The visual materiality and haptic visuality of brick and its syntax through the critical comparison of two works by Mies van der Rohe and Sigurd Lewerentz.

Serafina Amoroso,
Carlos L. Marcos Alba and
Marìa Pura Moreno Moreno

DOI: https://doi.org/10.20868/cpa.2024.14.5326

Introduction

Brick is an ancient and multifaceted material that, like stone and wood, has always maintained a contemporary appearance thanks to its ability to adapt to the conditions to which it has been subjected throughout the history of architecture[1]. As Pallasmaa[2] points out, 'natural' materials incorporate the dimension of time expressing their age and history through the their aging caused by their decay; a circumstance that differentiates them from today's artificial materials that deliberately crave a sort of timeless perfection. Something that does not happen with ceramic materials that, without ceasing to be artificial, also ages nobly. These materials as old as brick collaborate with the central themes of modern architecture such as the yearning for weightlessness and transparency. In fact, their own nature (multiple formats or structural possibilities) provides them a great potential to produce spaces where the boundaries between nature-artifice or interior-exterior are blurred, favouring constant architectural innovation, and the search for new experiences in space, time or place, in which all the senses are involved in a haptic way.

An architect of modernity for whom brick might seem a material of lesser importance is Mies Van der Rohe. This is probably why neither he nor his biographers paid much attention to the two houses (Lange and Esters Houses) built in face brick in Krefeld between 1927 and 1930[3]. This hypothesis is corroborated by the fact that in a public conversation that took place at the Architectural Association in 1959, Mies himself declared how much he would have wished to introduce more generous glazing in the Esters House had the client allowed it; admitting, almost guiltily and justifying the result, his concessions to the client's demands that modified his initial design [Fig. 01][4].

In this regard, it is interesting to echo the coherence that, according to Kenneth Frampton, can be seen in both houses, participating in the tectonic research of an architect who does not remorse traditional construction methods to explore spatial concepts typical of the avant-garde[5]. It is also worth contrasting this opinion of the critic-historian with those of Kleinman and Van Duzer, who affirm the opposite, precisely because the two houses exhibit, according to them, structural acrobatics in the service of conventional spatial concepts[6].

Most critics, more in line with Frampton's thesis, consider both Lange and Esters Houses alike, as a transition period between the constructive logic of brick (and its traditional use in load-bearing walls) and the emancipation of the architectural topology sponsored by the modern canon, characterized by the dismemberment of construction into skeleton and skin. This position is aligned with Cervilla's thesis when he introduces the concept of progressive "de-concealment of steel"[7], understanding it as a key in the understanding of the houses built by Mies in the first two decades of the twentieth century, where he underlines how load-bearing brick walls gradually give way to different systems. A thesis that abounds in pointing out Mies's awareness about the fact that new materials might entail fundamental changes that could be achieved both in the conception of space and within the formal sphere. In this sense, two details of the Wolf House (1926) and the Krefeld Houses (*Haus Lange* and *Haus Esters*) are especially significant: in the first, the concealment to the eye of the edge beam that supports the cantilever of the white slab of the terrace[8]; in the second, the slender steel column with a square section [Fig. 02]. For the first time, the column that supports the white cantilevered slabs of the porches that serve as an access to the garden in both projects is left completely visible, and set back from its edges: painted black, this element fades into the shadows, but even so, appears in the background, concealing itself, giving prominence to the white slab, which seems to float.

At the onset of this transition, the compositional change was not accompanied by a modification of the structural system. This is evident in the Wolf House (1927), in which Mies proposes a new modernity combining intuitions and more abstract spatial expressions with conventional load-bearing walls. In fact, despite achieving a certain spatial continuity — diagonally interconnecting three rectangular volumes that intersect— the Wolf House is a "resounding brick box"[9], organized thanks to a steel substructure that allows the realisation of the lintels over the openings while they remain deliberately hidden from the eye, by the brick that runs over it "as if by magic"[10].

