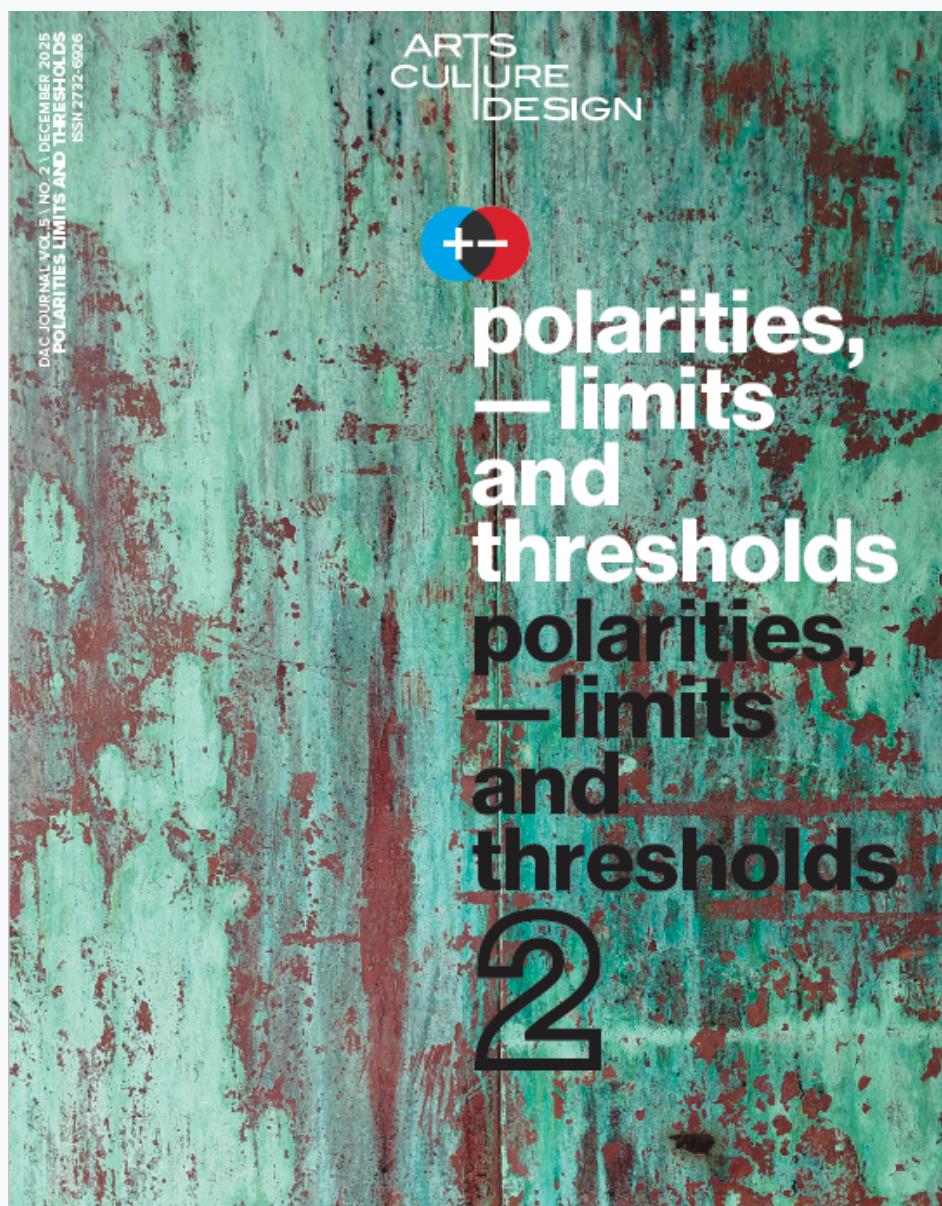
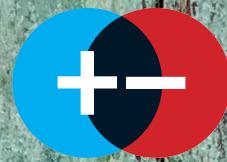


Design/Arts/Culture

Vol 5, No 2 (2025)

POLARITIES, LIMITS AND THRESHOLDS





**polarities,
limits
and
thresholds**
**polarities,
limits
and
thresholds**

2



THE JOURNAL

ABOUT THE JOURNAL

The International Journal Design \ Arts \ Culture is a digital open access and peer-reviewed multidisciplinary journal, published by "Design, Interior Architecture and Audiovisual Documentation" laboratory of the Faculty of Applied Arts and Culture of the University of West Attica Greece in cooperation with the Doctoral Studies of the National University of Arts Bucharest Romania, University of Nicosia Cyprus, ESAD Porto Portugal, and the Academy of Fine Arts Gdańsk Poland.

DAC Journal is biannual (regular and special issues) and publishes research articles, projects, and portfolios, as well as book reviews and student works. It aims to provide an academic forum for sharing and connecting ideas, projects, practices, and findings about design, applied arts and culture. DAC Journal provides immediate open access to its content on the principle that making research freely available to the public supports a greater global exchange of knowledge. The journal does not charge submission or publication fees.

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The journal aims to be broadly inclusive and interdisciplinary, publishing research articles, projects, portfolios, student works and book reviews with a particular focus on:

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Practice models and new alternative perspectives in building methods, materials research, cultural studies, sustainable approaches.

Portfolio presentations of original artwork projects, installations, film, photography etc.

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ABSTRACT



ABSTRACT

POLARITIES, LIMITS AND THRESHOLDS 2

In the second issue, entitled 'Polarities, Limits and Thresholds 2' the tensions observed in *Issue No. 5, Vol. 1* are revisited, identified there as axes of problematisation in contemporary debate. If, as we have seen, extreme positions have intensified conflicts and discourses of exclusion, weakening the common space and deepening social and political fragmentation, on the other hand, problematising the figures of the limit and the threshold can constitute other modes of collective mobilisation and critical reflection.

Assuming this dynamic as a condition for recognising cultural and social differences, rethinking public and media space, and reorganising human and technological connections, rather than trying to resolve them categorically, allows us to configure new forms of relationship, thought, and representation.

Therefore, this new issue of the publication highlights educational projects and institutional collaboration protocols, research issues, as well as considerations and processes noted in the fields of art and design that rearticulate this condition.

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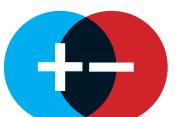
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POLARITIES, LIMITS AND THRESHOLDS 2

In this second issue of "Polarities, Limit and Threshold 2" the challenge and openness to dialogue with different practices and discourses that had already informed *Issue No. 5, Vol. 1* of the publication were maintained. In the opening text, it was noted that the figure of contemporary polarization compromises the complexity of the world and hinders the construction of a common space, while at the same time resulting in greater visibility of identity-related issues and increased collective mobilization in the recognition and understanding of differences.

In other words, if polarization intensifies almost ontological differences "us" and "them," "truth" and "falsehood," "nature" and "culture," "human" and "non-human," "subject" and "object," "interior" and "exterior" these tensions can constitute thresholds of transformation, give shape to spaces permeable to other modes of representation, and render visible other dimensions at play.

We emphasise that if it is at the limit that the relation finds its condition since without it there is no alterity, and the elimination of the limit may entail a loss of meaning, disorientation, nihilism and cynicism, and violence it is in the form of the threshold open, processual, and reconfigurable, that transformation is sustained.

The threshold thus figures as a dynamic condition that resists simple polarization and extreme existential distance, and has revealed forms of social, political, and aesthetic life that are not radically one thing or the other, and that resist absolute limits. If knowledge remains bound to old epistemological boundaries which, for example, AI reopens these questions by updating new forms of relation between human language and the machine thought and philosophy have long accepted the task of problematizing the unity of existence, displacing it, and reconfiguring it.

The construction of this space of experimentation has taken shape in zones of reflection where the distinction between these notions becomes indiscernible or diffuse and, once again, thinkable. In this regard, we recall different propositions, some of which are referred to in the essays that make up the present volume of the journal: the *devenir* in Gilles Deleuze, the *déconstruction* in Derrida; the relation in Bruno Latour, the mediation in Lévi-Strauss, and the *partage du sensible* in Jacques Rancière.

EDITORIAL NOTE

To inhabit the threshold requires clarity against premature thought, attention to small inflections of gesture, and to the tiniest transformations of the sensible that precede word or judgment. It is this ritual of attention that structures the threshold that gives form to passage to zones of crossing that do not eliminate limits, but restore a disposition toward an openness to the world that is not imposed and, for that very reason, resists.

In the conviction that the question itself may configure a space of resistance through the suspension between a before and an after and through non-immediate adherence to a state or a judgment we believe that the conditions are in place for an encounter with a zone of non-knowledge that acknowledges the limit and puts into practice strategies that reinstate the threshold.

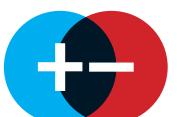
Consequently, we highlight the discreet manner in which researchers and artists, in this second volume centred on the figures of Polarity, Limit, and Threshold, have proposed to temporarily inhabit interrogation, destabilize the givens of existence, and formalize this appeal by asking:

How do polarities structure fields of meaning and activate creative, critical, or pedagogical processes? (Cordeiro & Duque; Seixas & Gárgoles; Pinto & Quadros)

To what extent do limits define, regulate, or enable what can be thought, represented, or experienced? (Vidal & Alves de Almeida; Bonacho & Simões; Saraiva)

In what way does the threshold constitute itself, through artistic and material practices, as an active field of ontological and sensible production of body, matter, and space? (Noronha & Simões; Pantazis; Stoikou)

ANA RAINHA





**ARTICLES
PORTFOLIO & PROJECTS
BOOK REVIEWS
STUDENT WORK**

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POLARITIES LIMITS AND THRESHOLDS \ 017

GERMANY – ISRAEL: WHEN HISTORY MEETS PLACES IN JANNIS KOUNELLIS’ WORK

ABSTRACT

The present study examines the work of Jannis Kounellis, a pioneering Greek figure in the Arte Povera movement, with a focus on his contributions in Israel and Germany during the final two decades of his life. Its primary objective is to shed new light on his work in these regions. This research emphasizes how Kounellis perceived the history of place and space as fundamental elements in his creative process, analyzing the historical, political, and cultural dimensions that inform his work in both countries. A key to understanding his artistic approach lies in his ability to transform everyday materials and objects into elements of historical and cultural narratives, imbuing them with complex layers of meaning and multifaceted symbolism. Using qualitative research methods, this study investigates how contemporary visual artists gather and synthesize information, linking materials and objects to the historical contexts, cultural memory, and social realities of specific locations through their symbolic meanings, often as expressions of suffering, loss, and death. It demonstrates how, in Kounellis’ work, ordinary objects become powerful metaphors that bridge personal and collective experiences, embedding them within broader historical and cultural frameworks. Consequently, the interpretation of his work shifts depending on the viewer’s geographic and experiential perspective, with particular emphasis on its resonance within the relatively underexplored artistic and cultural landscape of the Middle East.

