

Artistic Practices as Architectural Research

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Abstract

The potential of implicit architectural knowledge extends beyond the realm of sciences and technology. It is worthwhile to examine its role in art, artistic practices, and artistic knowledge. This article explores several practical examples from art and architecture, spanning the 20th and 21st centuries. These examples shed light on artistic practices that, apart from enhancing designerly qualities and fostering a reflexive approach, may have a significant research impact in architecture. The methods, processes, and topics of these examples are examined, and their potential for critical improvement is highlighted. Particularly, the concept of 'not-knowing' is emphasized as a valuable asset for addressing contemporary and future challenges, not limited to architecture.

Keywords

design and research; art; art in architecture; Artistic Research; artistic knowledge; artistic experiment; reflexivity; Reflexive Design; repetition; difference

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1 INTRODUCTION

It can be considered a truism that exclusively equating 'research' with the natural sciences and 'knowledge' with facts, quantifiability, and objectivity falls far short of the mark. In fact, the opposite holds true, as scientific research is inevitably reliant on creative action, imagination, and serendipity. The philosopher of science Hans-Jörg Rheinberger, following the anthropologist Claude Lévi-Strauss, refers to a 'savage' thinking mode that is both preliminary and parallel to abstract thinking. He places this 'savage' thinking, characterized by experimentation in the unknown, at the core of his theory of science (Rheinberger, H.-J. (2003)). In this view, research can even be likened to artistic work, which, as Lévi-Strauss posits, falls between science and handicrafts [bricolage], primarily involving the manual creation of objects that also serve as objects of knowledge (ibid., p. 38).

Rethinking research and knowledge in this manner is by no means a new concept, and over the last three decades, it has been examined with particular intensity in architecture. This has been especially prominent since Christopher Frayling introduced the canonical triad of 'research into/through/for art and design' in 1993 as research paths within creative disciplines (Frayling, C. (1993)). This perspective allows for broader avenues of research, attributing inherent forms of knowledge to the media, processes, methods, and products of creative work and design (Buchert, M. (2014)). Nevertheless, what is unique about this tacit knowledge in architecture, as well as its production and application within the discipline, remains a topic of active research¹. Notably, its potential lies in domains beyond what can be scientifically and technically controlled (ibid., pp. 28 and 42–44). In this context, it is worth exploring artistic practices and artistic knowledge.

One could argue that artistic practice generates unique perspectives that engage with and reflect upon specific issues, thereby suggesting alternative ways of thinking and acting. Art does not aim to provide definitive answers but rather to present a diverse spectrum of (im-)possible viewpoints on the current reality – the 'known.' Undoubtedly, knowledge is produced in art, albeit a form of knowledge that is challenging to fully describe, explain, or make entirely explicit. Art deals with, produces, and communicates knowledge in various ways and different forms (Busch, K. (2016), pp. 11–14 and 23). This artistic knowledge and distinctive mode of thinking are not limited to the realm of art alone but can also contribute value to other disciplines.

Below, we explore the potential of artistic research practices in architecture by examining practical examples from the 20th and 21st centuries, where art and architecture intersect. These examples encompass a wide range of content and methodologies. The primary objective here is not to delve into the contentious debate surrounding artistic research but rather to investigate the productive connections between disciplines (Henke, S., Mersch, D., Meulen, N. van der, Strässle, T. & Wiesel, J. (2020), pp. 18–27): What goals, methods, and qualities can be pursued and established through artistic practices within architecture? How are they supported theoretically and methodologically, and what makes them effective in terms of research and knowledge generation? Furthermore, what characterizes this unique form of knowledge, and what additional value does the artistic bring to bear on the future challenges facing the field of architecture?

