

"A Partial Synthesis": Debates on Architectural Realism

A Magic-Real Gap in Architecture

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Abstract

In 1925, German art critic Franz Roh formalized the notion of Magic Realism (*magischer Realismus*) as a celebration of everyday life. In Italian literature, the same notion was explored in the works of Massimo Bontempelli. But it was the architect Friedrich Kiesler who imported the notion into architecture, stating that 'Magic Architecture ... holds the balance between the two extremes of man', his 'desire for the machine' and technology on the one hand, his 'denial of science' on the other. This paper follows the development of the notion of Magic Realism throughout the twentieth century and into the twenty-first, tracing its re-emergence in works as varied as those of Carlo Scarpa, Billie Tsien and Tod Williams.

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A Magic-Real Gap in Architecture

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> 'Now down you go in the Ocean's folding gulfs to visit father's hall – the Old Man of the Sea – and tell him all. I am on my way to Olympus heights, to the famous Smith Hephaestus – I pray he'll give my son some fabulous armour full of the god's great fire!'¹ Thetis in *Homer*, Book XVIII

The cultural history of technology simultaneously narrates a subliminal history of magic. With the skilled smith Hephaestus harnessing Achilles' shield to battle Hector, we find testimony of a magical artefact that emerges from great craftsmanship and performs through a combination of spiritual invocations taken from occurrences of everyday life. Earth and sky, human interactions in love and war, and scenes of dance are depicted in the shield, representing a world that promises to protect the great warrior. The very condition of everyday life brought forth through technological means contains the strength to shield humankind. Consequently, it is not just the invincible metal that protects Achilles, but the stories conjured within it. In Hephaestus's words, Achilles's shield will prompt 'any man in the world of men [to] marvel at [it] through all the years to come – whoever sees its splendour.'2 The emergence of wonder appears in the shield through five layers of metal made by Hephaestus [poiei] 'with all his craft and cunning' [daidala], 'a world of gorgeous immortal work.'3 As Alberto Pérez-Gómez has stated: 'The principal value of daidala is that of enabling inanimate matter to become magically alive, of reproducing life rather than representing it.'4 Therefore, if someone fights Achilles, they are in fact fighting against an enacted cosmos carried within his armour.

Under the auspices of such a story, technology can be understood as that which comes alive through making [*poesis*] and concealed wonder [*thauma*].⁵ Homer never explains the reasons behind the shield's depicted scenes. The details of the narrative focus on the precision of its craft and the accuracy of the stories ornamenting the artefact, without necessarily reasoning a clear connection between them. A gap is created between the shield's factual and fictive nature, a gap that is left unassigned to fixed meanings, so it remains active as a productive place for thinking even to this day. In addition, technology, with its physical and metaphysical qualities, presents itself in the story as working for and with humankind, instead of being opposed to it. Technology, seen as an aid to improve life



¹ Homer, *The Illiad*, Trans. Robert Fagles (New York: Penguin Books, 1990), Book XVIII, p. 472.

² Ibid., p. 482.

³ Ibid., p. 483.

⁴ Alberto Peréz-Goméz, 'The Myth of Daedalus', *AA Files*, no. 10 (1988), p. 50.

⁵ Indra Kagis McEwen, *Socrates' Ancestor* (Massachussets: The MIT Press, 1997), p. 55. through skilled craftsmanship and wonder, was at the core of *daidala* objects.⁶ These were also applicable to the products of Daedalus, the first architect.

Looking into Homer's story not only seems relevant for understanding earlier notions of technology, but conceivably also more important, it offers a window to reflect upon today's practices and their relationship with it. Despite the succeeding displacement of magic as historically inherent to world-making, the twentieth century saw its revival through many expressions and theories.⁷ Notions of speed, machines in charge of someone else's life, remoteness and the overpowering new reach of communications raised an unthinkable set of conditions that was often described as magical.⁸ The technological revolution that occured in the nineteenth century, exacerbated after the First World War, introduced notions of 'remoteness' and 'distance' within everyday life. This paradoxically created, at least marginally, an awareness towards its material and intimate aspects, which would be described as 'magic'.