KOUNELLIS’ TRAVELS TO GERMANY AND ISRAEL

Kounellis’ engagement with diverse locations began at the outset of his artistic career when, at the age of twenty in 1956, he left Greece and moved to Italy to study at the Academy of Fine Arts. From that point forward, his work consistently reflected a deep engagement with place, transforming environments by drawing on the cultural memory embedded within each setting. He employed materials and objects imbued with the historical essence of their respective locales (Art, Arte Povera – Artists, 2017). Although

he frequently incorporated commonplace objects and recurring motifs in his installations, he continuously reinterpreted and recontextualized them, infusing them with new meanings aligned with specific contexts. Through this approach, Kounellis aimed to evoke experiences and memories that illuminate the intertwined histories of cultures, races, and different epochs.

Kounellis believed that art was inseparably connected to life, politics, and history. According to visual artist Urs Raussmüller and art historian Christel Raussmüller-Sauer (2019), exhibitions served as a catalyst—an impulse, occasion, and motivation—for creative action that was always deeply intertwined with the space and its history. This perspective is evident in his installations within former industrial buildings, such as Halle Kalk in Cologne, and the bombed-out National Library in Sarajevo. In these works, Kounellis created installations that resonated with the surrounding reality of each environment. His process invariably began with an exploration of a specific place and its historical context: “I don’t know why, but I’ve always been curious,” he remarked (Gayford, 2017).

His almost nomadic lifestyle enabled him to interpret each place through its unique cultural system and historical context. Art critic Germano Celant (1979), who coined the term Arte Povera and curated numerous exhibitions showcasing the movement’s artists, highlighted Kounellis’ nomadic spirit. In 1968, Celant characterized all Arte Povera artists as “nomadic,” describing their works as reflections of the “nomad or traveler” (Spector, 2020). This nomadic sensibility fostered a distinctive relationship with the environment, allowing these artists to incorporate local materials and objects as vessels of meaning, deeply connected to the cultural and historical narratives of each place.

Kounellis’ travels in Germany took him to cities such as Berlin, Düsseldorf, Pulheim, and Munich, while his visits to Israel included Tel Aviv, Jaffa, Shaheen, Be’er Sheva, the Negev, and the Judean Desert. Throughout this journey, Kounellis initially assumes the role of an itinerant historian and observer. The method he employs to gather information and a broader range of materials aligns with the regional approach of participant observation, as introduced by Peter and Patricia Adler. This approach requires the observer to be immersed in the site, gaining an insider’s perspective on the actions and meanings within the location under study. In this method, the observer engages with the daily activities of a community or becomes embedded in its physical and social environment (Adler & Adler, 1987, 1994, pp. 377-392). Following this method, Kounellis, like other Arte Povera artists, seeks to gather experiences, information, and even emotions related to the respective culture or to the predecessors who once inhabited these places, integrating these elements into his work (Pantazi & Pantazi-Frysira, 2011, pp. 733-734, 773; Adler & Adler, 1991; Kawulich, 2005). In addition to the evidence derived from fieldwork, personal memories and stories from both the artist and the viewer contribute to the creation of multiple and diverse narratives and images that permeate the space.

At each stop on his journey, Kounellis explored various dimensions of space—geographical, architectural, material, and historical—in order to identify the elements that would enable him to uncover traces of both the past and the present. The contemporary Greek artist and photographer Manolis Babousis (2024), who has worked with Kounellis for over twenty years, describes the process through which Kounellis’ work was created:

Kounellis’ creative impulses stemmed from a variety of sources: experience,

history, memory, current events, past works, people, loss, and drama, as well as from more everyday moments such as a walk through the city, a reading, or an image that could inspire a work. These elements functioned for Kounellis like pieces of a puzzle, which he sought to assemble in his installations, each of which told one or more stories. Continuing his description of the creation process behind Kounellis' installations, Babousis (2024) recalls that Kounellis:

When he arrived to set up an exhibition before the opening, Kounellis would wake up very early and spend an hour, two, or more walking alone through the city, observing its surroundings. Upon reaching the empty exhibition space, the "ceremony" would begin: before setting up the first piece, or any subsequent works, he would walk continuously, pacing up and down the hall in absolute silence, lost in thought. He positioned his works within the exhibition space using the tools of the space itself—surface and volume, perimeter and height, openings and recesses, axes and perspective. The exhibition space became like a stage, with the works as protagonists, meticulously arranged to the millimeter in terms of proportion, scale, geometry, verticality, hanging, straight lines, circles, diagonals, the floor, and the weight of each object. He extended his painterly gesture into three dimensions, but also into time and history. Once the works were placed in the room, he rarely adjusted them even a single centimeter.

Kounellis often chose to set up his installations in spaces that had served multiple functions over time. As a result, he frequently selected 19th- and 20th-century industrial production facilities, port warehouses, and places of religious worship.

GERMANY: SYMBOLISM AND INFLUENCES

Germany, specifically Stommeln, a district of the town of Pulheim to the northwest of Cologne, serves as an example of this choice. The district is home to one of the few synagogues in Germany that survived the pogroms and violence of Kristallnacht on November 9, 1938. In 1991, Kounellis visited the site and sought to establish a dialogue with its history, architecture, and function as a place of worship. Inside the synagogue, he created an installation titled *Difficult to Remember*, which consists of twelve hooks and three wooden beams placed vertically to form an equilateral triangle. At the top of each beam, Kounellis attached a stone with wire, symbolically supporting the roof of the synagogue (fig. 1). This gesture evokes the preservation of memory and resistance to human frailty. Through this installation, Kounellis offered a visual commentary on contemporary and cultural history, transforming his political and cultural beliefs into a potent metaphor. The twelve hooks represent the twelve tribes of Israel, while the triangle of three beams on the floor resembles the Star of David. According to Jewish tradition, the stones symbolize the stones placed on graves by Jews to honor their loved ones. Stones also appear as symbols in the Torah and later religious texts, such as the biblical story in which David selects five stones to fight Goliath. In this context, the stones as symbols of remembrance are closely tied to the title of the installation and the commemoration of the Stommeln Synagogue, underscoring the memorialization of the site.

A few years later, in 1997, the installation was relocated to a warehouse in the former Halle Kalk factory in Cologne. Once again, Kounellis interacted with the building's architecture, highlighting the space's defining characteristics: its height, emptiness, steel

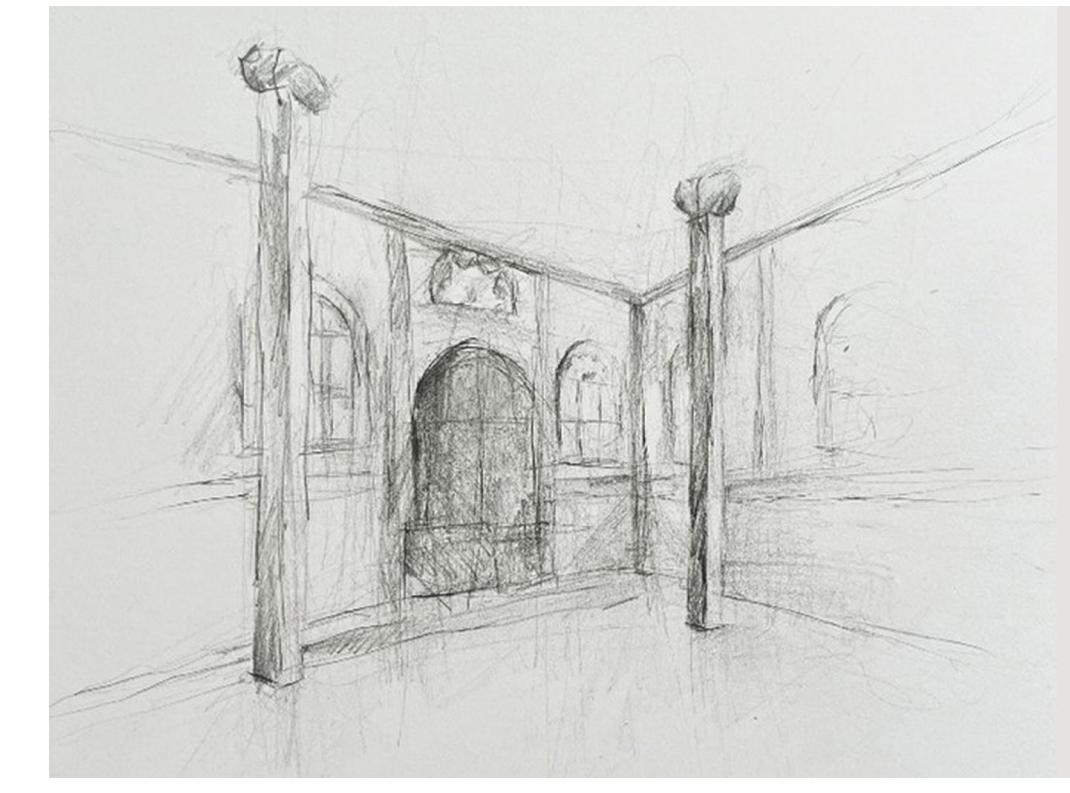


Figure 1
Author's pencil drawing depicting part of Kounellis' installation inside the synagogue in Stommeln, 2024.

beams, the building's frame, and the large windows that allowed light to flood the room. He positioned seven square steel beams, each with spiral steel shafts running along their entire length, vertically and asymmetrically in the center of the space. These beams reached the roof of the building, functioning as pillars while also imparting a sense of movement to the room. Additional steel beams were placed in front of the windows, joined diagonally in pairs. Elsewhere in the space, three cross-shaped steel beams were positioned in front of the windows, a symbolic element commonly found in Kounellis' early works. On top of each steel beam, wooden beams of varying lengths were tied together with ropes, and at the top of each beam sat an irregularly shaped stone, echoing the wooden beams in his installation at the Stommeln synagogue. While the two installations have clear morphological similarities, their symbolism diverges, though religious references remain present in both.