¹ Cf. e.g., the innovative, international EU-funded research network 'TACK / Communities of Tacit Knowledge: Architecture and its Ways of Knowing', focusing on the specific knowledge that architects use when designing buildings and cities, running from 2020-2023. <https://tac-it-knowledge-architecture.com>, 05.02.23 and further: Schrijver, L. (ed.), (2021). *The Tacit Dimension: Architecture knowledge and scientific research*. Leuven University Press. <https://doi.org/10.2307/j.ctv1mgm7ng>

2 ART AND ARCHITECTURE: INTERWEAVINGS

The relationship between art and architecture is characterized by a wide range of interfaces in which not only creative intentions but also conceptual and exploratory aspects come into play. Particularly since the 20th century, art has been distinguished by its engagement with interdisciplinary discourses in both the production of its works and its influence on them (Slager, H. (2009), p. 51). Artistic endeavors situated at the intersection of art and architecture can take on diverse forms. These endeavors may, among other things, resemble built architecture, employ architectural mediums, or produce performative and installation-based works that address content equally relevant to both disciplines. This content might encompass everyday life, sensory perception, light, material, and, most notably, space.

Exploring space, in particular, provides numerous examples of how artistic methods are employed in architecture to cultivate alternative understandings that lead to novel construction methods, spatial organizational forms, or materials. As early as 1941, in 'Space, Time, Architecture,' the architectural historian Sigfried Giedion underscored the potential of artistic work in reshaping the perception of space and the necessary evolution of means of expression. Giedion cited Le Corbusier's cubist paintings as an exemplar, where the boundaries between interior and exterior blur, and where lines and surfaces give rise to painted architecture (Giedion, S. (1992), pp. 527–529). Surreal strategies and cubist dissections evolve into a form of spatial exploration that architects then translate into physical structures. Consequently, Giedion attributes to artistic creations the imaginative capacity to foreshadow technical and constructive insights.

3 FUTURE CONSTRUCTIONS

Particularly notable examples of this creative capacity can be found in the drawings and paintings of the architect Zaha Hadid. Influenced by the Russian avant-garde, particularly the 'Architektona' by the constructivist artist Kasimir Malevich, Hadid initially worked in a two-dimensional, painterly format. The space that emerged in her work appeared as if in a state of explosion or tension. It took several years before Hadid was able to realize her first building, the Vitra Fire Station in Weil am Rhein in 1991, where the space, now translated into a constructed form, articulated a tensed line of movement.

Zaha Hadid's subsequent work also fundamentally evolves through drawing. The fluid impression characterizing her later buildings finds its roots in drawings influenced by Hadid's initial training as a mathematician or by Arabic calligraphies (Höfler, C. (2020), pp. 73–94). Her drawing movements are synonymous with movements through space and, therefore, deviate from conventional architectural drawings. They do not depict what is built but instead emphasize its impact and perception. For Hadid, her artistic work—drawing and painting—offers a realm of abstraction and imagination. The three-dimensionality of space is not a challenge to overcome but can be deconstructed and reassembled within its Cartesian dimensions. It need not adhere to conventional structures or materials.



FIGURE 1 Hadid's design for the Phaeno Experimental Museum in Wolfsburg in 2005.
Image credits: Richard Bartz (https://commons.wikimedia.org/wiki/File:Phaeno_Suedseite_RB.jpg), CC-BY-SA 3.0.

For instance, the flowing, landscaped spatial environments in Hadid's design for the Phaeno Experimental Museum in Wolfsburg in 2005 required the exploration and development of self-compacting concrete, a material rarely used at the time (Höppner, M. & Malcherek, J. (2002)) (Fig. 01). An alternative space is conceived and made achievable through the process of drawing. Hadid liberates herself from existing realities and their limitations. This drawing practice extends beyond envisioning future realizations in standard design processes. Drawing and painting, in this context, serve as more than mere contemplative design accompaniments since they do not solely address the 'solution' to a particular task.

Drawing from a diverse range of influences such as fine arts, mathematics, or calligraphy, a form of situated knowledge becomes embedded within these drawing gestures. Although this knowledge may be inherently personal, its integration into the drawings, which function as interpretable mediators, enables a contribution to the collective dimension—specifically, in the realm of material research. The structures thus newly achievable may subsequently prompt further inquiries into spatial exploration through drawings. Knowledge acquired through artistic practices possesses the capacity to reformulate other practices, thereby opening doors to further exploration (Bertram, G.-W. (2018), p. 143).