Quotidian Encounters

A particular consideration of everyday life as key to reveal the invisible through art appeared in 1924 in Germany with 'magic realism', a term coined by the artist and critic Franz Roh.⁹ Expressing that 'as early as the First World War a countermovement developed, one of those retardations which history likes to throw in as a breathing spell when we have experienced too many innovations', Roh celebrated the fact that the 'charm of the object was rediscovered'.¹⁰ In a manifesto, the art critic discussed the work of several artists looking at everyday life in order to 'celebrate the mundane and overturn the abstractions of Expressionism.'11 In the work of artists like Georg Schrimpf, Roh suggested that the magical 'palpitates and hides behind reality.'12 In order to develop his argument, he questioned the role of objects, finding an agency in both the objects of our everyday life and our own perception of them, in how they affect reality.¹³ In other words, he distinguished between how reality is represented and how its representation allows us to see reality anew, emphasising the anti-positivist principle that reality is constructed and not given. For Roh, 'if all matter consisted of minute abstract particles intrinsically in motion, then it was declared to be astonishing, even miraculous, that given such fluctuations, matter should crystallise and solidify into what we can call things.¹⁴ Rejecting the artistic imperative of extraordinary or divine events as distanced from the creative act, Roh inferred that the magical is already part of the real and the practice of looking closely and precisely at common events, normally taken as non-relevant, is what allows one to encounter the very heart of reality's mysteries. By nature oxymoronic, magic realism was founded on the duality of two seemingly different realms - reality and magic - precisely in order to open up a field for wonder and reflection rooted in an apparent 'unimportant' and 'given' occurrence: everyday life. Roh outlined the new formative human of this

6 Ibid., pp. 41-58.

⁷ 1900's Occultism and Symbolism, later Magic Realism and others.

⁸ Timothy Campbell, "Infinite Remoteness": Marinetti, Bontempelli, and the Emergence of Modern Italian Visual Culture, *MLN (Modern Language Notes)*, 120, no. 1 (2005), p. 112 (Italian issue).

⁹ Franz Roh, 'Magic Realism: Post-Expressionism', in Lois Zamora Parkinson and Wendy B. Faris, (eds.), *Magical Realism: Theory, History, Community* (Durham: Duke University Press, 1995), p. 17.

¹⁰ Franz Roh, German Art in the Twentieth Century (London: Thames and Hudson, 1968), p. 112.

¹¹ Roh, 'Magic Realism' (see note 9), p. 20.

12 Ibid., p. 21.

13 Ibid.

¹⁴ Roh, *German Art,* p. 113.

period as one who reconciles constructivist ideals 'with a greater respect for reality, with a closer knowledge of what exists, of the objects he transforms and exalts.'¹⁵ He described the magic real artist as one who not only contemplates and knows, but also acts.¹⁶ Relying on both theory and practice, magic realism attempted to expose something hidden within the world. Derived from thought, the object is meaningful and acts upon the perceiver only insofar as the perceiver is experiencing it.¹⁷ In this sense, objects are not just 'there' and I am 'here', but we are as we experience each other.¹⁸

In relationship to technology Roh addressed two key issues. On one hand he embraced the notion of precision, so skillfully attained through the performance of machines, suggesting however that such precision should be implemented by the human eye and hand. By slowing down the process of seeing and carefully re-constructing what is already there, precision had the capacity of revealing what was hidden. Paintings such as Laying Girls on Greenery (Liegende Mädchen im Grünen) by Georg Schrimpf were able to express a dream-like quality that was simultaneously familiar and uncanny.¹⁹ On the other hand, he supported the use of the machine for the work of art through the use of photography. In the exquisite 1929 publication Photo-eve, comprising seventy-six photographs, Roh curated the work of artists who had been able to 'photo-remake' the world by attaining something unique from it.²⁰ Roh, who was also a skilled photographer, portrayed some of his own ideas in rarely discussed photomontages where he overlapped scenes of everyday life of the city or domestic settings with carefully constructed portraits, such as in an untitled piece from 1928 owned by the Museum of Modern Art in New York.²¹ In this gelatin silver print, an image of a tunnel with passing bikers and an interior scene of a female model photographed from above are fused together, offering a complex perception of exterior and interior space. The art critic proposed: 'only when the creative process achieves its goal from the inside out can it generate new views of reality, which is at most built in pieces, never imitated as a whole.²² The intention was not imitation; rather it was to present reality anew based on concrete perceptions of the world.²³ The scholar Pepper Stetler has pointed out that while 'perspective traditionally aligns vision and knowledge, eye and mind, this photograph ruptures this relationship. In other words, Roh juxtaposes a system of perspective with features that disrupt it, shifting its meaning into realms of imagination, dream, and desire.'24 Another common technique that Roh performed to question reality through representation was to make negative prints of photographs, evoking a distinct sense of light and shadow that allows us to see the photographed object anew. Roh saw the juxtaposition of seemingly opposite forces as a method of searching for unknown geometries and associations. These encounters already constituted a way of working and thinking in a magicreal way.25

