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VIRTUAL TEMPLE PROJECT
A historiographical, conceptual and experimental expansion

MANUEL VIÑAS LIMONCHI (MVINAS@USJ.ES)[1]
[1]San Jorge University, Spain

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ABSTRACT

At the beginning of the present century, the project entitled "Virtual Temple, the paradigm of a new building" (2004) establishes —as an architectural utopia— a theoretical basis and a constructive graphic intervention supported by the continuity of CAD systems and the qualities of user-machine interaction. This article presents an analysis of this project in which narrative, creativity and technology, reviewed in an architectural approach, become the main variables that participate in the development of the objectives, methods, diagnosis and results of the research. Variables and methodologies that determine the morphology and urban location of the building, as well as, inside, the multimedia devices created using industrial design techniques, expressing the style and objectives of the building.

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1. Introduction

Architectural utopias and their connection to urban interventions allow for a repertoire of formal, conceptual and stylistic expressions that converge in a constructive design freed from the eminently functionalist conventions of the modern movement. In this sense, the rhetoric that nourishes creative literature in certain architectural trends finds its place in works of great historicist significance, such as those proposed in 1922 by Paul Gerhardt, Isaac N. Phelps Stokes and Adolf Loos for the ideas competition organised by the *Chicago Tribune* for the design and construction of its new corporate headquarters. This proclamation opened up this interesting architectural facet to the professional sphere, regulating the launch and conception of projects based on public guidelines, and in which, according to Smithson and Smithson (1956), it is clear that "the influence of the mass media and advertising today is infinitely stronger than that of avant-garde architects" (p. 49). In response to *the brief*, Adolf Loos versed the appearance of the building in the artistic dialectic of a Greek column, the *Chicago Tribune Column*, evoking the syntax and semantics of one of the key elements in the design of a newspaper layout based on a "double pun on the word column: *newspaper column and tribune*, the name of the newspaper" (Jencks, 1981, p. 53). However, the winning proposal was by Raymond Hood and John M. Howells, who proposed a more normative project, a robust neo-Gothic watchtower that became the institutional symbol of this illustrious newspaper, standing out in the already winding layout of the American city.

A utopian architecture similar, in other latitudes, to the project for the Moscow headquarters of the *Pravda* newspaper carried out by the Vesnin brothers in 1924. A proposal endowed with the particular synthesis of Russian constructivism, sketching linear geometries, colours and typographic blocks that give a machinist form to a building whose exterior transparency evoked the informative idiosyncrasy of the media outlet, thus becoming a genuine icon disseminating its editorial policy.

However, a few decades later, in the context of architectural complexes, "the formal component of modern urban utopia also made its presence felt, even in the specific field of the study of public roads" (Boaga, 1977, p. 74), and , earlier, in the capricious —because paradoxical— *belle époque*, according to Bárida (n.d.), *fin-de-siècle* writers, anticipating certain preferences, believed that cities were not born in the morning sunlight, but under artificial light. An artifice, ultimately, constituted as a utopian sustenance in the configuration of metropolises which, Bárida continues, makes sense in the words of Richard Le Galliane, for whom "the great capitals of the world were 'modern Babylons', and who, when writing about London, he did not think of Westminster Bridge in the morning light, but of Piccadilly at night." In reference to urban space, as suggested by Daniel Hiernaux (2007), this imaginary can be understood as a spatial representation, based in part on the urban sociology that Peter Saunders (1986) refers to as inducing organisation in space.

Within this new order, the streets of the English city abandoned the traditional image of scenes and characters that permeated William Logsdail's canvases, to take on another more artificial one, closer, for example, to manufactured interventions in the German Bauhaus, such as Herbert Bayer's *Luminous Advertising Sphere* (1924). This large structure rotated on its own axis and was equipped with electric light bulbs which, emulating the pixel matrix of monitors (yet to be invented), reproduced typographic characters, becoming an innovative propaganda medium.

A plastic art of shapes and lights that is transferred to Robert Delaunay's Paris, illustrating it as a dramatisation of the Eiffel Tower (1911) engulfed like a flame by the Champ de Mars, as well as that captured by Hector Guimard, the standard-bearer of Art Nouveau architecture, who designed the entrance to the underground, to *the Metropolitain* of such a beautiful city, passing through its elegant iron and glass canopies. Without denying, on the other hand, the socio-economic reality of the early part of that same century, exemplified in the working-class neighbourhoods of the French capital: *shanty towns* near the factories, built with waste materials and devoid of any hint of habitability. In both cases, "the urban landscape," writes Professor Anthony Kriesis in his work *Greek Town Building* [1965], "is a true reflection of the way of life and attitude towards it of its inhabitants" (Morris, 2013, p. 35).