In conclusion, in the Lange house, Mies works using an apparently conventional vocabulary that exploits, to the point of exhaustion, the plastic capacities to explore new spatial concepts. The project is configured as a reflection on the syntactical possibilities of brick walls.

Paraphrasing Pallasmaa[11], we can say that what makes an architectural project interesting is its ability to combine tensions and opposing or even contradictory allusions. Taking this as a premise, the Finnish architect affirms that Mies' architecture, despite being able to be appreciated from a classic frontal perspective, expands and enriches the paradigm of visual perception over time thanks to its sense of order, weight, structure, detail. And, when he uses ceramic material, also to its modular precision and adaptability. The materiality of the brick walls gives a certain appearance of solidity and helps to place his architecture within the context of the domestic architecture of its time.

Furthermore, the contrast with the nakedness of the continuous cladding on the inner layer of the brick walls invites a well-differentiated perception of the rough and discretized texture of the ceramic material on the outside, and the smooth and neutral panels on the inside (as a background against which the works of art in the client's collection could be better cut out) [Fig. 03].

We now turn to the Church of *Sankt Petri* by Swedish architect Sigurd Lewerentz, built in Klippan between 1963 and 1966. A project in which the Swedish architect acts, apparently, in the same wake as the young Mies, using the same material. The aim of this text is to provide a reading of this church from an intentionally limited perspective, that of the use of brick, trusting that this view and the dialectic raised with Mies' Lange House may contribute to trigger new reflections and possible interpretations from the point of view of a technological evolution of brickwork. This building has been considered by modern historiography as one of Lewerentz's masterpieces. Of it, as the rest of his work, multiple interpretations have been offered that insist on its complexity. According to Linazasoro, the church pertains to his late mannerism —or to his *sublime senectudine and ultimissima verba*— that is, to a moment in which the architect works in an unprejudiced and untroubled manner in a profession that he already masters, reaching the climax of both the defiance of any type of order or hierarchy and a marked drama, not devoid of mysticism[12].

As in the case of Alvar Aalto's work, Lewerentz also came to modernity after an exordium characterised by the creation of a rather neoclassicist production reinterpreted through a certain understanding of architecture from an urban scale. A perspective that, according to Linazasoro[13], comes from the influence exerted by his professor Ragnar Östberge in his formative years at the Klara School. An influence that already appears in the project for the Chapel of the Resurrection (1925), where his predisposition to understanding architecture as a system of fragments, which offer the idea of a coherent 'whole', is manifested, despite them having their self-autonomy and identity. This is evident in the church at Klippan, where Lewerentz uses a compositional layout based on the golden section in the plan, and where the entire complex has a complexity that can only be understood by taking into

account that a large part of its construction was dealt with on site[14] through the study of each detail, achieving a unique technical-constructive essentiality. This predilection for the precision of the profession comes from an experimental approach and continuous innovation with which Lewerentz reinvented himself in each project. An attitude that refers to the influence of his professors Var Tengbom and Carl Bergsten, in that institution where, together with his colleague Gunnard Asplund, he shared an apprenticeship characterized by "moving away from the imaginary nurtured on drawing boards, and instead, starting with the realities of construction: materials, projects and plans"[15].

Lewerentz's character fits perfectly into the framework of a Nordic modernity where the reception of new architectural principles is tempered by its connection with the landscape and with traditional techniques, based on craftsman methods of production advanced in the daily practice of the profession. In this sense, he can be considered an architect with material awareness, a quality typically distinctive of craftsmen in the words of Richard Sennet[16].

Although the Lange House and the Church of *Sankt Petri* are very different projects, both in programme and scale, they are linked by many elements that establish a dialogue allowing us to deduce a shared artisanal attitude towards brickwork and its constructive systems. Both projects constitute, each with their specificities, alternative responses to the imperatives of modernity, which we try to unravel through comparative criticism.

