Como parte de una línea de investigación basada en la práctica arquitectónica especulativa del autor, la presente contribución emplea un reciente proyecto de concurso de intervención en un cementerio histórico situado en Catania (Italia) como medio para identificar y explorar las dimensiones temporales de la arquitectura. El texto sitúa estas dimensiones en relación a una serie de corrientes filosóficas contemporáneas, focalizadas en la experimentación con nociones de “tiempo” que trasciendan la relación del mismo con la experiencia humana.

Para ello, el presente trabajo pretende enmarcar la intervención (y su proceso de proyecto) en términos de una temporalidad fluida, transformadora y extendida, planteando metodologías que permitan exceder el ciclo de vida “visible” de la propuesta arquitectónica. Apoyándose en material visual extraído de la propuesta de concurso original, el texto articula las diferentes decisiones de proyecto en relación a posiciones teóricas específicas, desarrollando definiciones de “temporalidad arquitectónica” en términos programáticos, materiales e instrumentales.

Este triple enfoque da lugar a una exploración exhaustiva de las dimensiones interrelacionadas (y potencialmente entrelazadas) de la “temporalidad,” formulándolas a través de tres principios activos y estructurantes del proyecto arquitectónico: La extensión programática del tiempo asociada al propio carácter espiritual de la necrópolis, la constante evolución —dentro y fuera de las secuencias temporales humanas— del proceso proyectual, y el entendimiento de la materia más allá del momento efímero en que los componentes materiales se manifiestan como un objeto arquitectónico.

This contribution uses a recent competition project for a materially lightweight intervention in a historically significant cemetery in Catania, Italy—developed as part of the author’s research-led design practice—to articulate and explore the interrelated temporal dimensions of architecture. In so doing, it maps these dimensions against a series of contemporary philosophical positions, which interrogate the notion of “time” beyond its relation to human experience.

To this end, this contribution seeks to frame the intervention (and its originating design approach) in terms of its fluid, transformative, extended temporality, demonstrating how it may exceed its “visible” life cycle as an architectural proposal. Developing as a discussion that articulates design decisions in relation to their associated theoretical frameworks, the text proceeds to flesh out “architectural temporality” in programmatic, material, and instrumental terms. This threefold approach aims to offer a comprehensive exploration of the interrelated (and potentially intertwined) dimensions of “temporality,” with a view to positing them as three active principles for structuring design: The programmatic extension of time embedded in the spiritual character of the necropolis, the constantly evolving nature of the design process—both within and outside the human temporal sequence—and the consideration of materiality beyond the ephemeral moment when material components become an architectural object.
INTRODUCTION

Human memory is a marvellous but fallacious instrument. The memories which lie within us are not carved in stone; not only do they tend to become erased as the years go by, but they often change, or even become by incorporating extraneous features.1

Primo Levi

The Drowned and the Saved (1988)

Extracted from his lucid account of the violent intertwining of life and death he confronted during his internment in a German concentration camp during WWII, Primo Levi’s quote foregrounds how the passage of time has a transformative effect on memory, altering and expanding it beyond actual lived experience. The quote is of particular interest to us as it seems to challenge some prevailing contemporary interpretations of time in relation to architecture. A prominent example of such interpretations is Juhani Pallasmaa’s phenomenological account of the architectural object as a container of time and space² and as a device to bring our minds back to an emotionally charged past.² Pallasmaa’s position strongly resonates with the views put forward by Peter Zumthor—a prominent phenomenologist. In his short essay entitled “A way to think architecture,” originally conceived and designed by architect Giambattista Nicastro in 1866, it is situated on the outskirts of Caltagirone, a town and municipality within the broader Metropolitan City of Catania in central Sicily. Its specific location combines peri-urban and rural characteristics. On the one hand, the cemetery site is directly connected to and surrounded by a network of roads and rail infrastructures that link Caltagirone with its wider regional context. Several light industries operate along these infrastructures in the immediate vicinity to the south of the site, while remaining visually separate from the architectural ensemble projected by Nicastro. To the north, east, and west of the site, a vast landscape of agricultural and forestry land extends into the far-reaching horizon. Large swathes of arable land are interspersed with areas of mature Mediterranean forests and shrublands, as well as small farming settlements. The initial impression is that of a deceivingly pastoral landscape which, upon closer scrutiny, quickly reveals itself as a highly humanised environment that has been inhabited since prehistoric times (Fig. 2).