Architectural utopias that, in the cinematic landscape, clash with dystopias rooted in movements such as brutalism, as in the film *High-Rise* (directed by Ben Wheatley in 2015), but based on the artifice created by physical resources such as light, introduced, as Speer (1969) narrates, of the first example of luminous architecture, with Albert Speer's famous Cathedral of Light (1936). Utopias that, decades later, incorporated the theoretical foundations and synthesis of forms that shaped postmodernist buildings. Contextualised within this trend, the buildings erected by Robert Venturi or Aldo Rossi exhibit a rhetorical quality that embraces eclecticism and ornamentation as hallmarks that endow the work with a rich narrative and significant historicist value. Architectural complexes fully integrated into the urban layout and its socio-cultural realities, which expand into space from the constructive unity of asymmetrical openings arranged on the façade—converted into a Greek frontispiece—of the Vanna Venturi house (1962-1964), to the unique urban location that houses the floating structure of Rossi's Teatro del Mundo (1979), with "the city of Venice always as a backdrop, achieving an ideal depth of stage space" (Braghieri, 1986, p. 144). Rossi himself, in the introduction to his book *The Architecture of the City*, explains that "the city, the subject of this book, is understood in it as architecture" (Rossi, 2013, p. 60) and "architecture, better than other artistic languages, has represented the utopian longing of the avant-garde" (Torres, 2010, p. 12).

These visions nourish the formal and conceptual foundations of the framework for the *Virtual Temple* project*, the paradigm for a new building* (Figure 1), led by the author of this research and its corresponding conversion into an article. A building proposal that seeks to reflect the morphology of the "large volume formed by white marble panels attached to translucent glass" (Sánchez Vidiella, 2011, p. 154) of the Saint-François de Molitor church, designed by Corinne Callies and Jean-Marie Duthilleul, and in which—for the sake of its multidisciplinary purpose—architectural components are fused with technological assets, Platonic volumes with digital devices of an expository nature and intent. Also, in the subtractive forms of the Church of the Holy Redeemer (La Laguna, 2005-2008), conceived by Fernando Menis from four large concrete rocks, between which "light penetrates, taking on special prominence within the project. Rocks and light, the body and the ethereal" (Menis, 2011, p. 106). Why not, in the interior and exterior asymmetries of the churches that, as a product of the "Lutheran liturgy" (Fleig, 1998, p. 195), Alvar Aalto designed in Imatra (Finland). In this regard, the roofs covering the central nave and transept of *the Virtual Temple* adopt, in the manner of a hyperbolic paraboloid, the undulation of the surfaces clad in titanium sheets that outline the outer membrane of the Guggenheim Museum Bilbao (1997), designed by Frank O. Gehry, also wielding the creative principles of the aforementioned Bauhaus in other fragments of its structure. A universal pedagogy described by art theorists such as Rainer Wick (2007) and reviewed in the anatomy of the building that subscribes to the *Virtual Temple* project through allusions to the modular design applied by Walter Gropius to his architectural interventions or by Marcel Breuer to the industrial activity he introduced, mainly in the furniture workshops of the German institution; provided, at the same time, with artistic precepts that cut across other graphic disciplines, such as the colour sequences generated by Johannes Itten and Paul Klee or the typographic studies of László Moholy-Nagy.