The brick: material, module and bonding

In 1965, under Mies's supervision, Werner Blaser carefully sketched the detailed floor plans of the 'Brick Country House' [Fig. 04], which Mies had designed in charcoal in 1923[17]. To give rigour and legitimacy to the project, in terms of methodology and tectonics of construction, Blaser indicated the thickness of the walls and the layout of the brickwork as if it were a detail for its execution, although it was never built. This level of detail was hardly achieved in the drawings of the Lange House, where the brick is the unit of measurement for everything[18]. The drawings that best document how brick was used in this project are those of the façade, at a scale of 1:20, where we see how, using brick as a module, the two-dimensional compositional framework of the 'surface' for the elevation was drawn[19]. However, the combination of this rigorous system of geometric rules and the use of brick gave Mies the possibility of converting the 'error' —or, rather, the lack of absolute control over the execution of a work in which artisanal produced bricks were used— into a semantic enrichment of the general sense of the project[20]: the conception changes, despite being load-bearing walls, when attention is focused on their composition in elevation. The walls, in short, are treated as if they were a simple covering or an exterior skin. The use of brick in the Lange House, therefore, is more linked to the two-dimensional nature of the wall than to its tectonic honesty: its materiality moves from the tactile (and massive) to the visual.

This approach is contrasted with that of the Church of *Sankt Petri* in Klippan [Fig. 05], where brick is once again the protagonist, but under different premises. Lewerentz developed his 'sensitivity' towards materials very early on, thanks to his familiarity with his father's glass factory, where he worked several summers as an assistant. Perhaps it was precisely there that he learned that detail in the design process acquires a certain semantic density and intensity, transfiguring the material into something that transcends its own physical conditions, or the fact that formal issues are closely linked to constructive ones; that is to say, that, in architecture, aesthetics are founded on technique. Always seeking essentiality, Lewerentz invents new constructive possibilities:

"Essentialising construction in a correct understanding of the technology available, controlling the entire construction from the design phase to its execution, taking care of the construction stone by stone, designing the space from the material taking care of the continuity between building and landscape, are some aspects that stand out in his work"[21].

In the church of *Sankt Petri*, Lewerentz exploits the constructive and plastic possibilities of brick, which derive from the internal logic of the construction system based on the aggregation of units. Brick construction does not proceed by moulding as is the case with concrete, nor by cutting, as is the case with stone or wood. Nor is Lewerentz interested in the 'modular' condition offered by brick, since the mortar of the joints plays an important role for him in subordinating the construction material to the metric of the project through the joints, which do not have to be strictly regular in thickness. The mortar is not simply a binder, but rather makes the ceramic material adapt to the geometry of space. On the other hand, the presence of the joints does not diminish, but rather enhances the single material character of the building. In Klippan, walls, vaults[22], and furniture are entirely made of black brick (of the clinker type). The presence of brick in walls and vaults also confers a certain domestic quality to a space that becomes "welcoming" thanks to its proportions and is endowed with an anti-monumentalism that operates on all the senses. As the brick historian Alec Clifton-Taylor points out, architectural elements made of brick are like a sum of small gestures, which imply, by their own nature, a certain intimacy and human warmth. To a certain extent, absent in stone architecture, producing a synthesis between the visual, the tactile, the haptic, related to a material whose rigging and arrangement around corners, nooks and other encounters is related to a mason craftmanship, considering the hand as an indelibly human work tool[23].

Thus, for Lewerentz, brick is a material that moves from the visual to the haptic; its texture, its joints on both sides achieve a kind of haptic visuality determined by a bare and desquamated materiality[24]. The brick in Klippan is never cut, avoiding altering its original dimension: this self-imposed restriction for the sake of sincerity in the use of the material becomes one of the radical points of the project that show the maturity of the architect.