This cemetery is a historical, monumental “city within the city,” originally conceived and designed by architect Giambattista Nicastro in 1866. It is situated on the outskirts of Caltagirone, a town and municipality within the broader Metropolitan City of Catania in central Sicily. Its specific location combines peri-urban and rural characteristics. On the one hand, the cemetery site is directly connected to and surrounded by a network of roads and rail infrastructures that link Caltagirone with its wider regional context. Several light industries operate along these infrastructures in the immediate vicinity to the south of the site, while remaining visually separate from the architectural ensemble projected by Nicastro. To the north, east, and west of the site, a vast landscape of agricultural and forestry land extends into the far-reaching horizon. Large swathes of arable land are interspersed with areas of mature Mediterranean forests and shrublands, as well as small farming settlements. The initial impression is that of a deceivingly pastoral landscape which, upon closer scrutiny, quickly reveals itself as a highly humanised environment that has been inhabited since prehistoric times (Fig. 2).

Gradually built in multiple stages and over a long period of time throughout the second half of the 19th century, the Eccumenical Cemetery was eventually left unfinished, and has remained so until the present day.3 Nicastro’s design conveys the idea of a necropolis in a characteristic neo-Gothic Sicilian style, and built them using several types of local stone—ranging from white Ragusa stone to volcanic stone from the Etna region and terracotta from Catalino—richly decorated with ceramic ornaments, the structures convey a strong polychrome impression that reinforces Nicastro’s aspirations to monumentality. The architectural ensemble is organised as a bi-axial composition, with a main northwest-southeast axis that runs through the site and is linked to the cemetery entrance gate and to the access road that traverses the adjoining neighbourhood. The central element of this bi-axial composition is shaped as a large Byzantine cross made of 170 arched stone porticoes (Fig. 3). These outline the ends of each of the arms of the cross as octagonal squares, which are themselves enclosed by the succession of arches of continuity with the arms. An exception to this enclosure is the tip of the northwest-southeast axis, which opens into a large void. This space was originally intended to be occupied by a chapel and, although several projects were drawn up for it over the 19th and 20th centuries, none of them were ever realised.

This remaining void in Nicastro’s structure became the focus of an international competition, jointly organised in 2021 by the Chamber of Architects of Bologna and the Chamber of Architects of Catania. The competition called for a built intervention that topped off Nicastro’s axial structure and provided formal closure to the porticoed construction while simultaneously articulating a broader connection to the surrounding areas of the cemetery.

1 Pallasmaa’s and Zumthor’s takes on the relationship between architecture and time have clear points in common. In both of them, the built form is approached as an instrument of human memory, inasmuch as it performs experientially as a permanent manifestation of the past. A key implication of this approach is that the realms of experience and time are considered solely through a human perspective and linked conceptually through human memory. However, as Levi points out, there is room to argue that memory itself is far from the stabilised construct that we consider it to be, and thus its ability to faithfully encapsulate the past is, at best, highly limited.

2 Rather than memory, time emerges in Levi’s writing as a stronger structuring force—both in relation to human experience and to the built environment—though it exerts its influence through gradual transformation rather than systematic consolidation. Following Levi, and in considering an alternative discourse that extends beyond the strictures of human memory and experience, we might contemplate an extended “temporal” architecture that encompasses an expanded range of transformations afforded by the passage of time.

3 To this end, this essay leverages a speculative design scenario—an entry to an architectural competition developed in 2021—as a platform to investigate and unpack the interrelated dimensions of temporality in the built environment. In so doing, it seeks to address the following questions: How can a small architectural intervention foreground and articulate several temporal cycles at once? How can these cycles be meaningfully intertwined to become a conduit for time-driven design decisions? How are these intertwined dimensions of temporality ultimately manifested—both materially and immaterially?

4 At the core of its argument, this essay posits temporality as a threefold dimensional system: One which encompasses the full life cycle of material components (before, during and after their presence in an architectural assembly); the programmatic and spatial embodiment of this assembly into longer temporal landscapes, and the time-inflected instrumental qualities foregrounded through specific design processes.