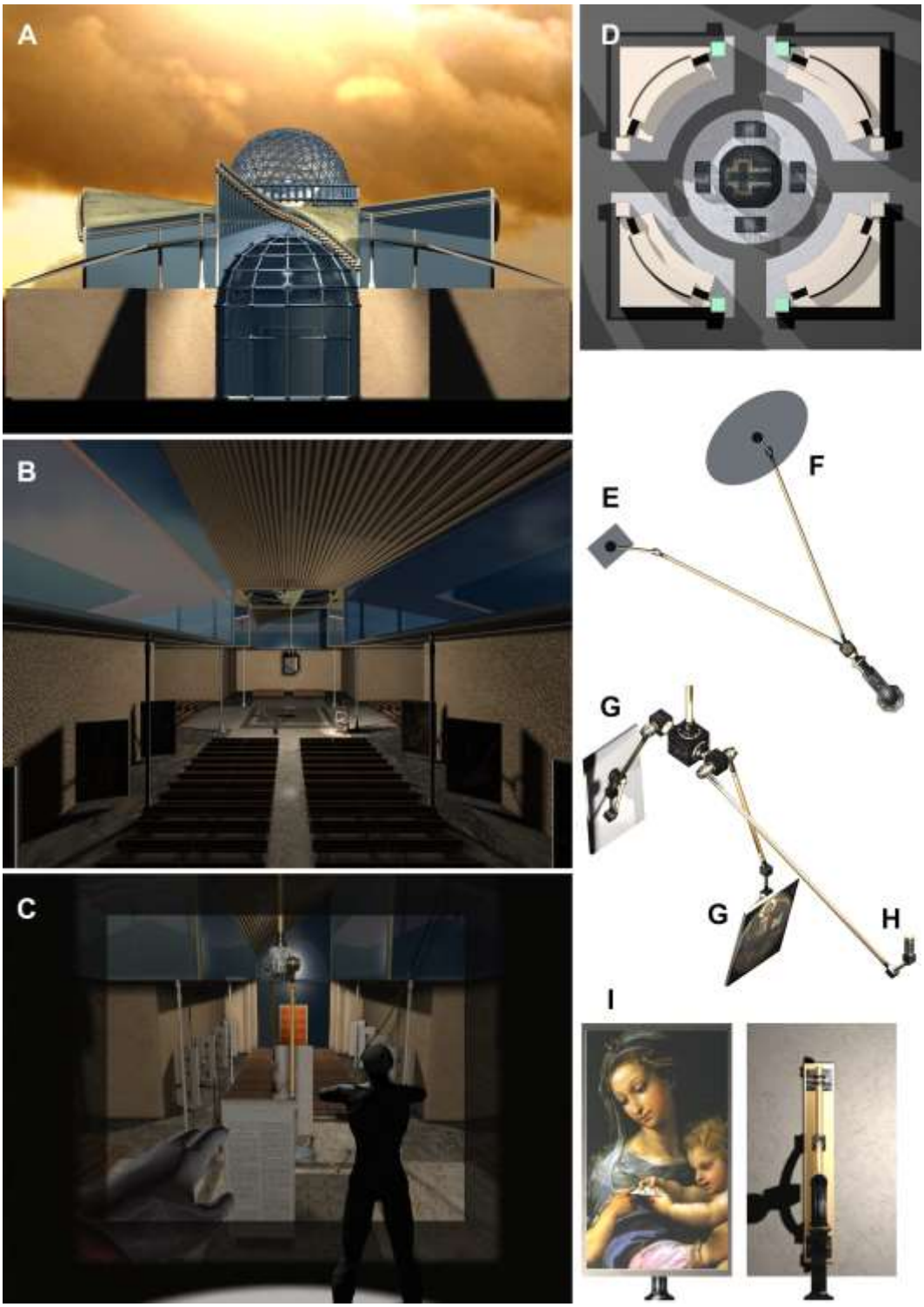
In short, creative routines that drive the technical and artistic aspects of the architectural project, promoting conventions and arguments that blend with industrial and technological assets, inherent to construction practice and, on a larger scale, integrated into the metropolitan landscape in that "prevalence of urban order" stated by Luis M. Mansilla and Emilio Tuñón (2012, p. 11).

2. Methodology

Regarding "the temple and its meaning", Manuel Iglesias Costa (1998) subscribes to the idea that it is "the most appropriate building for determining the development of construction techniques and the harmony of forms, evolving in step with ideas and the course of the ages" (p. 11). This argument is confirmed by Rafael Suárez Medina (2017) when he suggests that:

The Christian temple was the most important building theme until the 18th century, corresponding to the history of the evolution of Western architecture. The study of religious architecture has generally been linked to traditional studies through its physical reality, its visual, technological and stylistic variations, forgetting the intangible values and, therefore, basic information about its symbolic significance. (p. 25)

Figure 1. *Virtual Temple* Project: architectural and technological assets.



Source: Own elaboration, 2004.

This exhibition presents a review of the *Virtual Temple* project based on the creative and technological methodological and historiographical narrative that underpins this building proposal. Two of the three key areas of design, on the one hand, that which operates within the architectural-urban framework and, on the other, that relating to the industrial context, come together in a study that explores the theoretical foundations of the construction project and its formal procedures, guided by the writings and work of scholars such as Le Corbusier and Peter Behrens. The latter, practised in both areas of design but strongly rooted in the third, which operates on the graphic-editorial side, contributes with its creations in the advertising and corporate sphere to the consolidation of architectural ideals as significant as those carried out for the popular electricity company AEG.

Consolidated in the research report that supports the description and progress of the *Virtual Temple* project, these divisions of design find in digital technology a true ally in the creative facets that allow for the ideation, representation, and manufacture of the proposal, as well as user interaction within immersive virtual reality (VR) environments that deploy a script and a space endowed with both architectural and industrial plot and formal resources.

In short, the methodological framework of the research is based on the formal and stylistic evidence that in 2004 illuminated the design of the architectural and industrial assets prescribed by the *Virtual Temple* project. This technical and creative activity is then balanced with the author's academic and informative documentary contributions in these areas of knowledge. Two decades later, these foundations introduce a historiographical review of a building model characterised, on the one hand, by architectural features whose constructive essence lies in form, space and light and, on the other hand, by technological advances driven by user-machine interaction mechanisms specific to systems such as virtual reality.