4 DEVIATIONS

The architectural office Ensemble Studio employs a similar ‘questioning’ approach, utilizing artistic-experimental models or mock-ups to explore alternative material qualities and construction methods while integrating automation and addressing existing contexts such as landscapes or existing building structures. Through a series of experimental studies, they replicate natural forming processes, among other things. The resulting aesthetic characteristics are not intended to be rationalized; chance and receptiveness to the final outcome are integral to the experimental design. Realizing such experimental work necessitates architects relinquishing some degree of control (Hoberg, V. (2022), pp. 85–89).

Even in their built projects resulting from model studies, like the ‘Structures of Landscape,’ which comprises monumental concrete structures for the Tippet Rise art center in Fishtail, Montana (since 2016), the ultimate outcome is not entirely predetermined. Débora Mesa, one of the principals of the office, explicitly asserts that only by encouraging improvisation and situational adaptation, typically associated more with art, can the non-designable emerge (Gil, I., Garcia-Abril, A. & Mesa, D. (2021), p. 148). It involves a departure from conventions that leads to new possibilities and modes of comprehension. However, this departure extends beyond the aesthetic realm. By acknowledging the non-determinable as a ubiquitous factor in processes, they attain flexibility and sovereignty in handling deviations.

5 (NOT-)KNOWING OF ART

Ensamble Studio's methodical approach, marked by clear structure, facilitates the production of multiple and varied outcomes through repetitions. In a parallel to scientific experiments, one could describe these as artistic experiments. The central distinction here lies in the fact that while scientific experiments typically seek to validate a pre-established hypothesis and depend on reproducibility, artistic experiments aim to discover deviations within repetition. Failure is perceived as a quality, and the contemplative exploration of these deviations yields productive knowledge in the realm of artistic experimentation (Mersch, D. (2009), pp. 40–43, and Rheinberger, H.-J. (2005), pp. 58–61).

In both cases, a generally accepted body of knowledge serves as the starting point for the purpose of deviation, resulting in the creation of new knowledge: Hadid's space diverges from conventional Cartesian space, and Ensamble Studio's concrete takes on qualities of lightness, textile characteristics, and an almost lively quality. This inclination towards 'not-knowing' can be seen as emblematic of art. Each work offers a unique perspective on what remains unknowable, contributing further differentiation. The act of creating art entails constant differentiation (*ibid.*, pp. 43–46), a concept that partially applies to architectural design as well. In architecture, a design is rarely ever considered final and unalterable, but rather as the best among the variants developed during the process.

From this perspective, knowledge appears less as something absolute and ultimately correct, and more as something adaptable. Even scientific knowledge must be understood as a reflection of the contemporary state of knowledge and the interpretations it generates. Furthermore, advancements in tools and media shape the possibilities of investigation and representation. Hence, knowledge is seldom static, fixed, or unchanging.

6 NARRATIVES

Particularly in the context of time-dependent frameworks, such as historical and cultural understandings, it becomes evident how much knowledge is shaped by human narratives. The ways in which this knowledge is documented, interpreted, presented, and commented upon can significantly alter perspectives on various issues. This approach can be observed in the work of Smiljan Radić's architectural firm, which incorporates numerous references to art and various artistic practices as integral components of architectural work. These references are episodically linked to designs and buildings, forming a complex network.

The Chilean context plays a significant role in Radić's work. It is characterized by a tumultuous political history, notably marked by the 1973 military coup leading to dictatorship and neoliberal experiments. This history, in turn, has led to diverse cultural influences, combined with the distinctive geographical setting, landscapes, and natural forces of Chile. Nevertheless, Radić asserts that describing Chile as the 'end of the world' is a narrative construct, as untouched nature no longer exists there either (Radić, S. & Fujimoto, S. (2016), p. 306).

Embracing the notion of Chile as the 'end of the world,' Smiljan Radić deliberately avoids attempting to conform to a supposed Chilean historical narrative with his architectural works. Instead, he constructs alternative interweavings into Chilean identity, cultural history, and everyday life experiences. These interweavings draw from shared, or perceived as such, impressions as well as Radić's individual observations.



FIGURE 2 'Parasol i kobieta' by Tadeusz Kantor, 1967

Image credits Tadeusz Kantor, 1967 (https://commons.wikimedia.org/wiki/File:Kantor_T_Parasol_i_kobieta.JPG), CC-BY-SA 3.0.