The installation at Halle Kalk also evokes religious iconography, and, according to curator Barbara Catoir, the beams symbolize the crucifixion and Golgotha, drawing comparisons to Beuys' Crucifixion. Religious references are embedded throughout other parts of the installation, including the curved beams in the central space and the natural light streaming through the windows. The former recalls the artist's allusion to St. Peter's Basilica and Bernini's Baldachino, the sacred canopy beneath the dome of the Basilica, supported by four spiral columns. The second element, light, reflects Kounellis' interest in ecclesiastical architecture, particularly Byzantine and Gothic styles. In Byzantine architecture, light is often associated with spirituality and the divine, while in Gothic architecture, light penetrates through yellow glazing, casting intricate shadows on the



Figure 2
Author's photo of the old town and the port of Jaffa. On the left of the harbour can be seen the warehouse where Kounellis set up his installation in 2007, 2021.

Figure 3
Author's photo of the port of Jaffa, next to the main gate of the Hangar, where Kounellis set up his installation in 2007, 2021.

beams. The play of light and shadow is further emphasized by the lead-coated spheres, which reflect the light and float in space like an iron curtain. This motif appears in other installations by Kounellis, such as Mauser (1991) for the German playwright Heiner Müller, where books, rather than steel balls, are suspended in a similar manner.

In addition to the sacred character of this installation, the artist's symbolic language invites various interpretations related to the deprivation of freedom or the transfer of danger. As Catoir notes, this recalls Barnett Newman's *Lace Curtain* (1968), a work protesting the Vietnam War. It is particularly intriguing that Newman, an American artist not associated with *arte povera* but rather one of the key figures of Abstract Expressionism and Color Field painting, employed a language similar to that of Kounellis and other *arte povera* artists to protest the violent treatment of anti-Vietnam War demonstrators by the police, for which Richard J. Daley, the mayor of Chicago at the time, was held responsible. In the post-war period, the curtain emerged as a symbolic element representing danger, violence, and protest, especially in the works of artists who had lived through the Second World War, the student uprisings of 1968, and the political protests that followed, particularly those against the Vietnam War.

Elsewhere in the installation, there are further parallels between Newman's work and that of Kounellis, particularly in the way windows are covered with stone, wood, or iron, leaving a small opening filled with wires and springs. This motif also appears in Kounellis' other installations, such as in the 1982 *Zeitgeist* exhibition in Berlin, where stones, wood, and broken cast iron nearly completely covered two back-to-back windows, creating a direct dialogue with the nearby Berlin Wall as an expression of his protest.

In other installations, openings—whether windows or doors—were entirely obscured, as seen in his installation in Ber Sheva, which will be described later.

In his installation in Cologne, Kounellis continues the dialogue with the building's history, as demonstrated by the bags placed at the end of the room. There, he hung a sack tied with rope from a steel beam, evoking the cranes that once carried goods within the building. In another area, near the windows, he suspended sacks of coal from an iron structure, and close to the floor, he built a structure with four openings resembling coffins. Inside, he placed old tools, some rusted and damaged, symbolizing the passage of time and wear. Thus, although his installation from the Stommeln Synagogue was relocated and adapted within the warehouse at Halle Kalk in Cologne, it acquired new meaning shaped by the history, architecture, and function of the site. While only a few elements remained consistent, such as the force of gravity, which connects man to the earth, and the sacred aspect that imbued the Halle Kalk warehouse with a cathedral-like atmosphere, the installation evolved to reflect the new context.

These two installations by Kounellis lead us to another significant work he created a decade later in Israel, at Jaffa Port. In 2007, Kounellis visited Israel, extending the thematic continuity of his previous projects in two keyways. First, by engaging with the chronology of historical events, such as Kristallnacht and the migration of hundreds of thousands of Jews from Germany to Palestine, which ultimately led to the founding of the State of Israel in 1948. Second, he chose a site in Jaffa—a warehouse with morphological similarities to the industrial building in Halle Kalk, Cologne. The Jaffa warehouse featured elements such as rows of windows, steel beams, and, most notably, its unrenovated state, which allowed Kounellis to establish a dialogue with the past.

JANNIS KOUNELLIS IN ISRAEL

During his fieldwork in Israel, Kounellis sought to engage with the history and culture of the region by referencing landmark events in the histories of both the Jewish and Palestinian peoples. These events shaped the land of Palestine, from the time of the Ottoman Empire and its dissolution during World War I, to the Balfour Declaration of 1917, and the subsequent British Mandate. However, Kounellis' primary focus was on the decades that followed, particularly the growing influx of Jews into Palestine, which intensified during and after World War II (Renton, 2016, pp. 15-37) [1].

In the installations Kounellis created in Israel, there are clear references to war, including the First World War, the first Arab Israeli War of 1948, as well as the Greek Civil War. This period was significant for Kounellis, who, still living in Piraeus, captured images of ships filled with Jewish immigrants departing from the port of Piraeus for Israel, as noted by the Italian art critic and historian Adachiara Zevi (2017, p. 75). During this time, Kounellis encounters the 'Other' in the Middle East—a mosaic of peoples of diverse ethnic origins, lifestyles, religions, cultures, and traditions—within a region whose history has been shaped by multiple, ongoing conflicts.

KOUNELLIS' INSTALLATIONS IN THE PORT OF JAFFA

In 2007, the port of Jaffa, specifically at the main gate of the Hangar (fig. 2, 3), became one of Kounellis' first destinations in Israel. On his journey there, he explored the history of the place, which is deeply intertwined with the movement of people to and from these



Fig.4
Author's pencil drawing depicting one of the installations of Kounellis in the port of Jaffa, 2024.



Fig.5
Author's pencil drawing depicting one of the installations of Kounellis in the port of Jaffa, 2024.



Figure 6
Author's pencil drawing depicting one of the installations of Kounellis in the port of Jaffa, 2024.



Figure 7
Author's photo of the Yasser Arafat Museum in Ramallah, Palestine, 2022.

lands. The history of the location, viewed through two distinct perspectives—the history of the Jewish people and that of the Palestinian people—has shaped the context in which Kounellis installed his works. This is the site where the events of 1948 unfolded, when the State of Israel was established, and over 700,000 Arabs were expelled from their homes, marking the “Day of Destruction,” or Nakba. This exhibition space, located in the port of Jaffa until a few years ago, was founded in 2001 as a contemporary art venue to showcase Palestinian art from the West Bank, Gaza, Israel, the Palestinian diaspora, as well as from the Arab world, Europe, and the USA (Zvi, 2006, pp. 4-5).

In this space, Kounellis created a large installation composed of several smaller ones. In one of these, at the center of the circle formed by chairs, the outline of a dead human figure is drawn on the floor in white chalk (fig. 4). In the center of another circle, there is a black mark resembling thick blood. Both installations clearly reference historical events that have shaped the site, but it remains unclear whether Kounellis is referring to both sides—the victims of the Holocaust and the victims of both parties during the first Arab Israeli War—or if he is focusing on only one of these histories.

In another installation, also involving chairs arranged in a circle, a white sheet covers the chairs (fig. 5), alluding to a funeral ritual while also recalling Kounellis' long-standing relationship with the theatre, which began in the 1960s. He designed sets for contemporary plays and collaborated with renowned directors and playwrights such as Theodoros Terzopoulos, Heiner Müller, Tadashi Suzuki, Anna Badura, Valery Fokin, and Carlo Quartucci, among others. Kounellis' increasing collaboration with theatre professionals profoundly influenced his understanding of stage, space, and time.

This influence led him to create large-scale installations in expansive spaces, which he always treated as stages upon which events with real elements could unfold. By choosing to place his installations in historically significant spaces, he imbued his works with temporal and spatial dimensions. His ephemeral installations thus functioned as props on stage, existing only for the duration of the ‘performance’ or exhibition in that space. In this sense, Kounellis’ installations had a temporal limitation, existing at a specific time and in a place of personal or historical significance (Raussmüller, 2019). He also mentioned that Arte Povera was born out of theatre, influenced by the concept of Jerzy Grotowski’s “Teatro Povero,” which emphasized the actor’s skill and minimal props (Gallery, n.d.).

Returning to the installation in the port of Jaffa, in another area, chairs are arranged in a circle, with sewing machines placed on them, symbolizing the Industrial Revolution. Adjacent to this, in a separate circle of chairs, are sacks. Unlike the black bag placed on the table, these sacks are blue, providing the only color contrast in the otherwise black-and-white installation. According to Adachiara Zevi (2007, p. 10), Kounellis chose this specific shade after observing a Palestinian woman’s dress of the same color during a walk in Jerusalem. In another circle, rather than a chair, a monk’s black cloak and hat hang down. The figure of the monk symbolizes the Central European bourgeoisie, to which many Jews belonged, while the black cloak and hat represent the absence of human beings—specifically the victims of the Holocaust (Gelbin & Gilman, 2017). Furthermore, as the monk’s attire was traditionally hung at the entrance of homes (fig. 6), this installation could also symbolize the arrival of Jewish immigrants to Jaffa.



Figure 8
Panoramic photograph taken by the author from the room in which Kounellis set up his installation at the Arab Heritage Museum of Sakhnin, Israel, 2022.

SHOES AS SYMBOLS

In the center of another circle, formed by chairs, there are worn-out shoes, symbolizing the sense of loss. The chairs are each unique, belonging to different periods, and represent the various events that have occurred in or are related to this place. Similarly, the shoes symbolize the historical events tied to the area, including the fate of tens of thousands of Jewish Holocaust survivors, as well as the residence of hundreds of thousands of Arabs (Bergman, 2002, pp. 1-46). The shoes evoke several installations dedicated to Holocaust victims, such as those at the Yad Vashem Museum in Jerusalem, the former Auschwitz-Birkenau concentration camp in Poland, and the "Shoes" installation along the banks of the Danube by Hungarian sculptor Gyula Pauer. They also resonate with the work *O My Friends, There Are No Friends* (2011) by Israeli artist Sigalit Landau, and an installation by Israeli artists Joshua Neustein and Georgette Batlle (1969) at the Jerusalem Artists House, both referencing the piles of Jewish shoes at Auschwitz as well as the 1967 Six-Day War.