5 The Drowned and the Saved (1988)
This intervention was meant to serve as an ecumenical space of quiet reflection, which reiterated the poetic themes expressed by Niemeyer’s curvilinear system in a contemporary manner.¹

The goal of participating in the competition was to develop a design process (and a design proposition) that would jointly express how the problem of time as an intellectual question could be woven into the production of architecture at multiple levels and scales. In so doing, the passing of time was deliberately foregrounded as the principal developer of the design process, as well as a fundamental programmatic feature and a material strategy. A further goal of the competition development was to investigate how the different aspects of this “architectural time” and their potential interactions could be successfully manifested.

The structure of the text will develop in reference to this intellectual framework of temporality. Following a factual initial description of the design scenario and the temporal deliberations, it will establish three temporally inflected dimensions, referencing them against the intellectual positions from the recent history of ideas that they emerge from. In so doing, I will clarify their role in shaping the development of the designed output, supporting this argument through explicit references to a selection of the visual materials (drawings, sketches and digital collages) that were part of my original submission to the design competition. These visual materials are presented as captioned illustrations, providing further context on the material media and techniques through which they were originated. The textual argument will highlight how the aforementioned, temporally inflected dimensions are not separate but interdependent. On the contrary, they structure and augment each other, articulating a design framework that is driven by the passing of time—first as a passive accumulator of change but rather as an active principle of organisation.

1.1. Programmatic Temporalities [duration]

As an architectural programme, the central theme of the necropolis is the establishment of a built threshold between human life and death. It opens up a permeable boundary between two states, but also a place where the transition between such states can be spatially experienced and inhabited. On the one hand, this functional theme is inherently charged with symbolic content—even when we try to spell it out in strictly factual terms. On the other hand, a more expansive consideration of its architectural manifestation can help restate it beyond the strictures of symbolic interpretations.

Thus, we could argue that the necropolis programme activates two fundamental expressions of the interplay of life and death through architectural means: the persistence and transformation of memory, and the notion of temporal contingency. As accounts of change and transformation, both can be framed conceptually through the work of philosophers and architects Bergson. For Bergson, memory and perception are two fundamentally different mechanisms—discussed in his own terms, he notes that they are different in “kind” as opposed to simply different in “degree.” Whilst memory is fully relegated to the past and therefore not readily accessible, perception is the realm of “actual sensations” and therefore it is materially active in the present. That is, for Bergson perception captures and co-produces reality as it unfolds. However, he also noted that both systems are linked through the mechanism of image-memory, whereby the past becomes actualised in a present image. In so doing “pure” inaccessible memory from the past “borrows something from perception” as it emerges into the present and becomes mediated by it. This mechanism is strongly resonant with Levi’s quote on the articulation of the past and the present: Pure memory—the consolidated past—does not really partake in the present, but rather emerges in a mediated form, enmeshed into our unfolding reality.

From a conceptual standpoint, the project reflected this mechanism of transformation of the past into the present by drawing further from Henri Bergson, and specifically from his notion of Duration. For Bergson, this is a process of continuous yet heterogeneous transformation that is expressed over the passing of time. Duration encompasses the perpetual state of change of reality “as a whole” rather than as a series of discrete fragments, and independently of our ability to perceive it. This continuous transformation.⁴ As Gilles Deleuze puts it, Duration is a form of change that endures, inasmuch as it is “substance itself.”⁵ Within this framework, time is simply our fragmentary perception of this continuous unfolding of the present.

Tapping into this theoretical soil, the competition proposal aimed to present material and spiritual permanence—and the mechanisms that might activate—as continuous processes of heterogeneous transformation, encompassing both human and non-human entities and inserted into a much broader framework of uninterrupted temporal—and substantial—change.

In keeping with this aspiration, the design made use of tectonic and material languages that contributed to conceptually frame it as an intervention in the landscape rather than as a built object. That is, the intent of the design is not to produce a building, but rather a unitary intervention that links the stone arcades with the broader spatial and material organisation of the site. This strategy allowed the design to retain the spatial footprint allocated by the competition rules, while simultaneously embedding it into the elongated temporal cycle of the necropolis. An obvious precedent for this expansive landscape strategy can be found in the Igualada Cemetery designed by Enric Miralles and Carme Pinós, which has been widely characterised as an “architecture of time.”¹² In his own brief account of the Igualada Cemetery, Miralles describes the lighter tectonic components of the intervention as devices to “blur the edges” of other, more permanent material, solid cuts in the terrain. Furthermore, he notes how the place itself is something to be occupied with “small individual actions”.¹³ The themes of the dissolution of human-made actions and the extended duration of the site beyond the moment in which the project has been constructed already appear as key themes here. As Miralles poetically noted “to use this place is to make it disappear”.