Technical gymnastics and structural acrobatics: windows and corners

At the structural level, there are certain syntactical ambiguities in the Lange House, since not all the typical features of buildings made with load-bearing walls are taken into account, especially with regard to the generosity of the openings. Thus, the vertical rhythms characteristic to brick wall architecture are challenged by the generous dimensions of the openings, nothing but a compromise between the aspirations for a thoroughly glazed architecture, which Mies dreamt of, and the concessions that he would eventually have to make in response to the client's demands. Its load-bearing walls are actually configured as a hybrid structure in which the steel substructure is hidden [Fig. 06], just as in the Wolf House: a fact evidenced when observing how the lintels were hidden in the wall. Probably the reason, among others, why Kleinman and Van Duzer use the expression "*structural acrobatics*"[25]. This is a wall that in the two houses in Krefeld appears to be more like a skin rather than a massive element, characteristic of a load-bearing wall system: the windows placed almost on the exterior face of the wall, concealing its real thickness, lighten it visually, making the treatment of the brickwork more plastic than expressive[26]. Although it remains hidden, the steel begins to be exposed in the houses in Krefeld: it is found "in the mullions of the large torn openings, although also painted in a dark colour, and camouflaged among the window frames. And we find it partially exposed forming the lintels of the windows"[27] [Fig. 07], something that suggests the initial constructive detail skill limitations at the onset of Mies' professional career, carefully refined years later as a benchmark of his work.

Thus, in the Lange House a structural paradox is produced, which challenges the ordinary perception of the consequences of the laws of gravity. With regard to the windows, as Ricardo Meri de la Maza and Clara E. Mejía Vallejo[28] have pointed out, the Lange House as the Esters House are designed to interact with the landscape; they therefore become devices of vision [Fig. 08]. Especially in the corners set back towards the garden, the glass panes of the windows act as filters that mediate the relationship between the landscape and the building according to diagonal perspectives and, at the same time, due to their own configuration, generate multiple points of view that frame not only the exterior but also the interior.

In contrast to these 'Miesian' strategies, Lewerentz in Klippan solves the problem of the windows [Fig. 09] in the following way:

"First a brick hole is formed, a pure rectangular void surrounded by a pure brick edge. A thick layer of mastic is then applied to the outside face of the hole, and a sealed double-glazing unit a few centimetres larger is pressed into place, the brackets screwed on to retain it. From inside there seems hardly a window at all, for the glass remains invisible and frameless, simply a brick hole in a thick brick wall. On the outside the precision and fragility of the glass contrast poignantly with the brutality of the brickwork"[29].

This strategy confirms Fernández Elorza's thesis that in Lewerentz's works, general project criteria are subordinated to small-scale decisions in detail, however involving great repercussions regarding its visual appearance, which force us to fine-tune our critical gaze in search of those elements that are truly relevant[30]. The placement of glazing on the exterior wall without a window frame, directly on the sealant, held exclusively by the meagre staples [Fig. 10], invisible from the inside, produces the magical effect of an opening on the wall to allow the light in seemingly with no window at all. It is this type of approach to detail, so carefully and simply presented, where Lewerentz's mastery stands out for the phenomenology to which he appeals, through the contrast of the roughness of the brick and the refinement in the constructive detail of the glazing without apparent carpentry.

It is worth highlighting the corner theme and the fact that the bricks are not cut into fragments or sub-modules. In this way, the brick itself designs the corner, thanks to the generous mortar joints, which refer to the characteristic rigging of Arabic architecture: the constructive solutions of the corners give the whole complex the typical character of *non finito*.

Conclusions

With brick as the guiding thread, this text proposes a series of reflections on its substantive application in two works by Mies and Lewerentz, proving how physical material manages to respond to contents of another order, more intellectual and abstract, but as real and tangible as the architectural spaces that are supported by them, qualify them and through which they find their expression.