From its origins in post-war Germany, the 1927 Spanish publication of Roh's essay in Madrid's *Revista de Occidente* signaled the birth of magic

¹⁵ Roh, 'Magic Realism' (see note 9), p. 23.

¹⁶ Ibid.

¹⁷ In describing a scene of apples on a table, Roh recounted his captivation as not merely sensational nor merely formal. Instead, he expresses that, 'I am overcome by a much wider amalgam of colors, spatial forms, tactile representations, memories of smells and tastes; in short, a truly unending complex that we understand by the name of *thing*.' Ibid., p. 24.

¹⁸ This notion is also at the core of Maurice Merleau-Ponty's work on perception. Merleau-Ponty, Maurice, *Phenomenology of Perception*, translated by Collin Smith. (New York, Routledge, 1958)

¹⁹ Image URL: <u>http://onlinekat-alog.staatsgalerie.de/detail.</u> jsp?id=C9159C7F4496A97715C-5CB089A4F023&img=1.

²⁰ In an opening essay he makes clear: 'they are photographs in which we wish nothing to be moved, raised or levelled, no part to be either materialized or dematerialized, etc.' Franz Roh, *Foto-Auge = Oeil et photo = Photo-eye* (Stuttgart: Akademischer Verlag F. Wedekind, 1929), p. 15.

²¹ Image URL: <u>https://www.moma.org/</u> interactives/objectphoto/objects/83888. <u>html</u>.

²² Roh, 'Magic Realism' (see note 9), p. 24.

²³ Roh gives the example of Georg Schrimpf, an artist how used to paint landscapes and other scenes inside a room without any models or sketches. Schrimpf believed in rigorously representing the scene as if it were real but without imitating it, although closely looking at all the details as the painting was being constructed, remembered and becoming 'familiar' in a magic real form since it was not exactly a copy of something out there, and yet it seemed to be, at the same time that it was conceived in isolation. Another example Roh gives is the work of Alexander Kanoldt who constructed landscapes out of Italian cities. Roh emphasizes the important of opposites to emphasize the various methods for discovering a magic-real apprehension of the world. Ibid.

²⁴ Pepper Stetler, 'Franz Roh and the Art History of Photography', in Mitra Abbaspour, Lee Ann Daffner, and Maria Morris Hambourg (eds.), *Modern* realism on the international stage.²⁶ Its publication into another language opened up territory for many artists and writers to become acquainted with new ideas gestating at the time. Although magic realism as a movement in art did not span a great length in time, it opened up an immense territory within literature that remains present to this day.²⁷

Inside Stories

Magic realism as a literary movement first appeared in Italy in the publications of the Lombard writer Massimo Bontempelli. Holding similar principles as Roh, as well as some uniquely Italian notions, Bontempelli believed that magic realism was an invitation to re-write the reality of everyday life and to find the magical within. While the threatening changes of modernism worried many artists, writers, and particularly architects, Bontempelli saw magic realism as an apparatus to construct and reveal myth and as a vehicle by which cultures could evolve from the past without ignoring it.²⁸ In 1926 he introduced magic realism in his literature journal '*900'*, *Cahiers d'Italie et d'Europe*. Published in French as well as in Italian, the journal was an attempt to disseminate more broadly the work of Italian writers and other international figures such as James Joyce, Ramón Gómez de la Serna and Virginia Wolf.