The competition project aimed to incorporate functional and formal “blurring” that would challenge the prescriptive programmatic organisation imposed by the existing architecture. Thus, without resorting to formal or material replicas of the stone arcades designed by Giambattista Nicastro, the proposal continued and consolidated the grey and white public circulation routes that characterised the original design¹⁴ while simultaneously introducing opportunities for a broader range of “small individual actions” akin to those insinuated by Miralles and Pinós in their drive to make a place “disappear.” The sheltered walkways covered by the arcades were extended and connected to the northern sectors of the cemetery by means of two lightweight raised platforms (Fig. 4). These allowed visitors to gaze over the central open space left unfinished by Nicastro and provided an access to it via the adjoining stairs. However, the role of the connective platforms was not just to reach the central space as a culmination of the arcades, but also to foreground a further flow of circulation that continued “beyond” them, leaving the stone architecture behind to enter the large arboreous landscape that extends to the north-west of Nicastro’s work.

This connective gesture dissolved the prescriptive programmatic character of the arcades and the focal, axial space they led to, offering instead a continuous circulatory connection that invited perambulatory movements and drew users into the wider site of the cemetery and its adjoining territories. In this manner, both Giambattista Nicastro’s stone architecture and the proposed intervention were intended to appear as short, yet unfinished “moments” within a fluid,
1.2. Material Temporalities [change beyond human experience]

The temporally inflected material strategy for the competition proposal intends to challenge conventionally established relationships between matter and design. This is achieved by testing how the lens of an extended temporal framework may destabilise the prevalent notion that the former is subservient to the latter. This prevalent notion stems directly from the western, Aristotelian philosophical framework of hylomorphism: The idea that matter exists as an infinitely malleable, pliable substance, lacking in properties other than the potential to be shaped by human hands. In other words, hylomorphism suggests that “form” is something to be imposed on “matter” at once.

In a book that critically challenges the dominant paradigm of design as a hylomorphic imposition on matter, Simone Ferracina puts forward two key concepts that challenge the act of “design” as a singular, pivotal moment in the existence of a piece of architecture (and by extension, in the existence of any human-manipulated object). For Ferracina, these two vectors are potentiality and change. Potentiality encompasses the possible affordances and relationships into which objects may have entered in the past and the ones they may enter in the future. Change encompasses the potential of an object for transformation and alteration over time—be it by reassembly, weathering, disassembly, decay, adaptation, reuse, recycling or any other occurrence (human or non-human). These occurrences will not necessarily turn a given object into a different one, but rather make that object progress into a different version of itself.

Both potentiality and change are inherently temporal. That is, they emerge over time and are also detached from human temporal cycles. The process whereby an object turns into a different version of itself may exceed human time or, on the contrary, take place in such short spans that they are not easily apprehensible through human cognition. At the core of both ideas is an understanding that, in any design workflow, objects exist and operate within a broader relational framework, yet always still maintain a certain degree of autonomy. Ferracina refers to this autonomy as a quality of “withdrawal” in the relation between an object’s reality and its sensual qualities—a reference which itself draws from philosopher Graham Harman’s own ontological framework, known as Object-Oriented Ontology. In a succinct explanation of what he means by objective withdrawal, Harman describes how the objects that are in front of us are only partially present in our minds. That is, human observation constitutes only a small aspect of the real. Objects only offer a partial manifestation of themselves to the human sensual domain and develop complex sets of relationships independently from it.

This extra-human dimension of objects is aligned with both realist and materialist philosophical traditions. Whilst realism posits the idea that objects in the world exist outside (and independently of) human cognition, materialism considers that all entities are, to some extent, historically constructed. That is, they do not exist as unmovable singular “things” but rather as assembled entities that develop (and evolve) over time.

