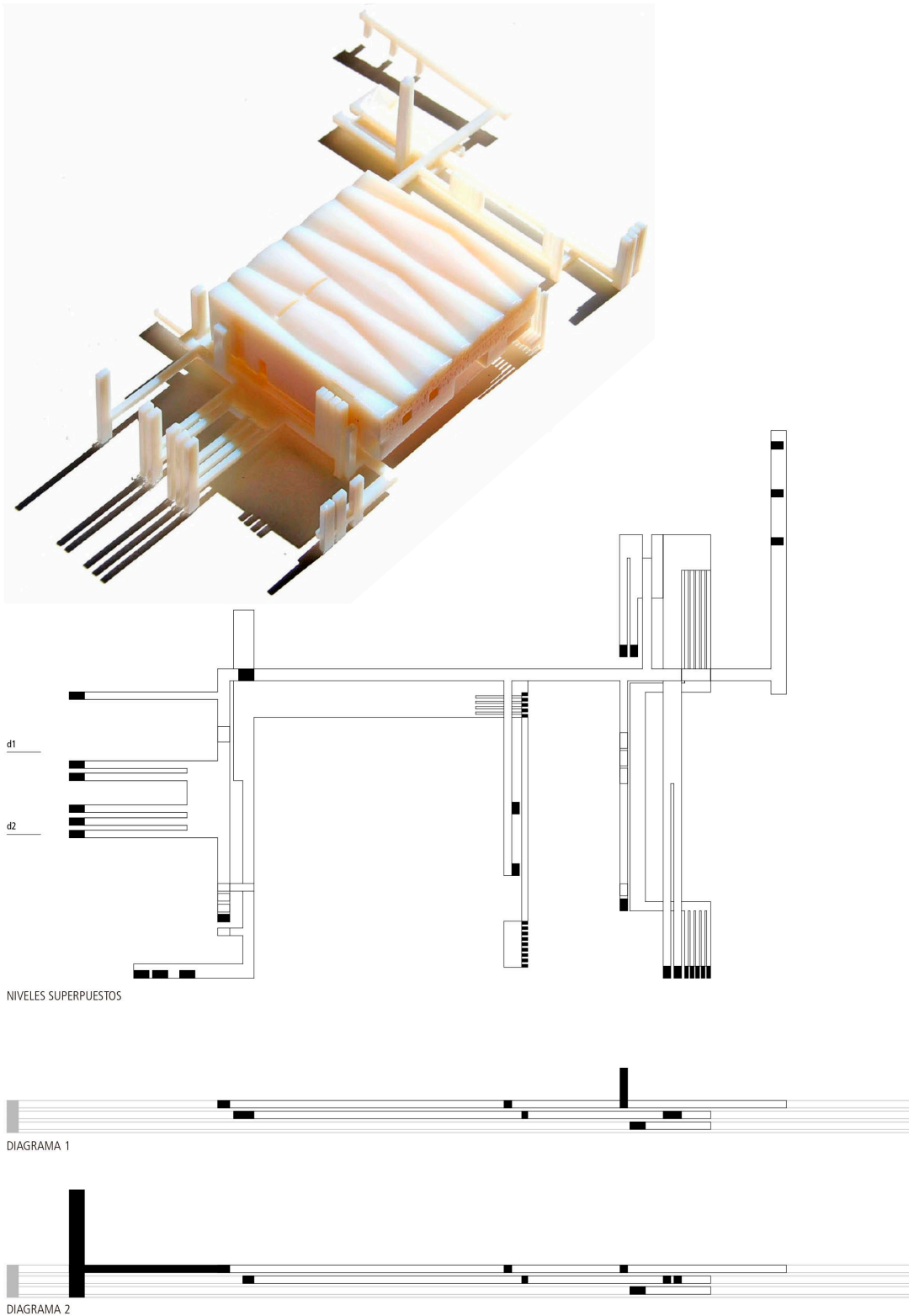


Figure 13. Wind Instrument, Klippan (1966). Sound levels. Source: Graphic fabulation and hypothesis of the author (2017).

BIBLIOGRAPHIC REFERENCES

AA.VV. (1987). *Sigurd Lewerentz. 1885-1975, Catálogo de la exposición*. Madrid: Dirección General para la Vivienda y Arquitectura, MOPU.

Ahlin, J. (1987). *Sigurd Lewerentz, architect, 1885-1975*. Estocolmo: Ed. Byggeförlaget.

Calvino, Í. (1972). *Las ciudades invisibles*. Madrid: Ed. Siruela.

Calvino, Í. (2018). *Seis propuestas para el próximo milenio*. Madrid: Ed. Siruela.

García, T. (2012). *St. Petri Kyrka: Väl värt et besök*. Klippan: Klippan kommun.

García, T. (2017). *Cartografías del espacio oculto. Laboratorio de experimentación arquitectónica*. Tesis Doctoral Inédita. Premio Extraordinario de Doctorado por la Universidad de Sevilla 2018. Sevilla: Universidad de Sevilla, Sevilla.

Giménez, C. (2004). *Escritos y declaraciones*, en AA.VV.: *Calder: La Gravedad y la Gracia*. Madrid: TF Editores.

Holl, S. (2011). *Cuestiones de Percepción. Fenomenología de la Arquitectura*. Barcelona: Gustavo Gili.

Merleau-Ponty, M. (2010). *Lo visible y lo invisible*. Buenos Aires: Nueva Visión.

Pallasmaa, J. (2006). *Los ojos de la piel*. Barcelona: Gustavo Gili.

Parra-Bañón, J.J. (2020). *Criptografía de la Arquitectura*. Reseña bibliográfica: García García, Tomás. 2018. *Cartografías del espacio oculto*. Welbeck Estate en Inglaterra y otros espacios. Sevilla: Universidad de Sevilla-IUACC. *Proyecto, Progreso, Arquitectura*, (22), 14-15.

Pezo, M. (2013). *La máquina inútil*. Recuperado de: http://pezo.cl/wp-content/uploads/2013/12/0706_PEZO_LA-MAQUINA-INUTIL.pdf

Puente, C. (2006). *Koan*, en AA.VV.: *Otras vías, homenaje a Lewerentz*. Madrid: Colegio Oficial de Arquitectos Castilla y León.

Soriano, F. (1999). *Las texturas de la otra cara. Fisuras de la Cultura Contemporánea: revista de arquitectura de bolsillo*, (7), 34-38.

Vogel, P. (2011). *The Sound of shadows* [DVD]. Recuperado de: <http://vimeo.com/19780802>.

Our sincere thanks to all those people who remotely made this research possible, Anika Tengstrand, Research Coordinator at the Stockholm Architecture Museum. Eva Barrios and Julián Diez, from the Spanish Embassy in Sweden. Catharin Skoog, Magnus Lundh, and Joakim Vall, from the Swedish Embassy in Spain. José Ignacio Linazasoro, architect, and José Acosta, Spanish Consul in Lund. Eivor of the Cave, Klippans Turistbyå, and Olof Sandström, Parish Priest of St. Petri Kyrka. Sven Arlemo, Klippan's custodian.

ACKNOWLEDGMENTS