On the other hand, when considering the history of the Palestinian people, the shoes serve as a reminder of the displacement of Arabs from Jaffa (Manna, 2013, pp. 86-99; Wermenbol, 2013) [2]. A similar installation can be found at the Yasser Arafat Museum in Ramallah, where unused and worn shoes are encased in a bronze installation resembling wet sand. This piece references the Arabs expelled from Jaffa in 1948, who attempted to save and carry the belongings they could across the sea (fig. 7).

Jannis Kounellis also uses the light from nine old lampposts placed next to

each circle to illuminate the space. These lampposts cast a cold light on the areas where the installations are situated, while the rest of the space remains in darkness, referencing the lampposts that once lined the perimeters of concentration camps. In the center of another circle, iron beams are stacked on top of each other, evoking the electric fences that were present in those camps. As noted by Manolis Babousis, the references to the Jews are unmistakable. Furthermore, Kounellis' connections with the Jewish community span multiple countries, as he has collaborated with numerous Jewish collectors, museum directors, and curators, including Adachiara Zevi.

These installations convey the loss of human life and home, which signifies the loss of identity and the sense of belonging experienced by the Jewish population. They likely also reflect the loss suffered by the Palestinians due to their displacement, the death of millions of Jews at the hands of the Nazi regime, the passage of time, and the human need for reconstruction. This is evident in the efforts of Holocaust survivors to preserve their Jewish identity and community in the post-war period. Undoubtedly, the Jaffa port warehouse is a setting familiar to Kounellis, who grew up in a similar environment, providing him with the opportunity to unfold these stories. He imbues them with dramatic elements drawn from ancient tragedy. These elements are evident in the circular arrangement of the seats, reminiscent of the chorus in ancient Greek tragedy, in the shadows that create a heightened dramatic atmosphere, and in the simple objects and fabrics, which evoke the minimalistic staging typical of ancient drama.

KOUNELLIS' PARTICIPATION IN THE 2ND MEDITERRANEAN BIENNALE OF HAIFA IN SAKHNIN

A few years later, in 2013, Jannis Kounellis returned to Israel to create another installation, which incorporated part of his earlier work in Jaffa. This time, he traveled to the northern part of Israel, to the town of Sakhnin, an Arab town located between Acre and the Galilee, where the 2nd Mediterranean Biennale of Haifa took place. Kounellis participated in this biennale, titled "Re-Orientation," which aimed to act as a bridge between cultures in the Middle East as well as between the East and the West (Akin, 2013; "The Mediterranean Biennale"). The institution of the Mediterranean Biennale in Sakhnin, which began in 2010, and the establishment of the Arab Museum of Contemporary Art and Heritage (AMOCAH) in Sakhnin immediately after the 2nd Mediterranean Biennale, were initiatives by curators Fainaru and Bar-Shay. Their goal was to combine local and international contemporary art by presenting artists from Arab and other Mediterranean countries. Visitors were encouraged to explore the Arab city, visiting restaurants, shops, mosques, public spaces, museums, and garages where the works of participating artists were exhibited. The aim was to bring people closer to the inhabitants of the city, foster a better understanding of Arab culture, and promote acceptance of each other's diversity.

Among these artists, Kounellis created an installation at the Arab Heritage Museum in Sakhnin. In the center of a room filled with displays of traditional costumes worn by Arab women (fig. 8), he placed circular arrangements of shoes and chairs. The installation was similar to the one presented at Jaffa Harbor in 2007, although its narrative differs. The artist links this installation to the place and people of Sakhnin, a northern Israeli city, by referencing the diversity of religious communities that coexist there, including Jews, Arab Muslims, Christians, and Druze. The installation consists of three



Figure 9
Author's photo of the Bedouin houses in the Negev desert, Israel, 2022.



Figure 10
Author's photo of the Negev desert, Israel, 2021.



Figure 11
Author's pencil drawing depicting part of Kounellis' installation at the Negev Museum of Art, 2024.

concentric circles. The first circle is formed by the shoes of the people who live side by side, the second by the chairs, and the third by the displays of traditional Arab garments surrounding the installation. This piece reflects the past, representing the history of the area; the present, depicting the region's inhabitants, the majority of whom are Muslim Arabs; and the future, promoting dialogue, communication, and peaceful coexistence among the diverse communities of the Middle East.

THE BEDOUINS, THE CITY OF BER SHEBA AND THE NEGEV DESERT IN THE WORK OF KOUNELLIS.

Kounellis returned to Israel a few years later to create his final installation. This time, he traveled to the city of Beersheba and the Negev desert, an area inhabited by Bedouins (fig. 9). In an interview with The Jerusalem Post, Kounellis recalled arriving in Beersheba with his hands in his pockets, unsure of what he would do there. As was his method, he considered the history of the place and the site, and then sought to link them together (Scheps, 2010, p.7).

The installation was set up in the Negev Art Museum, a two-story building that was originally constructed as a typical Ottoman official's house in 1906. During World War I, it housed members of the British staff, and just before World War II, it became a school for Bedouin girls. Adjacent to it stands the Great Mosque of Beersheba and the Carasso Science Park, which was built in 1914 and originally served as a school for the children of Bedouin sheikhs. After exploring the museum site and surrounding buildings,

Kounellis visited the Negev desert daily for over a week to observe the environment (Fig. 10). He said, "I am not interested in the skyscrapers being built in Beersheba. The main characteristic of this region and the identity of Israel is the desert" (Davis, 2016).

After his observations, Kounellis began to create his installation. He selected stones from the desert and transported them to the museum site. He wrapped them with thick rope, like that used by sailors, in the same manner the Bedouins secure their tents in the desert. In each room, Kounellis placed furniture found at a local flea market, including twelve chairs, a bed frame, and a wardrobe, symbolizing human existence. "The wardrobe," Kounellis explains (Povoledo, 2016), "is physical; it is the closest thing to a human being because of what it preserves inside it, different patterns connected to life." All the objects Kounellis used in this and throughout his installations reference the human experience. Even the distance between the knots in the rope corresponds to the length of a human step. Through this, Kounellis created a chain that ran through the entire space, connecting the museum's two floors. The rope serves as a path, with references to Ariadne's thread, that leads to the exit of the labyrinth (fig. 11).

Kounellis' journey relates to human existence and symbolizes the absence of human bodies. The chairs, each bearing its own stone and positioned to face the stone placed in the center of the circle, create a scene that evokes a sense of community. Their circular arrangement, reminiscent of a dance in a Greek tragedy, intensifies the dramatic effect (Babousis, 2024). The same can be said for the stones surrounding the room's perimeter. This scenario is disrupted by the frame of the bed in the next room, which holds stones that allude to the image of death. Through this setup, the peasant's bed, as

Kounellis described, references the lost past of the pre-industrial era and the traditional way of life. However, he also states that: "I just accept what follows, and what comes from literature. I have a great deal of sympathy, for example, for Victor Hugo and his understanding of the underworld of suffering. This society of suffering is still mine. I have often used an iron bed that is two meters long and 82 centimeters wide, which is about the size of a peasant's bed. It is a constant reminder of humanity" (Gayford, 2017).

In other words, Kounellis "sees the reality and dissatisfaction of contemporary society, while simultaneously drawing upon primitive, fundamental human values and the human objects that embody, contain, and measure those values" (Povoledo, 2016).

In the middle of the room, on the ground floor, there is a wardrobe with a mirror, positioned on a rectangle formed by stones. The wardrobe is tightly wrapped with a rope, an image that could evoke the mechanism of a well with its corresponding rope. This symbolism refers to the seven wells in the area, the most famous being that of Abraham according to the Hebrew Bible, but also to the name of the city itself, which means "seven wells" in both Hebrew and Arabic. The rope continues its journey through the site and ends under another stone. At the end of this path is a stone doorway, suggesting that the stones were used by the Bedouin inhabitants of the desert to build their dwellings.

Stones are a symbolic element that Kounellis repeatedly uses in his work, which is deeply connected to the history of the site. While, on one hand, we can identify common symbols with the stones he has incorporated into his installations in locations where history converges, in other works, we see that this symbolism changes, as seen in the installation at the *Zeitgeist* exhibition in Berlin, or even in his work in Ber Sheva. From the very outset, Kounellis' references to the history of this place, to his homeland Greece, to the primitivism of Mediterranean dwellings—particularly the Bedouin—and more broadly to the contrast between the symbolism of urban and industrial culture and primitive, individual values, are evident. He explores traditional ways of life and contrasts them with the visions of modern urban existence he encounters around him.

However, there have been various interpretations by visitors, as Kounellis, like other Arte Povera artists, aimed to evoke memories using common materials and objects. While Kounellis uses similar materials and objects in his installations, the original narrative of the work changes according to the location, experiences, and associations of each viewer. By using objects familiar to them, viewers come to recognize his work as connected to their own lives, evoking memories in the process. The interpretation of his work often depends on the symbolism of the objects across different cultures, and in this case, the symbols of Israel and Palestine are abundant (Babousis, 2024). For example, the chain formed in the installation symbolizes unity, dialogue, and solidarity. In Jewish culture, the chain and knot represent kesser, physical connection, and human relationships. Stones also appear as symbols in the Torah and later religious texts. For the Bedouin, on the other hand, stones symbolize their home and place—the rocky desert terrain. Their houses, called bayt hajar, are made of stones as well as tents, just as their environment is made up of rocky desert terrain surrounded by mountains. Stones are also prevalent in Palestinian literature, both figuratively and literally, symbolizing their traditional stone houses.