In the Lange House, Mies combines the rational with the aesthetic, the 'structural' with the 'apparent', fusing conception and technique in a sort of gravitational constructed illusion, arriving at a coherent but poetic solution[31]. This longing for an architecture that transcends the simple manifestation of technical reasons, to arrive at artistic expression, even leads him to disregard structural and constructive honesty which, in his mature period, would however be one of the most characteristic features of his production[32]. This syntactical ambiguity of the two-dimensional pattern allows him to convert load-bearing brick walls into a 'skin' that folds back round the corners, so that the wall openings activate a spatial perceptual device that multiplies the view, especially due to the serialisation of generous openings in the different successive wall corners of the perimeter, thus establishing an interesting dialogue between interior and exterior. These anticipate the characteristic dilution of the enclosure of his mature stage with the curtain walls and the floor-to-ceiling glazing in domestic architecture.

In contrast, Lewerentz manages to produce a space-time density with symbolic meanings through the expressiveness of the construction and its geometry, using the process itself as a semantic element[33]. The virtual absence of frames in the wall openings in the Church of *Sankt Petri* produces tangent light, thus enhancing the brickwork texture. *"With light, Lewerentz managed to model the texture of the material"*[34], and with the sparse sobriety of his later works he approaches the language of poetry. A building by Lewerentz, taking refuge *"in archaism and in the primordial, [...] demonstrates that architecture has an artistic condition and that this is a necessary requirement for society"*[35]. The light in *Sankt Petri* appears as a powerful element that penetrates through the narrow openings into the interior, suggesting an almost mystical dimension of space that refers to the friendly dialogue between the architect and the theologian Lars Ridderstedt[36]. This is the light that Colin St John Wilson referred to, which does not illuminate, but rather takes on figurative qualities in the darkness: space emerges in response to an exploration that appeals to all the senses[37]. Emphasizing a phenomenological approach to architecture, the unreal sensation of a glazing absence on the wall openings is achieved: these meagre openings only allow the light to gently pass through, generating a spatial tension inside.

Both architects designed these works according to their own understanding of architecture, of space, of the world, in relation to the materiality of brick, which they use in very different ways: Mies through a 'visual materiality' and Lewerentz through a 'haptic visuality'. The brick walls of the two houses in Krefeld are abstract planes that define a geometry; in contrast, the walls and other elements built-in brickwork in Klippan invite to be caressed both by sight and touch. Their response is always diverse and 'operational' (that is, it varies depending on the relative conditions and demands according to each circumstance): in short, it is alive and open to invention.