These methodological indications, set out in a scientific text such as this article, should not overshadow the authorship of a review of the subject matter, the *Virtual Temple* project, signed by the author of the proposal and the relevant research. In this regard, it should be noted that this renewed immersion in the *Virtual Temple* project transcends the boundaries and creative expectations of a particular building proposal —in no case subjective— to delve into the analysis of a building model that combines technical, functional and aesthetic construction procedures in which the aforementioned variables, such as space and light, converge in protocols that express the spirituality of the individual who undertakes the routines inherent to the function of the building. Formalisms, such as the establishment of itineraries subject to the intervention of space, not only within the temple, in accordance with the liturgy, but also in its accesses, anticipating routes atavistically regulated by the layout of cities, especially their roads; or those that support the incidence of light as an immaterial phenomenon by virtue of the purpose of the building, but also physical, detailing the architectural surfaces in the modelling of the volumes processed in the design stages, as well as, subsequently, in that natural harmony that is produced between the exterior and interior space, traversed by distant external lights that converge —within the walls— with the artificial ones.

This and other evidence suggest a prolonged reflective transition from the uniqueness of the project to the infinity of research, agreeing on a narrative within the article itself that leads to the presentation of testimonies and procedures, as well as works and authors that urge an expansion of this within the more openly architectural order.

3. Objectives

In one of his writings, J. V. Foix (1995) quotes Le Corbusier's testimony on the plasticity of architecture, pointing that it´s a genre that was created to express an entire cycle of emotions. In this text, Foix indicates that paths appear around the building or in the building around the house or inside the house. The interior and exterior are a single biology. Harmony comes from achieving a state of perfect concordance.

Recognising this interior and exterior harmony that encompasses the functional and stylistic purposes of the building, described as “biological”, two general objectives are established that

weigh up the significance of the key areas of design, abbreviated here to architectural and urban design, as well as industrial design, applied to the narrative and morphology of the planned temple. Namely:

Objective 1. Architectural and urban design:

"Le Corbusier extends the foundations of his architecture to urban planning" (Gimferrer, 1979, p. 202). The urban layout, the city, takes shape in spaces that are characteristic of an architectural model. Occasionally, these are fictional spaces, such as in the futuristic fables in which filmmaker Terry Gilliam infers architecture "as a plastic element that shapes a terrifying labyrinth" (Santos, 2019, p. 96), or in the dystopian city of Los Angeles filmed by Ridley Scott for his *Blade Runner* (1982), but also real and sublimated, such as the landscapes resolved in neon facades in the city of Las Vegas, toured in 1968 by Venturi, Scott-Brown and Izenaur and concretised a few years later in the publication entitled *Learning from Las Vegas* (2015). It is therefore appropriate to analyse the spatial aspect and narrative of the building as a unit and, at the same time, as a catalyst for the urban landscape, categorised by Florencio Zoido (2012) as "perimeter architecture", as "a fundamental component of the interior urban landscape in every sense of the word" (p. 55).

Objective 2. Industrial and interior design:

In terms of industrial design, using the repertoire of technological devices that, distributed throughout the interior space of the temple, take care of the audiovisual tasks inherent to the liturgical function, the aim is to achieve, as indicated by Anatoli V. Lunacharski (1969), the skill of the engineer-artist who has a special taste for geometrization, able to make a beautiful machine thanks to a remarkable coordination of lines. This endeavour is oriented towards the design of such digital devices using graphic syntax that illustrates the particular attributes of their volumes and surfaces and blends in with their architectural counterparts.

4. Analysis and results

Karin Ohlenschläger (1997) outlines the three main characteristics of a virtual reality work: immersion, interaction and imagination. With these, the viewer becomes a participatory user of the artistic creation. Immersion, interaction and imagination stipulate an environment covered with stereoscopic images that operate with a virtual navigation system equipped with ultrasonic emission sensors, within which the user moves. Three concepts that converge in *La Piel Capaz*, an architectural intervention of digital design and purpose, created in 1997 by Rafael Lozano-Hemmer and Emilio López-Galiacho, whose exhibition dynamics and graphic narrative, typical of VR, allow for the virtual reconstruction of Andrea Palladio's Renaissance Villa Rotonda, located in Vicenza (Italy).

Similar to "the golden shell of the new opera house [the New Mariinsky Theatre in St. Petersburg], whose construction was ultimately cancelled" (Arquitectura Viva, 2008, p. 57) and composing an "architecture that covers and defines collective spaces (...) that adopt the almost conventional condition of the singular building" (Ynzenga, 2013, pp. 59-60), *La Piel Capaz*, says Ohlenschläger (1997), speaks of the superimposition of real space and cyberspace, reclaiming the physical place and its memory as a meeting point between the building and its virtual representations. The testimony of Ohlenschläger, a champion of digital culture and electronic art in the 1980s and 1990s, endorses much of the theoretical foundations and methodological and instrumental synthesis of the *Virtual Temple* project. Not surprisingly, the subtitle of this project, *Conceptual and constructive analysis of the constituent elements prior to their insertion into the VR platform*, reveals the technical codes of this methodology subscribed to a CAVE-type VR immersion platform (Figure 1.C). CAVE (*Cave Assisted Virtual Environment*) emerged in 1991 as a result of research carried out at the Electronic Visualisation Laboratory (University of Illinois, Chicago) by Thomas A. DeFanti and Carolina Cruz-Neira. Since then, its relevance and technical evolution have been remarkable, with its cubic geometry hosting stereoscopic images representing the most diverse areas of knowledge. The ability to "adapt the perspective of images in real time to the position of the user's head, while the user can select and modify the characteristics of virtual objects with certain gestures" (Polytechnic University of Catalonia –

BarcelonaTech, 2013) makes it a key medium for this immersive system, contributing, as in this project, to the analysis of positioning and interaction deployed in architectural space.