Beyond the various readings based on symbolism and cultural memory, we might ask whether this installation in Ber Sheva is Orientalist, reflecting the contrast

between the West and the East, and the narratives of Western travelers that have shaped the image of the East in the West. Indeed, in this case, Kounellis focuses on the Middle East, finding the foreign, or the "Other," as he called it, in the peoples of non-Western Europe. But his interest is not limited to Eastern cultures. Like Edward Said, he also focuses on groups with low social status, namely the Arab Bedouin of the Negev, a subaltern group within the Israeli state. According to the Israeli Central Bureau of Statistics, the Bedouins of the Negev are among the poorest and most marginalized communities in Israel. However, Kounellis does not portray them as a marginalized community, nor does he suggest that they pose any threat. On the contrary, he views the Arab Bedouin as something different—another culture with primitive characteristics.

These primitive characteristics also define the artist's relationship, as well as that of other Arte Povera artists, with materials drawn from the natural environment. In this way, they attempt to subvert the norms of art influenced by consumerism and the commercialization of the artwork. Kounellis critiques the powerful West and the Industrial Revolution, which abruptly transformed rural areas into industrial hubs. Here, this pre-industrial world is embodied by the traditional Bedouin society, which has been transformed by the development of technology, economics, and government restrictions, resulting in an almost brutal transition to the modern world. At the same time, Kounellis refers to the physical elements in his installation as remnants of Western civilization, implying that Western civilization itself has been undermined by the influence of American culture.

Thus, in his work, the East does not appear as an exotic or passive, subordinate place, nor does it display elements of barbarism according to the Orientalist imaginary. Instead, the stereotypical narrative of the East is undermined, and ultimately, some of the violent characteristics typically attributed to the "barbarians" are redirected toward contemporary Western culture.

PRINTINGS IN JAFFA

In addition to his installations in Israel, Kounellis created a series of prints at the Har-El exhibition space in Jaffa, Tel Aviv, where they were presented in more than eight exhibitions. One of the first to be showcased was *The Gospel According to Thomas*, produced in 2000. Kounellis accepted an invitation from the owners of the Har-El gallery to create twelve prints on paper illustrating *The Gospel According to Thomas*. These were later displayed in an exhibition of the same name at the Kewenig Gallery in Cologne in 2008. Kounellis employed a technique developed at the print shop, called Terragraph, which combines sand and binding agents to create these prints, rich in symbolism. The sand Kounellis selected came from the Judean Desert, a common material with immense symbolic significance. The Judean Desert, much of which is located in the Palestinian territories east of Jerusalem and runs along the Dead Sea, holds great religious importance across several faiths (fig. 12).

This place, which Kounellis incorporated into his work, is rich with biblical and metabiblical stories. Thus, although Kounellis chooses a two-dimensional surface, he employs a material that is steeped in history, or rather, in multiple histories. He recombines aspects of history, primarily religious history, to create twelve symbolic images, a number



Figure. 12
Author's photo of the desert of Judea, West Bank, 2022.

that corresponds to the original number of chorus members in ancient Greek tragedy. According to Manolis Babousis (2024):

He possessed a unique ability to instantly grasp ideas, to perceive both the whole and the details, seeing the structure in a single moment. He drew from all corners, collecting objects, fragments, and symbols necessary to complete his work. His quest was for unity. What was truly decisive was the subversive and inventive way in which he incorporated everything into the language he had developed to express the pain and loss of the human condition.

In the same gallery, in 2003, Kounellis created eight black and white silkscreens entitled *The Minotaur*, depicting the labyrinth in which the mythological creature lived. This theme, which he revisited several times, was previously explored in Paris in 1998, Rome in 2002, Milan in 2006, and Berlin in 2007. A year later, in 2004, he printed four silkscreens on paper titled *Homage to Munch*, featuring faces reminiscent of Munch's *The Scream* alongside counterparts from *The Gospel According to Thomas*, but with black outlines replacing the white.

Among these prints are twenty-four of the forty-seven black and white silkscreen prints in the *Opus I* collection, which narrate his artistic journey. These prints depict different stages of Kounellis' work, some of his installations and performances, first presented in his exhibition at the Albertina Museum in Vienna. In this series, Kounellis addresses time and the transience of his installations on one hand, and the evolution of his creative process on the other, highlighting the inseparability of the artist from his work (Scheps, 2006; Mitterer, 2006).

The twenty-four screenprints include photographs by Claudio Abate, featuring two portraits of Kounellis, a photograph of an installation with iron scales and ground coffee, an installation with gallows and a sack of bourgeois furniture next to the Church of the Holy Cross in Schwäbisch Gmünd, as well as images of installations with bloody pieces of meat from the slaughterhouse hanging from hooks. Other works include a piece with a knife and goldfish in a bowl at MONA - Museum of Old and New Art in Hobart, Australia, an installation with beams and stones in the synagogue of Stommeln in Germany, a work featuring a parrot on a pedestal placed vertically on a rectangular steel plate at Galleria L'Attico in Rome, and a photograph of him carrying a sack full of belongings on his back.

CONCLUSION

Although we typically perceive artworks and exhibition spaces as two separate entities, in the case of Kounellis, we observe that the site itself determines his installations, and ultimately, his installations and the spaces in which they are set up form a unified whole. As he travels through cities in Germany and Israel, Kounellis first gathers information about the history of the place and its cultures, and then gives shape to this information, transforming himself from a traveler into a storyteller who shares his experiences with the viewer to enrich them. In this way, his works travel with him through time. They engage with memory, political and social history, raise questions, and tell stories.

These stories, embedded in the materials and objects, help him create spatial images that, on one hand, carry the weight of history, and on the other, are infused with personal narratives. It is worth recalling his exhibition at the port of Jaffa, which, although located in the Middle East, feels very familiar to Kounellis due to his origins and experiences in Piraeus, a port also affected by the Second World War and the occupation period. For Kounellis, the port and sea—marked by history—serve as a symbolic space of classical civilization, representing the ancient civilizations of the Mediterranean to which he, like other Arte Povera artists, felt a deep connection.

Meanwhile, the stories conveyed in his works reveal the relationship between East and West, highlighting both their differences and similarities as components of an identity that unites the cultures of the Mediterranean, as demonstrated in his installation in Ber Sheva, where the Bedouins played a central role. At the same time, the artist seeks to evoke primordial emotions and emphasize the relationship between human beings and nature. To this end, he combines natural and cultural materials such as stones, sand, earth, ropes, and more in his works.

Kounellis does not strive for originality in the conventional sense but rather repeats certain installations. He uses the same or similar materials and objects, to which he attaches symbolic meanings that are tied to the specific space and location. Through these elements, he ultimately expresses his own personal thoughts and concerns. Once again, we observe that in each of these instances, Kounellis created a work that can be considered an independent whole. However, we can also identify elements that suggest continuity, forming a narrative that arises from various connections, such as the installation in the synagogue in Stommeln and the one at the port of Jaffa.

However, although the history of the place constitutes the 'raw material' for creating Kounellis' works, and despite the efforts made in this study to examine his work in Israel through the lens of the history of Israel and Palestine, the artist seems to exclude contemporary events from his field of research. While he visits Israel in 2000, 2003, 2004, 2007, 2013, and 2017, and the Judean Desert in 2000, he does not appear to be influenced by the events of the Second Intifada in 2000, the subsequent withdrawal of Israeli settlers and military forces from the Gaza Strip in 2005, the naval blockade imposed by Israel on Gaza in 2007, or the two major conflicts between Israel and Hamas in 2008 and 2014. This choice, or perhaps inadvertent omission, by Kounellis raises questions about the motivation behind his work and his personal stance on the current social and political issues in the region. The history of the place seems to have frozen shortly after the end of the Second World War, in the late forties and fifties—just after the establishment of the State of Israel, during the period of increased Jewish immigration.

NOTES

[1] In 1917, British Foreign Secretary Arthur Balfour expressed support for the establishment of a Jewish "national home" in Palestine with the Balfour Declaration. Three years later, in 1920, Palestine came under British control as a mandate following the Treaty of Versailles (28 June 1919).

[2] This was followed by the first Arab Israeli war, which was a catastrophe (Nakba) for the Arabs of Palestine. Thousands of Palestinians were forced to flee their land and move to the West Bank, Gaza, Syria and Lebanon.

[3] Several ancient Jewish religious manuscripts, dating from the 3rd century BC to the 1st century AD, were found at the site. These are known as the Dead Sea Scrolls and include the oldest surviving manuscripts of books later included in the Hebrew biblical canon, as well as numerous letters from the Roman period and artifacts from the Neolithic period.

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POLARITIES LIMITS AND THRESHOLDS \ 035

DESIGNING AT THE EDGE: CRITICAL FOOD FUTURES, POSTHUMAN ETHICS, AND THE POLITICS OF TASTE

ABSTRACT

This article examines how contemporary food design practices, spanning from speculative artefacts to commercial innovations, balance the tensions between nature and technology, authenticity and simulation, critique and scalability. Through a comparative analysis of four case studies (The Sausage of the Future, Edible Growth, Perfect Day, and NotCo), we explore how food design shapes the ethical, sensory, and systemic dimensions of food. Drawing on critical design theory, posthumanist thought, and decolonial perspectives, the study challenges the dominance of techno-scientific narratives and advocates for more inclusive, culturally grounded, and multispecies approaches to food futures. We propose a typology based on two key dimensions - symbolic depth and systemic traction - to assess how food artefacts mediate cultural meaning and infrastructural change. This framework invites a shift from novelty-driven food design to practices rooted in ethics, care, and epistemic diversity.

INTRODUCTION

Food design today unfolds at the intersection of intensifying polarities between nature and technology, tradition and innovation, local and global, and visibility and marginality. These polarities are not merely oppositional forces but sites of dynamic tension, where design operates as both a cultural mirror and a material mediator. They reveal how food, once anchored in ritual, place, and multispecies entanglement, is increasingly shaped by abstraction, digitization, and speculative narratives. Whether through cellular agriculture, precision fermentation, or algorithmically-generated recipes, what we eat is no longer merely a reflection of agricultural or culinary traditions but a product of techno-scientific imagination and geopolitical structures. These changes signal not just a shift in what food is, but in what food means, and for whom.