1. Beatriz Matos y Alberto Martínez Castillo, "La cerámica y los maestros modernos. 5+1" en *Ensayos sobre arquitectura y cerámica*, ed. Jesús Aparicio Guisando (Madrid: Mairea Libros, 2011), 7-23.
2. Juhani Pallasmaa, *The Eyes of the skin. Architecture and senses* (Hoboken, NJ: Wiley, 2005), 31-32.
3. Philip C. Johnson, in the catalogue published in 1947 on the occasion of the famous retrospective exhibition he curated on the work of Mies van der Rohe at the Museum of Modern Art in New York, publishes only one image of the Lange house, describing it in the captions as "*badly damaged*". See: Philip C. Johnson, *Mies van der Rohe* (New York: The Museum of Modern Art, 1947), 40. The first person to speak in a more systematic way about Mies's houses in Krefeld was Wolf Tegethoff in 1981, on the occasion of the first exhibition dedicated to his country houses after the creation of his archive at the Museum of Modern Art. Franz Schulze suggests, clearly referring to Mies's own statements that have just been discussed in the text, that if the Lange house project had actually been carried out following the architect's initial renderings, characterised by large glazed surfaces on the elevations facing the garden, it would have been more 'impactful'. See: Kent Kleinman y Leslie Van Duzer. *Mies van der Rohe, The Krefeld Villas* (New York: Princeton Architectural Press, 2005), 12-13, and the few pages - including the photos - dedicated to the houses in Franz Schulze, *Mies van der Rohe: A Critical Biography* (Chicago: University of Chicago Press, 1985), 145-147 y 194.
4. According to his biographers, in order to meet the client's needs, Mies was forced to give up on creating an architecture that was generously open to the outside, as shown in his first sketches. See in: Mies van der Rohe. Houses. *Revista 2G*, no. 48/49 (August 2009), 98-99.
5. Kenneth Frampton, "Mies van der Rohe: Avant-Garde and Continuity" in *Studies in Tectonic Culture: The Poetics of Construction in Nineteenth and Twentieth Century Architecture,* eds. Kenneth Frampton, John Cava, y Graham Foundation for Advanced Studies in the Fine Arts (Cambridge, Mass.: MIT Press, 1995), 163–67.
6. Kent Kleinman y Leslie Van Duzer, *Mies van der Rohe. The Krefeld villas* (Princeton Architectural Press, New York, 2005), 17.
7. Alejandro Cervilla, "La evolución de la imagen de la estructura en las viviendas de Mies van der Rohe," *ZARCH 11* (Diciembre 2018), 124-125. DOI: http://doi.org/10.26754/ojs_zarch/zarch.2018113211.
8. The beam, looking towards the house from the river, 'disappears' thanks to its setback from the main elevation and the shadow cast by the slab itself.
9. Cervilla, Op. Cit. 124. As Cervilla points out, it is even the same brickwork used in the Mosler house, built three years earlier: a Gothic brickwork whose courses are arranged alternating headers and stretchers.
10. Ibid.
11. Pallasmaa, Op. Cit. 29.
12. José Ignacio Linazasoro, *Las paradojas de Sigurd Lewerentz. Del Clasicismo al estilo tardío* (Madrid: Ediciones Asimétricas, 2024), 8 y 45.
13. Ibid., 73.
14. Ibid., 51.
15. Ingrid Campo-Ruiz. "¿Menos o más? La construcción del kiosko de Lewerentz en el cementerio de Malmo," *Proyecto, progreso y Arquitectura*, no. 8 (2013), 139. Original text in Spanish: "alejarse del imaginario cultivado en tableros de dibujo, y en su lugar, comenzar con las realidades de la construcción: materiales, proyectos y planos". Translation by authors.
16. Richard Sennet, *El artesano* (Barcelona: Editorial Anagrama, 2009).
17. At that moment, an immediate comparison was made between this plan and Theo Van Doesburg's neoplastic composition 'Rhythm of a Russian Dance', of which the house seemed an architectural transposition.
18. Mathematical formulas to express the size of parts are often found in drawings, very similar to those shown below: 5 K+4 F =56.5 cm, where K represents the brick or clinker laid in rows, which measures 10.5 cm, and F represents the size of the mortar joint, which measures 1 cm. In fact, there were two modules in the Lange House: type 1 (5x10.5x22 cm), i.e. the intact standard-sized brick; and type 2 (5x10.5x16.25 cm), i.e. the standard-sized brick cut to fit the design of the façade in correspondence with the windows (three-quarters of a brick). See in this regard: Kleinman and Van Duzer, Op. Cit. 66-68.
19. It is worth emphasizing that this is a use of brick as a defining element of the façades, that is, of the exterior faces of the walls, since the interior cladding is always plastered, eliminating all traces of its ceramic nature, sectioning, modulation, etc.