^{'900'} exposed the ideas contained within magic realism. The effort to discover and perhaps save reality from positivist definitions could only be attempted from an artistic perspective – in literature, art, music and architecture.²⁹ Bontempelli thought that a new art form could emerge from the intimacy between what was assumed to be reality and the fantasy practiced through one's imagination. He claimed imagination to be 'the instrument to liberate ourselves from the repetition of the old and create an atmosphere that favours the new'.³⁰ For Bontempelli, imagination was the only instrument capable of enriching reality.³¹ His goal has been understood as a desire to create a world of fantasy, not only borrowing the objectivity of the natural world, but emerging from it.³² Although not an architect, he nevertheless referred frequently, throughout his various works, to the field of architecture as the locus for magic realism to perform and to remain over time. In architecture, however, magic realism was never officially proclaimed as a movement.

The notion of magic in architecture was more literally expressed several years later, in 1936, by Austrian-American architect Frederick Kiesler, in a short volume entitled *Magic Architecture*. In this piece, Kiesler equates Magic Architecture with 'the expression of the creativeness of man', as 'an architecture of contact, not of separation'.³³ Just like Roh and Bontempelli, the emergence of this magic realm also related to everyday and 'every-night' reality. For Kiesler, *Magic Architecture* does the most with the least and 'holds a balance between the two extremes of man a) desire for the machine b) the denial of science'.³⁵ Again ambiguous in its definition, the element of magic contests assumed orders and prin-

Photographs: The Thomas Walther Collection 1909–1949 Object: Photo, An Online Project of The Museum of Modern Art. (New York: The Museum of Modern Art, 2014).

²⁵ Roh, 'Magic Realism' (see note 9), p. 27.

²⁶ Magazine directed by philosopher José Ortega y Gasset.

²⁷ From the work of Gabriel García Márquez to the contemporary writer Isabel Allende, magic realism in literature has remained actively present in the world through the work of multiple Latin American authors.

²⁸ Massimo Bontempelli, *Realismo Magico e altri scritti sull'arte*. Ed. Elena Pontiggia (Milan: Abscondita Srl., 2006), p. 21. All translations by the author.

²⁹ *Studi Novecenteschi.* Quadrimestrale di storia della letteratura italiana contemporanea, 12 (Padova: Marsilio Editori, 1975), p. 249.

30 Ibid.

³¹ Bontempelli, *Realismo Magico* (see note 28), p. 30.

³² Estelle Gilson in the preface to Separations, citing a review in *The New York Times* on Massimo Bontempelli. Massimo Bontempelli, *Separation: Two Novels of Mothers and Children.* Trans. Estelle Gilson (Kingston, New York: McPherson & Company, 2000), p. 8.

³³ Frederick J. Kiesler, *Selected Writings.* Ed. Siegfried Gohr and Gunda Luyken (Stuttgart: Verlag Gerd Hajte, 1996), p. 34.

34 Ibid.

35 Ibid.

ciples, and exists in a realm of wondrous performance. After the Second World War, Kiesler further developed the relationship between magic and architecture through an unpublished manuscript, recounting the story of human dwelling and exploring building technologies from the most primitive forms of shelter to postwar constructions.³⁶ Once again, after the major social shock of violent nature, magic was seen as way to cope and perhaps re-discover a lost sense of vitality. However, the architect also posses the role of magic as an art form residing essentially in the being of the conscious man. He explains that 'without the belief in the magic power of creation, both civilization and culture are unthinkable. Magic is the mother of invention. And every invention is a tool for increased power of the human being, down and up the scale of his makeup'.³⁷ Within such a premise, Kiesler seizes magic and technology as ontologically tied to the cosmos of humankind. The architect also points out that it is the relationship between the unknown and the known that has allowed magic to feed into men's curiosity. This is proven, he believes, by the fact that magic and experimentation have always gone hand in hand.³⁸