As such, food becomes a space where limits are both transgressed and re-imposed: ecological limits (e.g., planetary boundaries), sensory limits (e.g., taste as a human-centric sense), and epistemological limits (e.g., who is authorized to produce knowledge about food). At the same time, food design increasingly engages thresholds, critical junctures where ontologies and worldviews collide and recombine. These thresholds are not simply technological tipping points but moments of ethical, cultural, and political significance: thresholds between the human and the nonhuman; the natural and the artificial; and the speculative and the systemic. The emergence of artificial, intelligence (AI) in recipe development, the use of synthetic biology to replicate dairy without cows, and the performative politics of edible installations all point toward new configurations of taste, ethics, and agency.

Situated within the expanding field of critical food design (Vodeb, 2017; Tharp & Tharp, 2019), this article examines how food artefacts participate in and shape these transformations. Critical food design interrogates not just the functionality or sustainability of food systems but the values, ideologies, and sensory hierarchies embedded within them. Whose futures are being designed? Whose knowledge counts? And what kinds of food futures are thinkable or desirable? To ground these questions, this article offers a comparative analysis of four emblematic case studies: The Sausage of the Future; Edible Growth; Perfect Day; and NotCo. Each project inhabits different positions across two key heuristic dimensions: symbolic depth; and systemic traction. These two axes are not linear measures but interdependent forces that help map how artefacts function across the threshold between provocation and implementation.

Building on speculative design theory (Dunne & Raby, 2013; Tharp & Tharp, 2019), which positions design as a mode of inquiry rather than solution, it is possible to develop posthumanist ethics (Haraway, 2023) and decolonial design perspectives (Escobar, 2018; TallBear, 2019), which unsettle anthropocentric and Eurocentric assumptions about food, innovation, and relationality. These frameworks enable us to see food design not merely as product development or culinary experimentation, but as a form of world making, a practice that engages with limits (planetary, ethical, perceptual) and crosses thresholds (ontological, cultural, systemic).

Rather than assuming that design is an inherently progressive or benevolent force, we approach it as a boundary practice, one that operates at the edge of disciplines, species, and worldviews. In this view, food artefacts are not simply edible objects but mediators of value, power, and possibility, capable of shaping more just, multispecies, and pluriversal food futures, or of reinforcing extractive, anthropocentric, and techno-centric systems.

2. CROSSING THE EDIBLE LINE: FOOD AS A THRESHOLD PRACTICE

Recent issues related to our food systems, such as climate change, post-natural innovation, and shifting sensory authorities, have led to food design emerging as a critical discipline between speculative imagination and lived ecologies. Lab-grown proteins, AI-generated recipes, and 3D-printed meals have increasingly blurred the boundaries between human authorship and microbial, algorithmic agency in the food innovation sector. These innovations (or not) raise urgent questions, such as what we design, who designs it, and for whom it is designed.

Building on foundational design theory, this reflection begins with Simon's conception of artificial systems - as artefacts "synthesized to attain goals" (Simon, 1996, p. 4) - and proposes that food design reframes food not as something granted for humans, but as a purpose-driven cultural interface. As Simon (1996) further affirms, "to design is to devise courses of action aimed at changing existing situations into preferred ones" (1996, p. 111), highlighting design's inherently transformative intent - a useful lens for evaluating food systems shaped by speculation and techno-scientific ambition. Drawing on critical and speculative design (Dunne & Raby, 2013; Tharp & Tharp, 2019), food anthropology (Korsmeyer, 2017), and posthumanism (Haraway, 2023), the study resists reducing food design to something aesthetic, novel artefacts, or system optimization. Instead, it frames food design as a contested territory that negotiates tensions and boundaries between innovation and tradition, visibility and marginality, and simulation and authenticity.

The reflection conducts a comparative analysis of four representative cases - The Sausage of the Future from Carolien Niebling (Niebling, 2017), Edible Growth from Chloé Rutzerveld, NotCo, a software of AI (Giuseppe) for food product innovation from Matias Muchnick and Kim Pichara, and Perfect Day, a company of plant-based dairy products from Ryan Pandya and Perumal Gandhi - to examine how food design products shape the sensory, symbolic, socio-cultural, and political dimensions of food innovation. It challenges the trend of correlating visibility or novelty with critical value and questions the dominance of techno-scientific imaginaries. By drawing on decolonial and relational design frameworks (Escobar, 2018), this article aims to decentre extractive modes of futurity and reorient food design toward plural epistemologies, place-based practices, and multispecies ethics.

Speculative projects often serve as discursive provocations, but their systemic impact is diminished when they are disconnected from community engagement. Conversely, commercially scaled design projects frequently reproduce industrial logics while presenting themselves as sustainable. To navigate this double bind, the article positions food design as an interplay of symbolic review and infrastructural intervention, asserting that radical possibility depends on scalability, participation, and cultural pluralism.

The article pursues two aims: first, to articulate a refined typology of food design futures that distinguishes between speculative critique and systemic innovation; second, to reveal the ideological structure and epistemic gaps embedded in contemporary food-tech narratives. Through this critical lens, the article advances a politically attuned, multispecies-sensitive, and decolonial vision for designing future food systems.

3. POLARIZED PLATES: CONCEPTUAL FAULT LINES IN FOOD DESIGN

Contemporary food design sits at the intersection of multiple polarized uncertainties - nature versus technology, authenticity versus simulation, visibility versus marginality. These binaries produce ideological consequences, shaped by divergent ontologies, economic structures, and cultural imaginaries. Speculative design and food-tech innovation navigate these fault lines, generating new sensorial scripts and reinforcing distinctive ways of envisioning the future.

3.1 SPECULATIVE AND CRITICAL DESIGN FRAMEWORKS

The foundational work of Dunne & Raby (2013), Tharp & Tharp (2019), and Vodeb (2017)

frames many food design artefacts as discursive provocations rather than products. These artefacts operate within critical design traditions that emphasize speculation, rupture, and aesthetic alienation. As Tharp and Tharp (2019) observe, "discursive design embraces ambiguity as a method to provoke reflection, not resolution" (2019, p. 28), highlighting the intentional open-endedness and discomfort these artefacts introduce. However, their circulation often remains privileged to elite or academic design audiences. Such inscriptions of novelty may risk overvaluing aesthetic disruption as inherently radical, without considering its structural or long-term implications. As Vodeb (2017) reminds us, "design is never innocent - it either reinforces or resists the dominant order" (p. 17), prompting the need to critically assess the underlying ideologies speculative projects reproduce or resist.

3.2 POST-HUMANISM AND MULTISPECIES AUTHORSHIP

Post-humanist and new materialist thought - exemplified in Haraway's (2023) work - questions traditional notions of design agency and intention. In the context of food innovation, the delegation of creativity to AI (e.g., NotCo's "Giuseppe" algorithm) or microbial fermentation (e.g., Perfect Day cultivation) calls for a reconceptualization of design as multispecies co-creation. Rather than discovering agency in the designer, these emerging systems distribute authorship across humans, algorithms, and microbial ecologies. Critically, such distributed design frameworks demand new theoretical tools to examine ethics, accountability, and intention across biological and machinic actors.

3.3 DECENTERING TECHNO-SCIENTIFIC NARRATIVES

Despite claims to universal innovation, dominant food design narratives often reflect the techno-scientific imaginaries. To decentre this monocular view, decolonial and indigenous frameworks present critical perspectives. Escobar's *Designs for the Pluriverse* (2018) advocates for design paradigms grounded in radical interdependence, autonomy, and world-making from plural epistemologies. His critique of capitalist, extractive design systems offers a powerful lens to reimagine food design not only as innovation but also as a practice embedded in autonomy, ecological care, and cultural meaning.

TallBear's (2019) feminist-Indigenous scholarship proposes caretaking relations as an alternative to settler colonial futurities, exposing the ways design and science have historically erased Indigenous kinship with the land and multispecies relations. Her framing emphasizes spatial, relational ethics over progress-driven narratives, challenging design to operate in dialogue with land, community, and ancestral memory.

Other scholarship, such as the emergent concept of indigenous presence in design (e.g., Dorr et al., 2024), or the growing literature on the biocultural restoration of indigenous foodways (Howard, 2022), foregrounds relational design rooted in territory, reciprocity, and indigenous-led priorities. These perspectives underscore the political stakes of designing food systems in ways that restore sovereignty, rather than simply securing market access.

Bridging these frameworks requires attending to the ontological ruptures proposed by both posthumanist and decolonial thought. Haraway's "becoming with" (2007) and situated knowledges challenge human exceptionalism, while TallBear (2019) emphasizes Indigenous kinship systems, land-based epistemologies, and caretaking relations beyond human dominance. Both argue for an ethics grounded in relational inter-

dependence, undermining western binaries of nature vs culture, subject vs object, and design vs environment.

Together, these approaches propose a vision of design not as innovation from above, but as emergent co-creation across species, lineages, and ecosystems, demanding accountability not only to future consumers, but to ancestral relations, microbial collaborators, and territorial beings. This convergence invites food design to operate as a site of ontological negotiation, where design can both reproduce and reconfigure the logics of domination or reciprocity.

3.4 ANALYTICAL OPPORTUNITIES AND GAPS

While the current literature robustly critiques innovation imaginaries and speculative modalities, it often operates in silos, addressing theoretical provocations and decolonial critique in parallel rather than in an integrated manner. Food design scholarship can benefit from actively bridging the gap between speculative and design theorists (Dunne & Raby, 2013; Haraway, 2023; Korsmeyer, 2017) and decolonial and multispecies practitioners (Escobar, 2018; TallBear, 2019; Howard, 2022). This integration calls for direct attention to:

- Authorship and agency: Who claims credit in design outcomes when microbial or algorithmic systems shape the process?
- Scalar impact: How do designers and institutions translate discursive prototypes into infrastructural or community-engaged transformation?
- Epistemic inclusivity: Which knowledges do design imaginaries foreground or silence, and whose worlds do they make visible, or erase?

3.5 SUMMARY

This literature review constructs three critical moves: first, it situates speculative food design within a lineage of critical design theory; second, it problematizes post-humanist authorship and distributed agency in emergent food innovations; third, it foregrounds decolonial, indigenous, and relational frameworks to challenge techno-scientific dominance. Together, these strands provide new theoretical ground for examining the political, aesthetic, socio-cultural, and systemic capacities of food design.