FIGURE 3 Smiljan Radić: NAVE, Santiago de Chile. Image credits: Valerie Hoberg



FIGURE 4 Smiljan Radić: Teatro Biobío, Concepción. Image credits: Valerie Hoberg

Radić's publications often feature personal photographs capturing temporary everyday structures, like small shrines, market stalls, or makeshift dwellings—structures that may exist only briefly. These photographs are then linked to various references, such as the inflatable constructions by groups like Haus-Rucker-Co, artworks by the artist Constant related to his anti-capitalist urban utopia 'New Babylon' (1959–1974), or 'Emballages,' various artistic disguises by the versatile artist Tadeusz Kantor (Fig. 02).

Through the combination of texts, supplementary drawings, models, or photographs, narratives of an 'unnoticed' everyday Chilean story emerge. These narratives speak to transience, adaptability, constant transformation, and the veiled and the invisible. Radić conceptually and creatively transfers these aspects into his own architectural designs (Hoberg, V. (2021)). His buildings are characterized by contrasts and incorporate elements that disrupt conventional perception: for instance, a circus tent atop the roof of the gutted existing building housing the Centre for the Performing Arts in Santiago de Chile (2015), situated in the midst of a dense urban setting. Another example is the nearly entirely shrouded, yet translucent theater in Concepción (2018), functioning as a guiding lantern in an unframed urban space. Here, the interplay of movement behind the façade creates a spectacular shadow play (Fig. 03 + 04).

This approach highlights the ambiguity within narratives that are often presented in an unambiguous manner. In the realm of architecture, this provides an opportunity to delve into various, sometimes unconscious, aspects of places, to introduce historical or other narrative layers, and to shift focus. It results in an alternative perspective on places, which can enhance design processes. Furthermore, it can serve as a variant of on-site research or participatory observation, yielding not numerical data sets but rather emotional and associative insights about a place. The goal is to create a sense of alienation from content that is often assumed to be familiar, leveraging this feeling of detachment to prompt new ways of seeing and thinking. The acknowledgment of alienation, as described by curator Hans-Ulrich Obrist in relation to Radić as a "collision of non-identical thought systems" (Obrist, H.-U. (2019), p. 290), can lead to the productive generation of paradoxes, forming a part of a primarily artistic reflexivity.

7 ARTISTIC REFLEXIVITY

Reflexivity is a term present in various scientific discourses and has been described, for instance, by social scientist Pierre Bourdieu or within the context of the so-called second or reflexive modernity, explored by sociologists such as Ulrich Beck, Anthony Giddens, and Scott Lash (Buchert, M. (2014), pp. 34–36, and Beck, U. (1996)). Reflexivity can be understood as a theory of practice that encompasses an awareness of both shared and individual knowledge. It enables critical reevaluation of disciplinary conventions, encourages self-reflective distance, and fosters the imagination of alternative courses of action. In practical contexts, a reflexive approach can serve as a bridge between the past, for diagnostic purposes, and the future, for prognostic purposes, thereby offering stimulating qualities (Buchert, M. (2022), p. 14).

By the early 20th century, reflexivity had become an almost indispensable mode in art. The focus of the arts had shifted away from the representation of ideals or the imitation of reality. Art had to embark on a self-examination process to gain insights into the causes, goals, and methods of artistic activity (Gamm, G. (2007), pp. 38–40). In addition to reflecting on one's own actions, it implies thinking relationally for artists (Bourdieu, P. (1992)). One's own position is situated in relation to other disciplinary positions. Only then does it become effective beyond an individual perspective, potentially stabilizing, questioning, or critiquing, and perhaps even transcending disciplinary boundaries. As a result, reflexivity enables a change in perspectives through distancing and can lead to changes in actions.

It can be asserted that artistic practices and forms of knowledge employing reflexivity can provide starting points for contemporary (and future) challenges, which may appear to require solutions grounded solely in scientific knowledge. For instance, issues related to resources—such as sustainable materials, soil, and existing infrastructure—are not solely ecological, legal, or engineering concerns. Artistic reflexivity and its associated capacity to grapple with complexity and identify knowledge gaps enable the recognition of the need for innovation and the proposal of improved alternatives. Art offers practical reflections (Bertram, G. W. (2018), pp. 147–150).