In the same year Kiesler wrote his piece *Magic Architecture*, the German cultural critic Walter Benjamin published the pivotal essay 'The Work of Art in the Age of Mechanical Reproduction', in which he critically addressed the role of technology in art, the dominance of the machine and some of its cultural implications. Curiously, in his essay Benjamin opposed the work of the magician to that of the surgeon, in order to establish the dichotomy between the painter and the cameraman.³⁹ He concluded that 'the destruction caused by war furnishes proof that society was not mature enough to make technology its organ, that technology was not sufficiently developed to master the elemental forces of society.²⁴⁰ In light of this thought, if technology is understood as a form of language and, as he has stated, all language is a form of magic, then perhaps the surgeon and the magician are responsible to join forces and confront the dichotomous space of scientific thinking and magic making together.

Particularly in architecture, in doing what builders once used to make, machines transfigured the role of the 'maker' into an 'operator.' What then becomes the role of the architect in this transfiguration of the craft? As the aura of the twentieth-century builder disappears, it perhaps creates room for the architect's material imagination to engage in extracting an aura that includes the machine but does not submit to it.

Performing Magic

In Italy, the place where magic realism and architecture were first paired in a critical juxtaposition, post-Second World War architects also aspired to reflect upon ideals of the renewed society in every aspect of their work.⁴¹ In Gio Ponti's view, for example, Italians needed to love materials, use them and support their technical and aesthetic qualities in order to extract maximum results.⁴² In 1946 Mario Ridolfi published the *Manuale dell'*

³⁶ Archives of American Art, *Lillian and Frederick Kiesler papers, Magic Architecture,* box 23, folder 19.

³⁷ Ibid. 1/1, chapter one, p. iv.

38 Ibid. 1/2, chapter one, p. iv.

³⁹ Artistic production begins with figures in the service of magic. What is important for these figures is that they are present, not that they are seen. Walter Benjamin, *The work of art in the age of its technological reproducibility and other writings on media*. Ed. Michael W. Jennings, Brigid Doherty, and Thomas Y. Levin (Massachussets: Harvard University Press, 2008), p. 25.

⁴⁰ Ibid., p. 42.

⁴¹ Terry Kirk, *The Architecture of Modern Italy, vol. II: Visions of Utopia, 1900–Present* (New York: Princeton Architectural Press, 2005), p. 145.

42 Ibid., p. 159.

Architetto, an architectural manual intended originally to be a book of standards for Italy's reconstruction.⁴³ However Ridolfi, having illustrated many plates himself, interpreted the manual as a collection of juxtaposed details and architectural examples that had little to do with building standards per se. According to scholar and architect Marco Frascari, Ridolfi 'converted the Manuale dell'Architetto into a unique contribution of tectonic norms,' where 'craftsmanship is the invention of solutions not from abstract notions but discovered while working; solutions suggested by a comprehension of the organic nature of the material and the specificity of design problems.'44 For Ridolfi, an architect's immersion into making is what brings forth architectural inventions. He stated that, 'Pupils should learn to represent objects in such a way that they can be reconstructed ... I tell them that they should see the opaque objects as if they are transparent. They should learn to see also beyond them to be able to draw them in a constructive manner.⁴⁵ In addition to his commentary on acquiring a 'new' vision, Ridolfi also thought that architects, much like Hephaestus, had the challenge to bring things to life. In a published letter, he states that the 'difficulty is in finding the just measure of the individual parts ... the willingness to give life to things almost to make them to breathe, to try to make them speak.'46 For Ridolfi, architecture seems to have been close to magic, a form of practice that acts upon matter through a focused use of technology, aiming at an outcome that can be manifested in diverse and rich ways. The purpose of magic is that the action towards a subject results in its very re-enaction, i.e., it brings a new life to that which it addresses.