Architecture and technology converge in two building proposals, *La Piel Capaz (The Capable Skin)* and *Templo Virtual* (Virtual Temple), whose transition between interior and exterior spaces adapts to the individual's will within the framework of the story being told, but also in projects developed with similar virtual and augmented reality formalisms by Franz Fischnaller, undoubtedly one of the key figures in the evolution of these methodologies thanks to his rich contribution of cultural and educational nuances. From his exceptional list of works, it is worth highlighting *The Last Supper Interactive*, "an interactive and immersive journey in which visitors are teleported to the historical and architectural setting where Leonardo created his masterpiece, the Convent of Santa Maria delle Grazie in Milan" (Fischnaller, 2023); as well as *SpaceGate*, a proposal endorsed by the interaction between architecture, design, art, science, entertainment and technology. The first of these works by Fischnaller is close to the visual narrative and sacred transcendence revealed by the *Virtual Temple* project; the second, returning to this same case study, not so much in architectural style, but in the functional and symbolic character assumed by form in both works, sheltering an enveloping space that invites connection, a liturgy supported by technological assets. Both proposals, as Fischnaller (2008) refers to, are dated in an "era of technological communication and collaborative transformations that continues to generate revolutionary changes, opening up avenues to new ways of perceiving, feeling, communicating, sharing, thinking, creating, relaxing, living, working, enjoying, coexisting and dreaming" (p. 101).

From here, observing the impact of architecture and technology on the formal constitution of the building (both of which facilitate the visual representation of its paradigms and the interaction they elicit in a user eager for the textual and graphic narrative of the proposal), it is appropriate to carry out an analysis of the three architectural scenarios proposed by the *Virtual Temple* project.

4.1. Interior analysis: space and technology

Enrico Tedeschi (2017) argues that "a work without interior space is not architecture, but sculpture" (p. 139). In classical orders such as painting and sculpture, this plastic art takes on a presence and function that are recurrent in the typology of the building under examination, the religious temple, revealing the liturgical activity that unfolds in this place of worship. For this reason, the iconography located in each space of the building follows the protocol set out in religious chronicles, teaching about the life and work of its protagonists. These are graphic testimonies, associated with the erudition of the great masters of the artistic periods, which dictate the behaviour of the faithful in terms of sequences and regulated routes in the planning of the space within this temple project dating from the early years of the present century.

In this regard, in his theory of *promenade architecturale*, Le Corbusier notes that he "controlled the interior and exterior circulation of his works with the aim of transmitting to the user a sequence of experiences that would leave a mark" (Baker, 1988, p. 261). Demanding a “structural framework to adapt the elements of circulation”, the Swiss architect “encourages the use of circulations as arteries linking the main organs and proposes their layout as the basis for the framework of the building's activities” (Baker, 1988, p. 260). Thus, Le Corbusier describes his Villa La Roche (1923-1925) "as an architectural promenade":

> We enter, and then the architectural spectacle unfolds before our eyes. We follow an itinerary, and the perspectives develop with great variety. The flow of light is played with, illuminating the walls or creating shadows. The openings provide perspectives to the outside, where architectural unity is found once again. (Le Corbusier and Jeanneret, 1935, p. 60)

Given the spiritual nature of the building under study, Tim Benton delves into different interpretations of the *promenade architecturale*, noting that:

> One possible analysis would associate the route with the history of modern art, represented by La Roche's collection of paintings, in that the visitor is presented first with analytical and crystalline Cubism, and then with Purism. According to other analyses, the route represents the progressive elevation of the spirit, a painful path that leads from everyday life, through art, to the sanctuary of the library, a place of intellectual work. (Benton, 2021)

Drawing on the testimony of Roberto Goycoolea (1998), Bernardo Ynzenga (2013) states that "the acceptance of the conceptual existence of something equivalent to space (...) became accepted as a matter of course through faith" (p. 44). God's creative role "came to affirm that space 'is', that it was created and that, as a result of an act of creation, it was perfect from the outset. And so, space had a verb and a concept" (p. 44). These are all disquisitions, perceptible in the constructive philosophy of the *Virtual Temple* project, which allow us to establish the artistic and spiritual component that favours its architectural identity.

Throughout ecclesiastical genealogy, R. Suárez (2017) asserts that there has been a modification of "liturgical places, understood as the setting for the celebration of the sacraments, which determine limits that define the practical-symbolic action of man, delimiting and defining the architectural space as the physical setting of the church" (p. 37). In keeping with this spatial approach, but in terms of industrial design, the interior of *the Virtual Temple* brings together a catalogue of technological devices strategically located and categorised either as mechanisms for emitting liturgical representations or as furniture adapted to the activity performed by the celebrant.