8 (INVISIBLE) NORMS

In this context, the works of conceptual artist and architect Gordon Matta-Clark reveal critical potential. Matta-Clark engaged with the deconstruction of the architectural discipline under the term ‘anarchitecture.’ Through his ‘splittings’ and ‘cuttings,’ which involved large-scale incisions initially assembled in drawings and photos and subsequently executed on obsolete buildings, Matta-Clark not only created unconventional spatial states and perceptions but also uncovered unexpected functional potential within existing structures. Simultaneously, his works served as a critique of the failed structures that had arisen as a result of the economic and urban development of modernity—essentially, a form of artistic-reflexive modernization. This critical aspect was further heightened in his conceptual work ‘Reality Properties: Fake Estates’ (1973–74).

Matta-Clark acquired 15 so-called ‘gutterspaces,’ unusable residual properties, through auctions in the state of New York. He collected archival materials, maps, and plans related to these properties, intending to employ them in ‘anarchitectural’ interventions. However, due to his untimely death in 1978, these plans were never realized, and the properties reverted to the state of New York. These plots of land became an even more pronounced critical commentary on (land) ownership and urban space: they were physically existing areas but possessed no ‘physical value’ within the capitalist logic of exploitation because they could not be utilized. These areas only became real estate through their representation in documents.

This conceptual deconstruction towards ‘anarchitecture’ holds renewed significance in light of contemporary urgencies. It prompts questions about the conventions and rule-based behaviors that hinder not only added value but also necessary revisions. These questions extend beyond the realm of architecture and can impact fundamental systemic inquiries. They encompass the role of (land) ownership, the potential uses and obligations it entails, the coexistence of private actions with collective spaces and needs, and the responsible management of resources, especially land. These queries span a range from surveys to critiques, unveiling divergent interests, inequalities, and unintended consequences of regulations.

Artistic work primarily highlights these various forms of disparities, without necessarily implying or being capable of offering solutions within the fields of art and architecture alone. It is the perceptible difference, the paradox, that triggers impulses for action—sometimes even beyond the sphere of architecture. In this capacity, artistic research can serve as a tool for other disciplines.

9 INSECURE FOUNDATIONS

And overarching, there is also the question of what role architects play at all: What is the (self-) understanding of the discipline? Are architects 'merely' designing executors or can they have a say in determining systems as agents? This confrontation with systems and the often heterogeneous constellations they contain can be seen as a future challenge not only for architecture: people and human culture have always been integrated into complex systems and thus are not confronted with, but part of a shared world. The increasingly networked, globalized world makes these dependencies clear; currently via climatic tipping points, economic and migrant consequences of war, or a global pandemic. Conditions that are taken for granted, foundations that assure the community and somewhat predictable futures are becoming more and more unstable, so that everyday life and normality have to be thought of much more flexibly.

This evolution seems to represent a contradiction in terms of architecture, which produces 'im-movables' and was already characterized by the ancient architectural theorist Vitruvius, among other things, by 'firmitas' (solidity). The artistic can offer an approach here by detaching from structural realization and strengthening the speculative dimension inherent in architecture: Prognostic constellations are inscribed in perceptions of reality and can change these – and consequently knowledge and actions – in particular through sensitization with regard to the (not) possible (Buchert, M. (2022), p. 22, and Bertram, G. W. (2018), pp.130-144)).

10 ARCHITECTURE AS A HYPOTHESIS

The interdisciplinary team at the office OMA seems to have possessed not only prognostic but almost prophetic abilities when they began to address the topic 'Hospital of the Future' some years ago—a topic that rapidly gained relevance with the onset of the Covid-19 pandemic. Set up as an ongoing research project, it has, among other things, resulted in a scenographic installation at the Venice Architecture Biennale in 2021. At the Biennale, an artistic short film on a 'hospital revolution' was showcased. The film intricately weaves together facts, current megatrends, and speculative questions, employing dialectic comparisons. This narrative is underscored by historical photographs and plans, as well as collage-like visualizations that appear associative and, at times, almost humorous due to their montage.