20. An interesting fact, which can be verified by reading an exchange of letters between Mies and Mr. Lange, is that the architect was not always present at the construction site to verify that all his instructions were precisely carried out. The successful execution of the work must therefore have been achieved above all due to the presence of such a system of general measurements and proportions, mentioned above, which managed to guarantee a certain level of control in the execution.
21. José Antonio Quintanilla Chala, "Sigurd Lewerentz 1885-1975. Una transición nórdica a la Arquitectura Moderna: Desplazamiento gradual hacia el dominio de lo táctil" (PhD Thesis, UPC, Escola Tècnica Superior d'Arquitectura de Barcelona, 2004), 63. Original text in Spanish: "Esencializar la construcción en una correcta comprensión de la tecnología de que se dispone, controlar el total de la construcción desde la fase de proyecto hasta su ejecución, cuidar la construcción piedra a piedra, diseñar el espacio desde el material cuidando la continuidad entre edificio y paisaje, son algunos aspectos que destacan de su trabajo". Translation by authors.
22. This configuration gives the church a 'cave' character, that is, an enveloping spatiality whose boundaries are physically imperceptible due to the lighting conditions: Only four small windows illuminate its interior; at the same time, two skylights indicate with a weak ray of light the priest's path to the altar
23. *"A brick wall is [...] essentially an aggregation of small effects. This implies a human and intimate quality not present to the same extent in stone architecture"*, in: Alec Clifton-Taylor, *The Pattern of English Building* (Londres: Faber and Faber, 1972), 242.
24. Linazasoro, Op. Cit. 81.
25. According to Kleinman and Van Duzer, Op. Cit. 90, in the Lange House, there are up to 16 columns hidden in the walls.
26. Cervilla, Op. Cit. 125.
27. Ibid., 126. Original text in Spanish: "en los parteluces de los grandes huecos rasgados, aunque también pintado en color oscuro, y camuflado entre las carpinterías de las ventanas. Y lo encontramos parcialmente a la vista conformando los dinteles de las ventanas". Translation by authors.
28. Ricardo Meri de la Maza y Clara E. Mejía Vallejo, "Las casas de Mies van der Rohe: del espacio continuo al paisaje enmarcado," en *Arquitectura y paisaje: transferencias históricas, retos contemporáneos* (Volumen I), coord. David Arredondo Garrido *et al.* (Madrid: Abada Editores, 2022), 351-362.
29. Peter Blundell Jones, "Sigurd Lewerentz: Church of St Peter, Klippan, 1963-66," *Architectural Research Quarterly* vol. 6, no. 2, (June 2002), 159. DOI: 10.1017/S1359135502001628:
30. Héctor Fernández Elorza, "Asplund versus Lewerentz" (Ph.D Thesis, UPM, 2014), 495.
31. Cervilla, Op. Cit. 136.
32. "Similarly, Mies rendered visible the material conditions of technology, industry, and labor by rewriting or reworking them and making of them an 'ornamental' pattern that would redeem technical structure by transforming the calculus of means and ends into the evocation of an end in itself", in: Detlef Mertins, "Mies's Skyscraper 'Project': Toward the Redemption of Technical Structure," in *The Presence of Mies*, ed. Detlef Mertins (New York: Princeton Architectural Press, 1994), 66.
33. Gennaro Postiglione, "La chiesa di S. Pietro a Klippan, Svezia, 1963-1966," *Costruire in Laterizio*, no. 67 (enero-febrero 1999), 47.
34. Janne Ahlin, "Sigurd Lewerentz." en *Sigurd Lewerentz 1885-1975*, Catálogo de la exposición, ed. AA. VV. (Madrid: MOPU Ministerio de Obra Pública y Urbanismo, Secretaría General Técnica - Centro de Publicaciones, 1987), 24. Original text in Spanish: "Con la luz Lewerentz lograba modelar la textura del material". Translation by authors.
35. Linazasoro, Op. Cit. 48. Original text in Spanish: "en el arcaísmo y en lo primordial, [...] demuestra que la arquitectura posee una condición artística y que esta es un requerimiento necesario para la sociedad". Translation by authors.
36. Ibid.
37. Colin St John Wilson, "Sigurd Lewerentz. The sacred buildings and the sacred sites. Essential Architecture," *OASE*, no. 45–46 (1997), 77.

Brickwork
Rigging
Materiality
Phenomenology
Modernity