The conceptual framework summarised above—combining an awareness of continuous transformation through change and potential with an understanding of the ability of matter to “exceed” human sensation over time—drives the approach to material organisation in the competition proposal. A key design decision emerging from this position is the use of glulam as the material of choice for all structural elements. Also referred to as glued laminated timber, glulam is a structural, engineered wood product made up of layers of sawn timber bonded together with adhesives. In this manner, the main organisational rhythm of the project was provided by glulam pillars, extended vertically to form large, laminated timber pergolas, which in turn were partially covered with a diagonal mesh of tensioned steel wire (Fig. 6). The structure responded to the spatial rhythm and the span of the arched naves of the arcades, but also to the arboreal elements that determine the broader circulatory rhythm of the necropolis: Its changing geometry sought a gradual accord between the monolithic, monumental sequence of Nicastro’s architecture and the “ligneous” rhythm of the trees and the vegetation that articulate the cemetery.

Moreover, the choice of glued laminated timber—unconventional in this geographical context—also reflected the intention to build lightly and with consideration to the broader temporal impact of human construction. From a propositional angle, this translated into a desire to leave as few permanent traces as possible in the event of a future decommissioning of the structure. This, in turn, extended to a consideration of how materials are initially sourced, but also how they are disassembled and eventually disposed of. With this in mind, and considering their entire life cycle through a Life Cycle Assessment protocol (LCA), it was determined that using glulam elements would yield the overall lowest ecological footprint before, during and after their use in the project. Key factors in this assessment included the carbon emission mitigating potentials of cradle-to-grave recycling strategies associated with glulam, and the ability of timber to sequester carbon over long periods of time (which extend well beyond the use of any given material).

An important goal of the design proposal emerged from the way in which the architecture of the stone arcades could be regarded as a material index of the broader regional landscape in which they are embedded.

Fig. 6 – Structural axonometric of proposed intervention. Ink on velum.
As noted in previous sections, the arcades were constructed using a remarkable range of different stone types, brought from different parts of Catania and Sicily. The glulam structural geometry added a ligneous layer to this material index, which also encompassed the human remains lodged into the niches and the transient, fleeting human traces of visitors. Like a solar clock, the serialised rhythms of the structural ribs projected ever-changing layers of shadow onto the open ground space of the lower level, emphasising its use as an area of quiet reflection on the perpetual rhythms of the natural world. In keeping with the stated aspiration to address matter “beyond” human time and the human mind, this overarching material strategy framed the intervention as an action that extended beyond the “visible” life cycle of the architectural proposal. In Western cultures, cemeteries provide a metaphorical device that helps situate the cycle of human life within a broader temporal sequence, suggesting that our existence surpasses the point of physical death in one way or another. In line with this, the intervention sought to attune this broader framework of existence to the non-human components of the project: its extended material substrate and the temporality of the natural landscape it is embedded into.

1.3. Instrumental Temporalities [unfinished processes]

The third temporal dimension tackled in the competition proposal for the necropolis of Caltagirone pertains to the methodological approach to the design process itself. As was the case with the other two dimensions presented in this essay, the idea of temporality as a form of continuous transformation was explored as a productive condition that could be embedded into the core of the design workflow. As anticipated in earlier paragraphs, this resonates with the aspiration of contemporary practices that deliberately seek to both extend and blur their design processes. In so doing, they attempt to destabilise the idea of design as a particular “moment,” opting instead for presenting it as a continuous transformative endeavour that does not make a distinction between “work-in-progress” and “final results.” Critically, such destabilisation also extends this transformative production beyond the agency of the human designer and its inscription into human time.

Once again, the work of Enric Miralles and Carme Pinós provides abundant cues to better understand this approach. In a short essay prefacing a series of works under construction, Miralles notes that “construction” is certainly not the final state of the process, but rather “another of the unconnected instants that are always demanding a new response.”21 Working within the conceptual and disciplinary tradition of Miralles and Pinós, the practice of Eva Prats and Ricardo Flores has provided the most comprehensive contemporary account of how this aspiration can be mobilised through a design methodology that is grounded on an intentional, restricted use of representational methods and techniques. As Juan José Lahuerta notes, Flores and Prats’ work “takes its time and lingers in an unarmed experience” and both hand and tool operate in a continuous process “with the work.”22 In order to establish these working conditions, Flores and Prats put great emphasis on harnessing the instrumental implications of their chosen means of architectural representation—namely hand-based drawing and model making.