The first group contains the digital frames, the altar blades, and the dome projector. These devices, like the temple, were digitally designed and modelled by the author of this research and subsequent article. A descriptive summary of these three instruments would stipulate:

- Digital frames (figure 1.I): Distributed throughout the side aisles to facilitate the viewing of images related to the religious liturgy, these digital panels replace traditional pictorial standards, materialised in canvas, wood, or paper. The mechanical joints that assemble the different parts of the frame give the projection surface full mobility, allowing it to rotate on different axes to become a vertical or horizontal support, orient the image towards other planes of the room or tilt towards the viewer.

-Altar panels (figure 1.G): Similar in appearance and function to the digital frame and suspended—together with the dome projector—in the apse of the temple, these panels display the aforementioned iconographic compendium, predominantly showing synchronous images of the celebrant to help attendees follow the ceremony.

- Dome projector (figure 1.H): The type of dome chosen for this project recreates the architectural and engineering methods used in the mid-20th century by Buckminster Fuller, creator of the famous geodesic dome, whose "construction is based on the basic principles of tensegrity structures" (Martínez, 2020). The struts and joints that articulate the semi-spherical metal envelope of this dome contrast with the smooth internal concavity that replaces, in this case, the ancestral frescoes and bas-reliefs to accommodate the beams of light that—composing an image—are projected from a level below the centre of the semi-sphere.

The second group consists of two pieces of furniture that are common on the altar, namely the pulpit and the celebration table:

- Pulpit (figure 1.E): This mechanised support, similar to a lectern or ambo, houses a touch screen that replaces the liturgical book used by the celebrant. This device is used to control the mechanisms and content projected onto the digital screens, the altar panels and the dome projector.

- Celebration table (figure 1.F): Articulated with the same movement system and on the same base as the pulpit, an extendable arm supports its surface and adapts it to the celebrant's requirements.

The correlation between these devices, which convey the sacred pictorial and sculptural narrative, and the structural volumes of the temple highlights the theories of Jacobus J. P. Oud (1921). Peter Collins (1977) points to this Dutch architect when he reveals that:

> The ideal of a complete fusion of abstract sculpture, abstract painting and construction technology was expressed by Oud in his manifesto *On the Architecture of the Future* (1921), where he announced that "an architecture created by itself is finally possible. The other arts are no longer subordinate but work organically with it". (p. 279)

Without detracting from the particular semantics and symbolism of sacred texts, this iconographic liturgy, enveloped in another, physically larger one that resolves the building's structural anatomy, now accommodates the technical and creative advantages introduced by Artificial Intelligence, enabling the audiovisual readaptation of content that is perfectly imprinted on the retina and in the mind of the faithful. Generative art "allows a fusion between human creativity and that of the machine, offering a new perspective on artistic expression" (Casas Arias et al, 2024, p. 242), that is highly effective—because it is illustrative—in projects such as *Virtual Temple*, which are equipped with an interdisciplinary repertoire of images ranging from graphic literature attributed to religious genealogy to the CAD/CAM compromise that the methods of representation and construction of the building arrogate to themselves.

4.2. External analysis: geometry and matter

Regarding the external appearance of Renaissance churches, Antón Capitel (2012) states that "since the church is an almost purely interior building, the exteriors and, specifically, the main façade—often the only external element—could aspire, almost exclusively, to a certain formal coherence with the interior" (p. 59). This teleological stance could be qualified by E. Tedeschi (2017), who suggests that "any work of architecture seen from the outside can be confused with a work of sculpture" (p. 140). Two major arts, architecture and sculpture, implemented in creative work, not only aesthetic but also functional, which requires the fixing of the structural volumes and ornamental surfaces that make up the building, the temple itself; noting, as Luis Moya González (2014) states, that "when a unique work is necessary for spiritual or social reasons, it will actually be slightly more voluminous in context, but will apparently be distinguished from the rest by its location and composition" (p. 95).

As a consequence of its architectural roots, the structure of *the Virtual Temple* has a marked symbolic quality. Its Latin cross plan dictates a formal economy based on simple vertical planes that—within the walls—run through an open space on a modular scale. This formal spontaneity is "curtailed" by two factors that contribute material and narrative to the architectural ensemble: on the one hand, the furniture infrastructure, which, singularised in the *ad hoc* multimedia devices, contributes to the development of the religious functions and narrative; on the other hand, pointing to the construction resources, the use of glass materials as a structural element that runs along the outer strip connecting the concrete walls to the roof of the building.