The Venetian architect Carlo Scarpa, a close friend of Ridolfi,⁴⁷ remained on the periphery of modernism's turmoil in Italy, although he was well aware of the work of several of these iconic figures, including that of Bontempelli.48 Often referred to as Il Mago by some of his colleagues, Scarpa appears as one of the architects who addressed issues of technology through the lenses of magic tangentially to thoughts previously discussed in this paper. His work, as well as testimonies from work assistants, indicate the architect's cunning use of the machine while trying to extract a hidden potential of the materials performing with and through it. Erstwhile collaborator Carlo Maschietto recounts that Scarpa's vast cultural knowledge allowed him to extend the work towards that which was improbable.⁴⁹ His interest in designing the most banal details of the architectural project, from a handle to a shadow, usually provided the total work with a sense of elevated complexity.⁵⁰ One of the many examples of this can be found in a small detail found in his Brion Cemetery project, located in San Vito d'Altivole, and built between 1968 and the architect's death in 1978.

The entrance corridor to the burial complex consists of a concrete structure that creates an intimate gate within the old cemetery (Fig. 1). After walking a few steps up and upon arrival into the main level of this corridor, one notices that the concrete floor is made from individually cast concrete pavers contained within steel frames. It becomes evident that ⁴³ Manual Images URL: <u>http://ffmaam.</u> it/collezione/mario-ridolfi#mario-ridolfi.

⁴⁴ Marco Frascari, 'The Drawings of a Reflective Architect,' unpublished essay written in Washington Alexandria Architecture Center, Virginia Tech, p. 4.

⁴⁵ Ibid., p. 4–7.

⁴⁶ Mario Ridolfi, 'Lettera di Mario Ridolfi', *Controspazio*, 3 (1977), p. 3, quoted in: Marco Frascari, 'A Quasi-Necessary Cacotechnology: Few Happy Thoughts on Architectural Imagination and Facture', *Architectural Theory Review*, 10:2, 1–11 (2009), p. 9.

⁴⁷ Marco Frascari expresses the strong friendship between the two in many of his papers, including in 'The Well-Tempered drawings of a Reflective Architect' (see note 44).

⁴⁸ Scarpa mentioned Le Corbusier's works many times in his lecture and interviews. He admired the Swiss architect and knew his work well. He also collected several Italian journals of the time. Franca Semi, *A Lezione con Carlo Scarpa* (Venezia: Cicero, 2010).

⁴⁹ Sandro Giordano, *II mestiere di Carlo Scarpa : collaboratori, artigiani e committenti.* Doctorate Thesis, IUAV: Istituto universitario di architettura di Venezia, 1984, p. 26. Translation by the author.

⁵⁰ Guido Guidi and Antonello Frongia, *Carlo Scarpa's Tomba Brion = La Tomba Brion di Carlo Scarpa* (Ostfildern: Hatje Cantz, 2011).





some of the pavers are purposely left without any fixed attachment to the subfloor structure, thus creating a play of subtle sounds, especially on the right side of the corridor that gives access to the water pavilion (Fig. 2). The purposeful imprecision of the ground achieved by highly precise technology (refined steel frames and poured concrete) plays a key role in the experience because it emphasises the spatiality of the corridor. Once the sounds of the 'mis-placed' ground resonate, the height of the space is enacted and as one moves into the space, each sound seems louder and deeper thanks to the narrowing corridor. The acoustic reverberations act in complicity with two more details that elucidate Scarpa's magical approach towards technology. The first one directs our attention towards the realm below the floor. The loose pavers, resonating louder as one moves into the corridor, reveal a hollow presence underneath that is filled with water and connects to the yet invisible pond on the other side of the structure. This begins to reveal the nature of the wall's foundation that, while invisible to us, becomes present through an aural experience allowed by its design. The perforated concrete wall that allows water beneath the floor is dematerialised at the strongest structural points in order to allow a loftier experience where it appears the most solid. (Fig. 3).