4. FROM SIMULATION TO DISRUPTION: PATTERNS ACROSS THE EDIBLE SPECTRUM

This analysis adopts a qualitative, interpretive research approach grounded in critical design studies and comparative analysis. The purpose is not to measure technological efficacy or consumer behaviour, but to examine how specific food design artefacts operate symbolically, ethically, and politically within emerging systems of production and meaning.

The methodology aligns with practice-based and interpretive research traditions in design (Frayling, 1993; Kimbell, 2012), emphasizing the analysis of artefacts as cultural texts that articulate systemic tensions and aesthetic ideologies. Drawing on principles of discursive design (Tharp & Tharp, 2019), the study examines artefacts not for their usability or efficiency but for the narratives they propose and the futures they implicitly endorse or exclude.



Figure 1
The Sausage of the Futures.
© Carolien Niebling



Figure 2
The Sausage of the Futures.
© Carolien Niebling

4.1 CASE SELECTION

Four design projects were selected for comparative analysis:

THE SAUSAGE OF THE FUTURE

A speculative design project by Carolien Niebling, this initiative proposes new typologies of sausage using plant-based and fermented ingredients. Through its provocative presentation and departure from traditional meat aesthetics, it challenges the logic of mimicry and encourages more diverse and sustainable food futures.

Rather than mimicking meat, this project exemplifies a “discursive object” in the Tharpian sense - it disrupts consumption norms and “invites viewers to consider new frameworks, not just new forms” (Tharp & Tharp, 2019, p. 42). Its strength lies in its capacity to generate dialogue about food futures beyond traditional product innovation.

EDIBLE GROWTH

Developed by Chloé Rutzerveld, this bio-design prototype combines 3D printing with living organisms (seeds, spores) to produce food that evolves. It visualizes a symbiosis between natural growth and technological fabrication, offering a speculative model for local, self-sufficient, and sensorially rich food experiences.

PERFECT DAY

A biotechnology company focused on producing dairy proteins (casein and whey) through microbial fermentation without involving animals. While it replicates the texture and taste



Figure 3
Edible Growth.
© Chloé Rutzerveld

Figure 4
Edible Growth.
© Chloé Rutzerveld

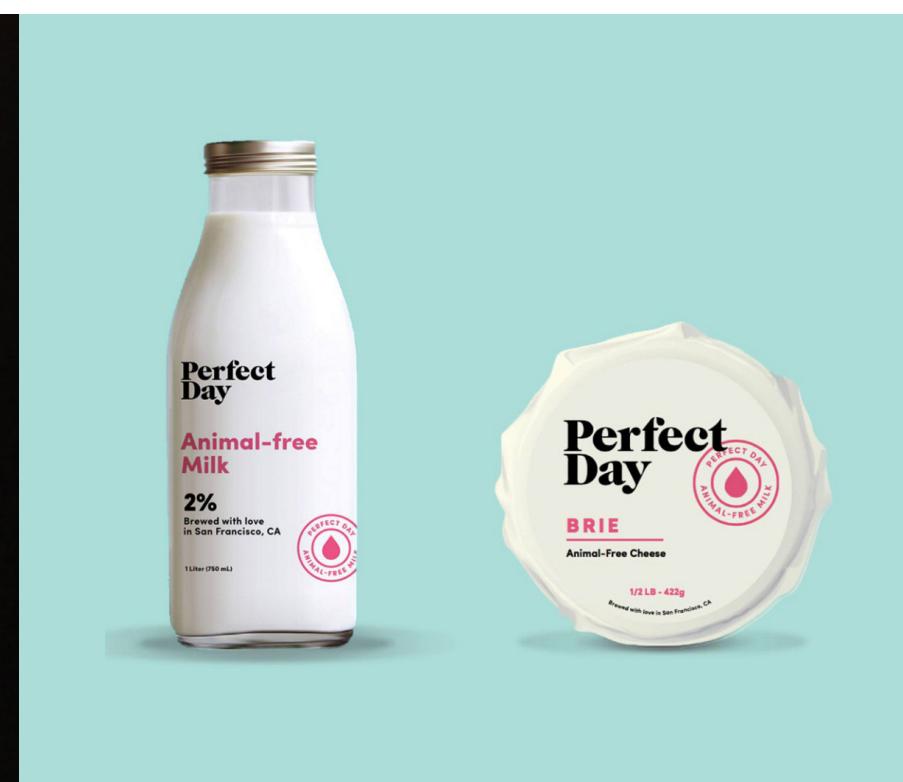
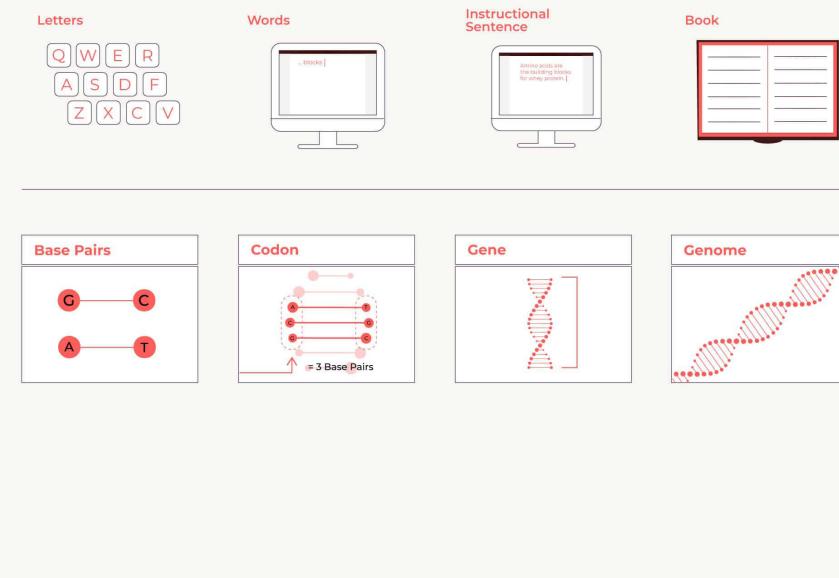


Figure 5
Animal-Free Milk Product.
© Perfect Day

Figure 6
Process.
© Perfect Day



of conventional dairy, it raises questions about consumer transparency, industrial control, and the shifting boundaries of what we consider “natural” food.

The ethics of animal-free fermentation hinge not only on sustainability claims but also on the transparency and legitimacy of technological substitutions. As Sandler (2014) notes, “technological food innovations must be assessed not only for their benefits, but also for what they displace- ecologically, economically, and culturally” (2014, p. 101). Perfect Day’s replication of dairy taste may obscure broader concerns about centralization, consumer autonomy, and food sovereignty.

NOTCO

A food-tech company that uses an AI algorithm (“Giuseppe”) to create plant-based versions of familiar animal products. It leverages data and machine learning to simulate taste and texture while maintaining conventional food formats. Though positioned as a sustainable innovation, it also reinforces the aesthetics and logic of industrial food systems.

These cases were chosen based on the following criteria:

- Relevance to current polarities in food design (e.g., authenticity vs simulation, nature vs technology);
- Diversity in design typology (speculative vs commercial);
- Richness of available documentation (visual, discursive, technical);
- Symbolic and epistemic impact on contemporary food discourses.



Figure 7
Giuseppe AI.
© NotCo

Figure 8
Giuseppe AI.
© NotCo

The selection comprises both speculative projects (The Sausage of the Future, Edible Growth) and market-oriented innovations (Perfect Day, NotCo), enabling a cross-comparison of discursive intention and systemic traction.

4.2 ANALYTICAL FRAMEWORK

Each project was analysed employing a four-dimensional comparative framework designed from the literature review:

- Materiality and Technology: Ingredient origins, fabrication methods, and the ontological framing of food (e.g., lab-grown vs fermented vs printed);
- Aesthetics and Sensoriality: Visual, textural, and multisensory strategies that encode values or challenge norms;
- Narrative and Discourse: The framing language and rhetorical devices used to position each artefact within cultural and systemic debates;
- Ethical and Political Implications: Questions of transparency, participation, food sovereignty, and justice embedded in the design logic.

This framework draws inspiration from critical design (Dunne & Raby, 2013), food ethics (Sandler, 2014), sensory anthropology (Korsmeyer, 2017; Howes, 2021), and post-humanist critique (Haraway, 2023; Escobar, 2018). It allows for multi-scalar interrogation - attending not just to artefact-level design decisions, but to the broader systems of knowledge, legitimacy, and power in which they circulate.

4.2.1 DATA SOURCES AND ANALYTICAL PROCEDURES

This study draws on publicly available documentation for each selected project, including websites, design publications, visual materials, media interviews, and academic commentaries. The analysis applies a qualitative interpretive approach to these materials, grounded in constructivist epistemology and critical design studies.

Each project was coded using the heuristic dimensions outlined below - Materiality and Technology, Aesthetics and Sensoriality, Narrative and Discourse, and Ethical and Political Implications. Coding focused on identifying:

- Visual strategies (e.g., mimicry, estrangement, multisensory emphasis);
- Discursive narratives (e.g., sustainability rhetoric, cultural imaginaries);
- Epistemic positions (e.g., anthropocentric, multispecies, algorithmic);
- Systemic orientation (e.g., critique, compliance, scalability).

While not exhaustive or ethnographic, this approach allows for multi-scalar analysis that attends to both representational and ideological aspects of each case.

HEURISTIC DIMENSION	ANALYTICAL FOCUS
Materiality and Technology	Ingredient origins, production methods, ontological framing (natural/synthetic/etc.)
Aesthetics and Sensoriality	Sensory coding, visual design, texture, temporal aesthetics
Narrative and Discourse	Cultural/ethical stories told, rhetorical framings, future imaginaries
Ethical and Political Implications	Justice, participation, food sovereignty, ecological responsibilities

Table 1. Analytical Framework. Source: Authors.

4.3 EPISTEMOLOGICAL POSITIONING AND LIMITATIONS

This research adopts a constructivist epistemology, viewing food artefacts as culturally situated expressions rather than neutral solutions. It resists instrumental or purely market-oriented analyses, focusing instead on symbolic meaning, aesthetic disruption, and epistemic diversity.