This simplicity, limited to form and enhanced in part by the use of glass, finds an unbeatable precedent in an architectural archetype as ecumenical as the house, with similar attributes found in the Eames House (Los Angeles, 1949) by Ray and Charles Eames, Ludwig Mies van der Rohe's Farnsworth House (Illinois, 1945-1951) and Philip Johnson's Glass House (Connecticut, 1949). Other notable examples include the headquarters of *Der Spiegel* magazine, designed by Henning Larsen Architects in Hamburg between 2007 and 2011, which features a "glass roof that can be used for multimedia projections and will, to a large extent, be the reason for the building's excellent energy balance" (MGS Architecture, 2013). The German *news magazine*'s corporate building echoes the most canonical analysis of the architectural project, matching the material, in this case glass, with a "dihedral" appreciation of the building that would endorse the aforementioned formal economy. This work is limited to architectural practice which, embodying such precepts associated with the representation of form and the qualities of the material, can be

seen in buildings that are certainly less well known but equally relevant for their experimental value. Among them is the *Casa del Desierto* (2018), designed by the team of architects led by Spela Videcnik of OFIS Architects and located in the Granada Geopark. "A designer home, fully glazed and self-sufficient" (La Casa del Desierto, n.d.), which blends a 20 m^2hexagonal building, divided into three glazed modules, with the arid surrounding environment.

The natural settings surrounding the *Glass House* and the *Desert House*, as well as the urban settings that shelter the institutional building of *Der Spiegel* and the building that houses the *Virtual Temple* project , infer the contribution of the exterior space in the interpretation of the building itself, agreeing that "content and container come together in the same project gesture" (Ynzenga, 2013, p. 49). Rudolf Arnheim (2001) asserted that “no spatial problem is more characteristic of an architect's work than the need to see the interior and exterior as related” (p. 75). In these architectural examples, this relationship and, at the same time, the professional competence mentioned by Arnheim is based, in part, on the study of the incidence of distant exterior light on interior spaces, creating a perfect communion between both habitats.

Incorporating into this discourse—and, with it, into the architectural programme involved in the progress of the *Virtual Temple* project—the humanist rhetoric proposed by Hans Hollein (1966) when he proclaims that "architecture is the creation of space by man and for man", it is worth recalling the testimony of Louis I. Kahn, who states that:

> Space is not an abstract entity; it is a concrete entity tailored to man. Man carries out his activities in space. According to him, the meeting place of two people is completely different from a space intended for the gathering of a crowd of people. The difference is that between facts (event) and their realisation (performance). (Giurgola, 1982, p. 159)

4.3. Urban analysis: unity and environment

Contrary to Renaissance architecture, which was somewhat distant from the natural link established between the building and its urban context, it was in the 18th century when, according to G. Boaga (1977), "scenography, understood as a deliberate and complex organisation of spaces and elements, designed to achieve a calculated visual “effect” from different points of view, was proposed as a fundamental element in the conception of architectural space" (p. 37). Today, in disciplines that are part of the architectural summary, this argument would be reinforced by the testimony of R. Scott (2007) concerning the aforementioned—and memorable—*Blade Runner*, in which he points out that "buildings will begin to be designed from the inside out. All the engineering will be on the outside".

Around this argument, as an extension of the concept of exterior space, E. Tedeschi (2017) states that "it practically includes that other space proposed as interior in urban planning" (p. 144). Le Corbusier himself (2001), referring to the building envelope, warns that "it no longer has any supporting function and can be considered, if necessary, as a simple membrane separating the exterior from the interior" (p. 40), the raison d'être of the building in relation to the urban landscape, in short, that "element of order on which our existence is organised" (Le Corbusier, 2003, p. 99).

Both approaches could be summarised within that established by A. Capitel (2012), who asserts that "architecture can impose a strong and appropriate order on the informal and disordered condition of the terrain and urban space, without losing the internal order that serves its own qualities" (p. 77).

Having thus exceeded its constructive autonomy, the building—elucidated here as a temple—expands and contributes to the urban discourse (figure 1.D), becoming that boundary that was once set by the "cobbled roads that led to monumental and religious buildings" (Boaga, 1977, p. 12). Landscape architect Lawrence Halprin stated that, "as in a theatre setting, the landscape needs the [architectural] project to interact with the movements and activities of the people within it" (Colafranceschi, 2007, p. 42). In this way, the devout pilgrimage of the faithful gives meaning to these itineraries, establishing a natural link between the building and the surrounding

spaces: "as we walk, we become a kind of itinerant tribe with its own rules, with a single, multiform body that carries out an experience on which we build our shared knowledge" (Careri, 2016, p. 115). In this wandering, preserving urban planning and design in terms of mobility, Francesc X. Ventura (2016) points out that:

> Professionals must develop specific menus for the approach and resolution of the project in which aspects relating to travel, travel needs or desires, the means used, and the form and connectivity of the spaces conceived (public and private) also incorporate a certain "pattern" of mobility. (p. 19)

All in all, reiterating the humanistic position that sealed the previous section, it is worth closing this one with the postulate of Gyorgy Kepes (1978), who argues that to the extent that man understands the external world around him, and that, for better or worse, he shapes it in his own image, the internal and external landscapes of humanity will take on a new meaning. An individual, a user, reveal Víctor Sánchez Franco and David Lavilla (2022), "will be increasingly persuaded and seduced by new immersive tools that will most likely make them connect to obtain more information about the place where they live" (p. 4), including those scenarios characteristic of their most fully spiritual daily life, such as those evoked by the *Virtual Temple* project.