A myriad of contemporary and complex topics are interwoven, all converging under the overarching theme of 'healthcare.' These topics encompass technological progress, population aging, prevalent diseases, the collection of digital data, automation, circular economy, urban development, locality, nature, and (mental) well-being. Especially in the context of the Biennale installation, where hospital beds and curtain walls simulate the rather uncomfortable staging of a makeshift hospital, larger, abstract questions come to light: How do we coexist in a resilient, future-oriented, and environmentally friendly manner? The hospital serves as the typology through which these questions are addressed in an exemplary fashion; the architecture in this artistic installation, therefore, serves as their litmus test.

11 EXPERIENCING KNOWLEDGE

In OMA's hospital project, the research potential of architecture becomes evident, particularly in artistic works. People are accustomed to perceiving, reading, and interpreting architectural arrangements, often without consciously noticing or being able to describe them precisely. It is a tacit embodied knowledge acquired through bodily presence in architectural spaces. Architectural means are thus well-suited for expressing the consequences of changing conditions and abstract implications. In the context of climate change, there is considerable potential in architectural creations that speculatively depict life experiences, illustrating the intangible, long-term threats and their repercussions.



FIGURE 5 'Oasis No. 7' by the architecture and art group Haus-Rucker-Co. Image credits: © VG Bild-Kunst 2023, Photo: JeLuF (https://commons.wikimedia.org/wiki/File:Documenta_5_Fridericianum.jpg), CC-BY-SA 4.0.

Early examples of this approach can be found in architectural visions from the 1960s and 70s, which envisioned minimal, nomadic adaptive living. An example is 'Oasis No. 7' by the architecture and art group Haus-Rucker-Co, an air-filled bubble that hung parasitically from the Museum Fredericianum during Documenta 5 in Kassel in 1972. This intervention provided a different experience of the city, altering perceptions of inside and outside, private and public. However, it's worth noting that the symbolic emergency exit led only to an illusion of freedom (Borries, F. von (2010), p. 139). This intervention served as a critique, transforming growing environmental pollution and the fear of life-threatening catastrophes into an idealized architectural refuge that was simultaneously even more artificial than the human cultural landscape 'outside' from which it aimed to protect. It was an artistic questioning of circumstances, convictions, and conventions, including architecture's 'firmitas' (Fig. 05).

12 ART AS A WAY OF THINKING: HOW WE CAN KNOW WHAT WE DON'T KNOW

What unites these examples of artistic methods, works, and knowledge in the context of architecture is their focus on what is not yet known. This does not mean that they are striving towards anticipated knowledge, but rather that the artistic process serves to elaborate on knowledge as something yet unknown. In this way, artistic knowledge is not an increase in knowledge but rather an increase in ignorance, or even a conscious embrace of the unknown.

Highlighting differences, (re)interpreting, critiquing, and even engaging in imaginative speculation are practices primarily directed at what we have yet to discover, what we may have forgotten, or what remains uncertain. Artistic reflexivity provides a means to delve into this realm of not-knowing. By confronting traditions, existing creations, and comparing with imprints and objectives, artistic insights can serve as a form of research within architecture (Buchert, M. (2022), p. 25).

These insights can lead to innovations in spatial design, materials, and construction techniques, influence cultural and historical perspectives, invent new typologies, deconstruct established norms and routines for renovation, and serve as critical theses in other disciplines.

13 CONCLUSION

To establish the artistic as a productive and research-oriented method in architecture, it requires a repetitive process and a concurrent, comparative mode of thinking that structures, selects, and reorients. Furthermore, it necessitates an articulation of the implicit knowledge contained within it—not necessarily in written form but rather in architectural form, whether it be manifested in built structures, books, exhibitions, or other forms of media. In this way, artistic works in architecture can serve as not only a creative force that fosters novel forms of expression and imaginative environments but also as a means of research. By creating a sense of distance from the familiar, they intentionally cultivate a state of ignorance, which, in turn, enables access to the 'other.' It is a form of implicit, sensory, and poetic (not-)knowing. The ultimate objective remains unclear, and the impact is open-ended, yet by no means without direction.

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