Although on the surface it might be perceived as a purely visual or stylistic decision—seeking to establish the practice as an “artisanal” alternative to the heavily prevalent aesthetics of digital production in architecture—the intent of Flores and Prats cannot be reduced to a simple preference for “drawing using analogue instruments.” On the contrary, Flores and Prats articulate their method through the notion of “thinking by hand”: a form of material engagement with the project that is intellectually multilayered, deliberately extended and, most importantly, formulated as an endeavour that is not marked by either beginnings or ends.23 The iterative approach afforded by the instrumental conditions of hand-based drawing is also clearly prominent throughout Carme Pinós’ long-spanning solo practice career. In a recent interview, Pinós elaborated on the “tentative” yet also resolutive nature of her pencil drawings. For Pinós, these drawings are the key locus of design organisation, and can be returned to whenever key decision-making moves are required.24

In keeping with the pursuit of a temporally-driven modality of engagement with design as a process, work on the Caltagirone competition proposal sought to tap into the instrumental development methods explored—among others—by Miralles, Pinós, Flores and Prats. In so doing, all key documents of the project were drawn entirely by hand, using pencil and ink on large-format velum sheets.

Again, rather than a stylistic choice to set the work against sophisticated means of digital production, hand drawing served as a deliberate method to defer the identification of an “end result” indefinitely, ultimately discarding the possibility of “completion” altogether. Working in this manner, drawings are never a finalised blueprint that guides—and marks the beginning of—a separate stage of material assembly and construction. On the contrary, they become a series of continuous, overlapping “constructions” that extend over a potentially infinite period of time (Fig. 7).

At an instrumental level, some of these “constructions” are enabled by the physical overlaying of large velum sheets, whereby parts and fragments emerge to conform a fluctuating whole with potential for rearrangement and recombination. This configuration also leads to

![Fig. 7 - Photographic overlay of the development of the proposed architectural plan, elevation and cross sections. Ink on velum and digital collage.](image-url)
the collapsing of different drawing projections—plans, projections and elevations—into one single drawing sheet. This intertwining of projections—both geometrical and spatial—is, in turn, expanded through the deliberate use of a single line weight throughout the drafting process. In so doing, an additional form of fluid continuity is established by blurring the hierarchical distinctions between background and foreground, section and projection, object and landscape.

A key aspect of this instrumental methodology, the manual commitment of lines and curves to paper means that slight design variations gradually emerge as the drawing develops, giving rise to a certain degree of inconsistency across different projections (Fig. 8). Rather than a liability, these deliberate inconsistencies challenge the fiction that the finished intervention will be an exact, scaled-up replica of a set of fully precise design documents: A number of design decisions will unavoidably be delayed until the work is on site, eventually blending into a wider set of “small individual actions”—human and non-human alike, and pertaining to the extended inhabitation of the site—that Miralles referred to when describing the cemetery in Igalada (Fig. 9).

CONCLUSION

Working within a functional programme that is inherently charged with symbolic content, the proposed intervention aimed to challenge established assumptions about how architecture may relate to the passing of time—in terms of its embedded material culture, its originating processes, and its spatial and aesthetic organisation.

In presenting this body of design work in relation to the textual counterpart of its intellectual framework, this essay is an attempt to explicitly map the different dimensions of architectural temporality unpacked by the visual materials against a relevant, contemporary philosophical discourses.

Besides the well-known connections between their respective theoretical lineages, these strands of discourse are linked by their shared interest in situating time and the chair of continuous transformation. Critically, they posit this domain as being connected (but not dependent) on human agency and perception. Thus, the three temporal dimensions of architecture presented here can be effectively regarded as three intertwined manifestations of time as a continuous sequence of perpetual, heterogenous transformation.

Ultimately, this essay endeavours to explore the question of architectural temporality in the broadest possible sense, but also to deploy it as a cohesive intellectual discourse, which can be mobilised as a series of design decisions—material, programmatic and instrumental alike—.

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NOTES

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6. For the above see www.concorsoarchibo.eu/pazio-ecumenico-caltagirone/documenti (accessed 22 Aug. 2023)
17. Ferracina, 192-98.