5. Conclusions

After the 1960s, the applications and graphic signs of digital identity opened up to multiple artistic sectors, contributing to the creative cause the theoretical and technical advances matured in scientific divisions and in the exclusive field of engineering, precursors in research to unstoppable technology. Since then, the contribution to architectural design analysis, encouraged by powerful electronic instruments and procedures, has led to a strengthening of the graphic field and, with it, of disciplines and methodologies such as drawing and design (architectural/urban, industrial and graphic/editorial), whose internal production depends on technological returns. The creative sequence that extends from ideation to the final phases that determine the manufacture of the product, is governed by digital routines that, in between, clear the keys that require the resolution of operations such as the calculation of structures, which, in the architectural and industrial sphere, involve the deployment of graphic representations whose range of abstraction and realism confirms the treatment and resolution of the work.

On this same project level and operating with the technical and aesthetic guidelines offered by digital technology, both the building that stands as a paradigm of a temple reviewed in this article and the industrial anatomy of the devices that manage liturgical performance reveal a formal economy distinctive of functional architecture. This style was established in the drawing board of architecture and product design in the early decades of the 20th century, flourishing in the itinerant Bauhaus of Weimar, Dessau and Berlin under the pedagogy and leadership of Walter Gropius, Hannes Meyer and Ludwig Mies van der Rohe. This didactic approach is evident in the theoretical and design contributions of design scholars such as Peter Behrens, "an artist who could bring the signs of technical perfection through the beauty of form" (Anderson, 2016, p. 16). He notes this in his writing *Art in Technology* (*Kunst und Technik*, 1910).

The use of materials such as concrete, steel and glass, representative of this architectural movement, avoids ornamentation in the modelling of building volumes and in the design of everyday objects. Both are immersed in an extraordinary geometric purity of form. One hundred years later, Will Jones (2016) states that "construction has moved from relying primarily on wood and stone as load-bearing structures to adopting steel, reinforced and prestressed concrete, as well as fabrics, glass and even structural plastics" (p. 7).

Along with materials, the contribution to the physical and graphic definition of volumes and their surfaces made by such an important variable as light represents a fundamental advance in architecture, which is also evident in the narrative and modelling of the spaces that make up the *Virtual Temple* project. Its scope in the construction framework, specified in spiritual terms, can

be seen in Roberto Secchi's (2001) argument that in light, one can see the miraculous emergence of forms, the unfolding of the expressive potential of materials and figures, which dematerialise in construction and ascend to the realm of the highest spirituality. Quoting John D. Barrow, specifically on the role of space in large religious buildings, nuanced by variables such as scale, texture and light, B. Ynzenga (2013) highlights the dual commitment of the latter, giving it a "symbolic theological role, as it is the result of the first act of creation (...) and a pragmatic role, due to its ability to become visible in beams of light materialised in suspended dust and in explosions of clarity on walls, factories and elements" (p. 46).

The *Virtual Temple* project is being developed along these lines. Even in an "*offline* world [where] authenticity is experienced more immediately and without technological intermediaries" (Barron et al., 2025, p. 70), an architectural utopia emerges based on an archetypal building whose functional and aesthetic —evolved from primitive societies—now allow for a script and a design that infer the use of digital technological procedures both in the evolution of the creative facets that determine its graphic representation and in the everyday functional role it assumes once the building is erected. A function and aesthetic that, considering the theoretical ecclesiology put forward by P. Collins (1977), would confirm that "architecture is an ethical art that refers, primarily, to the expression of truth" (p. 105).

A building project that extends into narrative and space. In the narrative, identifying, on the artistic side, the imprint and sacred theme of the iconography, as well as, on the architectural level, the normative modular structure of the building arranged in naves. In space, in that "concretisation of man's existential space" discussed by Christian Norberg-Schulz (1975), intervened and extended from these interior naves to the urban site where it is located, to corroborate that "urban imaginaries do not represent the city, but are the city" (Delgado, 2011, p. 99). A creative praxis that echoes the testimony of M.ª Teresa Muñoz Jiménez (1998), who states that "the link between architectural form and style and theory is now an inevitable fact. No architect can build without theoretical references, however partial these may be, and without their work reflecting on architecture" (p. 115).

At the same time, a building that returns to the International Style that flourished in the 1920s and 1930s, endowed with an idiosyncrasy that, recalling the words of Philip Johnson (1931), "takes advantage of new principles of construction and new materials such as concrete, steel or glass, whose style, as a result, is characterised by flexibility, lightness and simplicity". In short, this "construction derived to serve the image", as stated by A. Capitel (2012) in his writings, became "a metaphorical and conceptual instrument, a representation" (p. 23).

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