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The second detail directs our attention towards the realm above the floor. Embedded in the concrete ceiling, a play of timber strips creates a particular rhythm (Fig. 4). Through the evidence in drawings, we discover that Scarpa spent a great deal of time focusing on this particular detail. The execution was made possible through two opposite qualities. On one Fig. 1 Carlo Scarpa, Brion Cemetery, San Vito D'Altivole, 1978: Entry from old San Vito D'Altivole cemetery (C. Dayer)

Fig. 2

Carlo Scarpa, Brion Cemetery, San Vito D'Altivole, 1978: Concrete floor with steel frame edges at entry corridor (C. Dayer)





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hand, the precision of placing the timber inserts on the ceiling requires high quality craftsmanship in the formwork and pouring execution. On the other hand, each piece of refined and precisely cut wood was submitted to a process of 'disruption' created by using a table saw with a worn out blade that would create, at each cut, uneven markings in the two faces of the timber. While the side that is hidden within the concrete is sharply constructed, the exposed one is made 'wrongly' so that its texture, through the indirect light reflections in the corridor, becomes particularly visible. The timber is finished with brown polished paint that enhances the various uneven and parallel lines created by the machine. One of Scarpa's close collaborators from the Afondillo Carpentry recalls that Scarpa's excellent performance was due to the advanced technological equipment that he selected, to skilled mastery, and the value of the materials employed.⁵¹ He remembers Scarpa's fascination with modern machines, but highlights that his major concern was with the quality of materials.52 The subtle details described here are a small demonstration of Scarpa's approach to the use of technology, where the gap between the predictability of the machine and the unexpectedness of the material serve to enhance the total performance and embodiement of the architectural project.

In light of this approach to technology, it seems natural to wonder about the questions and opportunities that the overpowering use of digital tools poses in the twenty-first century. In 2001, American architects Billie Tsien and Tod Williams described the materials used in the now-demolished 51 lbid., pp. 67–68. Translation by the author.

52 Ibid.

Fig. 3

Carlo Scarpa, Brion Cemetery, San Vito D'Altivole, 1978: Corridor wall, floor and water pool to the side and underneath of corridor (C. Dayer)

Fig. 4

Carlo Scarpa, Brion Cemetery, San Vito D'Altivole, 1978: Concrete ceiling with wood incrustations (C. Dayer)



⁵³ Tod Williams and Billie Tsien in arcspace.com, (2003), <u>http://www.</u> arcspace.com/features/tod-williamsbillie-tsien/american-folk-art-museum/ (accessed June 2016).

54 Ibid.

⁵⁵ Graphis, The International Journal of Design and Communication, 59, no. 344 (2003), p. 89.

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Folk Art Museum in New York as a combination of 'the common and the magical'⁵³ (Fig. 5). The timber floors of the main gallery spaces were built with fir logs that had been submerged in the Ruby Lake for more than a century, before being unexpectedly discovered by a scuba diver.⁵⁴ The mysterious origin of the wood seems attuned with the subject of the collection, culturally significant artifacts of American folk art. The precious discovery allowed the uncut planks of the floor to be around 16 feet long. For this building, the architects also used a very particular and unique facade material called tombasil, consisting of metal panels made of an alloy of copper, zinc, manganese and nickel (Fig. 6). The alloy was poured on two different custom-made molds, one in concrete and another in steel.⁵⁵ The 'common' and the 'magical' are expressed in the museum through the elevation of typical materials into an exquisite state of transformation

Fig. 5 Billie Tsien and Tod Williams,

American Folk Art Museum, New York, 2001-2014: Façade (C. Dayer)



⁵⁶ Billie Tsien, *UCLA Alumni*, <u>https://</u> alumni.ucla.edu/stories/billie-tsien-march-77/ (accessed June 2016).

that is not only shaped by technologies, but by the histories hidden within them. In a lecture given at UCLA, Billie Tsien expressed her 'love' for 'the rediscovery of what is really there all along; the primal connections we all have with water and sky'.⁵⁶ Reminiscent of magic-real notions, her thought re-opens a gap for the unpredictable to emerge within the results-oriented determinism so present in current practice.

While technological events of the twenty-first century are proving to be proficient at highly controlled systems, even when claiming to be 'behaviour responsive', the necessity for keeping open the gap between defined and undefined qualities at multiple levels seems of urgent relevance. Architecture understood as magic-real suggests the opening of a gap towards horizons that can still haunt us.

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Fig. 6 Billie Tsien and Tod Williams, American Folk Art Museum, New York, 2001-2014: Façade detail (C. Dayer)