However, the study acknowledges several limitations. First, although the selected cases vary in type, they exclude grassroots, Indigenous, and non-Western food design initiatives - voices that play a critical role in shaping a more plural understanding of innovation. Second, the analysis relies on publicly available documentation and secondary data; incorporating deeper ethnographic or participatory methods would offer richer insights into user perceptions, affective responses, and community co-design processes.

Future studies can build on this work by examining food artefacts in context - through sensory ethnography, participatory design labs, or collaborations with communities that actively resist dominant food-tech paradigms.

ANALYTICAL DIMENSIONS	KEY QUESTIONS	THEORETICAL ANCHORS
Materiality and Technology	What are the sources and fabrication methods of the food artefact? How is food framed (natural, synthetic, hybrid)?	Post-humanism, Biotech Design, Artificial Systems (Simon, 1996; Haraway, 2007)
Aesthetics and Sensoriality	How does the artefact appeal to or disrupt sensory expectations? What cultural, ethical, or futuristic narratives does the project construct or reinforce?	Sensory Anthropology, Aesthetic Theory (Korsmeyer, 2017; Howes, 2021)
Narrative and Discourse	What are the visual/textural strategies used?	What are the visual/textural strategies used?
Ethical and Political Implications	How does the project address justice, transparency, inclusion, and ecological responsibility?	Food Ethics, Decolonial Theory, Systems Design (Sandler, 2014; Escobar, 2018; TallBear, 2019)

Table 2. Analytical Framework Matrix. Source: Authors.

5. FROM SIMULATION TO DISRUPTION: PATTERNS ACROSS THE EDIBLE SPECTRUM

This section analyses four selected food design projects - The Sausage of the Future, Edible Growth, Perfect Day, and NotCo - through the analytical framework introduced in Section From Simulation to Disruption: Patterns Across the Edible Spectrum. These projects were chosen for their ability to illustrate a spectrum between speculative provocation and commercial implementation. The analysis does not assess technical feasibility or consumer response but instead focuses on how each project articulates narratives, aesthetics, and systemic ideologies within the field of food design.

5.1 THE SAUSAGE OF THE FUTURE (CAROLIEN NIEBLING)

This speculative design project challenges meat typology by proposing new forms of sausage made from plant-based and fermented ingredients. Rather than imitating traditional meat aesthetics, the design leverages texture, form, and colour to provoke reimagined sensory expectations.

MATERIALITY AND TECHNOLOGY	AESTHETICS AND SENSORIALITY
Relies on artisanal techniques and non-animal proteins, foregrounding fermentation as both a material and cultural process.	Disrupts mimicry; prioritizes visual experimentation and culinary estrangement to challenge what a sausage can be.
NARRATIVE AND DISCOURSE	ETHICAL AND POLITICAL IMPLICATIONS
Frames food as a designable medium beyond nostalgia or substitution. Aligns with Tharp & Tharp's (2019) "discursive object" capable of shifting conceptual paradigms.	Critiques industrial protein logic by opening aesthetic alternatives. However, its speculative nature limits public engagement and systemic integration.

Table 3. Critical Analysis of The Sausage of the Future. Source: Authors.

5.2 EDIBLE GROWTH (CHLOÉ RUTZERVELD)

A bio-design prototype combining 3D printing and living organisms to produce evolving food forms. This project visualizes a co-evolutionary model of food production that brings together human, machine, and biological elements.

MATERIALITY AND TECHNOLOGY	AESTHETICS AND SENSORIALITY
Blends synthetic and organic processes to propose a temporally active, multispecies artefact.	Presents food as a process - not a finished object - highlighting the aesthetics of decay, growth, and the lifecycle.
NARRATIVE AND DISCOURSE	ETHICAL AND POLITICAL IMPLICATIONS
Critiques industrial stasis and suggests a symbiotic relationship between food and life systems.	Points to localized, zero-waste futures but lacks pathways for scalability, accessibility, or broader cultural integration.

Table 4. Critical Analysis of Edible Growth. Source: Authors.

5.3 PERFECT DAY

This biotechnology company engineers casein and whey proteins through microbial fermentation, enabling dairy production without the use of animals.

MATERIALITY AND TECHNOLOGY	AESTHETICS AND SENSORIALITY
Exemplifies precision fermentation as a scalable biotech process that mimics the molecular properties of dairy.	Promotes sustainability through technological substitution while preserving familiar consumer experiences..
NARRATIVE AND DISCOURSE	ETHICAL AND POLITICAL IMPLICATIONS
Maintains traditional flavour and texture profiles to ease adoption.	Raises concerns about opacity, proprietary control, and corporate centralization—despite claims of animal welfare and environmental responsibility (Sandler, 2014).

Table 5. Critical Analysis of Perfect Day. Source: Authors.

5.4 NOTCO – GIUSEPPE

An AI-driven company using machine learning (the "Giuseppe" algorithm) to generate plant-based alternatives that replicate animal-based food items.

- Materiality and Technology: Relies on large datasets to simulate flavour, aroma, and texture via novel ingredient combinations.
- Aesthetics and Sensoriality: Replicates familiar formats (e.g., burgers, milk) to ensure cultural legibility.
- Narrative and Discourse: Frames AI as an ethical, creative agent of food system reform—yet often instrumentalizes sustainability rhetoric for market acceptance.
- Ethical and Political Implications: Emphasizes efficiency and innovation but maintains techno-industrial paradigms. The role of AI in shaping taste raises epistemic and authorship concerns (Escobar, 2018).

MATERIALITY & TECHNOLOGY	NARRATIVE & DISCOURSE
Relies on large datasets to simulate flavour, aroma, and texture via novel ingredient combinations.	Frames AI as an ethical, creative agent of food system reform—yet often instrumentalizes sustainability rhetoric for market acceptance.
AESTHETICS & SENSORIALITY	ETHICAL & POLITICAL IMPLICATIONS
Replicates familiar formats (e.g., burgers, milk) to ensure cultural legibility.	Emphasizes efficiency and innovation but maintains techno-industrial paradigms. The role of AI in shaping taste raises epistemic and authorship concerns (Escobar, 2018).

Table 6. Critical Analysis of NotCo - Giuseppe. Source: Authors.

6. THE TASTE OF TENSION: ETHICS, ESTRANGEMENT AND DESIGN POLITICS

The comparative analysis demonstrates both convergences and divergences in how these artefacts navigate the ethical, sensory, and systemic thresholds of food design. Each case represents a particular tension between disruption and reproduction, opacity and transparency, and simulation and invention.

6.1 PATTERNS ACROSS ANALYTICAL DIMENSIONS MATERIALITY AND TECHNOLOGY

The Sausage of the Future and Edible Growth propose material redefinitions of food,

prioritizing fermentation, co-evolution, and processual aesthetics. In contrast, Perfect Day and NotCo utilize synthetic systems to replicate conventional products with high fidelity, advancing scalability but limiting ontological innovation.

AESTHETICS AND SENSORIALITY

The speculative projects provoke estrangement and invite new aesthetic imaginaries. Conversely, the commercial cases maintain aesthetic familiarity, reinforcing the sensory norms of industrial food systems. This dualism reflects divergent strategies for user engagement: invitation through disruption vs. acceptance through replication.

NARRATIVE AND DISCOURSE

All four projects deploy future-oriented rhetoric, but to different ends. The speculative projects act as discursive artefacts that provoke cultural critique. The commercial one's embrace techno-optimistic narratives, embedding their innovations in mainstream consumption without substantially altering food imaginaries.

ETHICAL & POLITICAL IMPLICATIONS

While all projects gesture toward sustainability, few engage with questions of food justice, sovereignty, or epistemic inclusion. Perfect Day and NotCo raise critical concerns around transparency, corporate power, and proprietary systems. The Sausage of the Future and Edible Growth, though more ethically ambitious in form, remain constrained by their speculative nature and limited accessibility.

6.2 EMERGENT TENSIONS

SIMULATION VS. AUTHENTICITY

Commercial artefacts simulate traditional food experiences to facilitate user acceptance, often at the expense of more profound transformation. Speculative designs disrupt sensory expectations, offering new symbolic registers but lacking reach or infrastructure for systemic change.

OPACITY VS. TRANSPARENCY

Precision fermentation and AI systems often obscure technical processes from the public. The reliance on proprietary algorithms and bioengineering in Perfect Day and NotCo raises questions about accountability and consumer autonomy.

FAMILIARITY VS. ESTRANGEMENT

Design decisions reflect assumptions about what users desire or can tolerate. The speculative projects assume that aesthetic discomfort may spark reflection, whereas commercial designs aim to avoid disruption and promote consumption.

DISCOURSE VS. INFRASTRUCTURE

There is a disjunction between speculative artefacts that critique the system and commercial artefacts that replicate it. Few initiatives bridge this gap to create participatory, community-driven design outcomes.

6.3 TOWARD A TYPOLOGY OF FOOD DESIGN FUTURES

The cases suggest an emerging typology across two axes:

- Symbolic Depth – from mimicry to invention;
- Systemic Traction – from provocation to integration.

To navigate the increasingly complex and often contradictory landscape of food design, where speculative artefacts meet commercial imperatives, and sensory innovation intersects with ecological urgency, we propose two conceptual heuristics: Symbolic Depth and Systemic Traction. These dimensions, drawn from critical design theory, post-humanist ethics, and decolonial critique, can serve as guiding criteria for evaluating food design artefacts beyond superficial novelty or scalability.

SYMBOLIC DEPTH			
DEFINITION	RATIONALE	INDICATORS	
symbolic depth guides to the extent to which a food design artefact interrogates, reframes, or transforms cultural, ethical, and epistemic beliefs about food, taste, nature, and identity.	building on dunne and raby's (2013) concept of "speculative design" and tharp and tharp's (2019) "discursive design," symbolic depth prioritizes the artefact's conceptual and affective resonance. it asks: does the design generate new imaginaries? does it reveal contradictions or make hidden systems visible? how does it re-script sensorial expectations or social rituals around food?	use of estrangement, ambiguity, or discomfort to provoke reflection (e.g., haraway's (2023) situated knowledge, korsmeyer's (2017) sensory ethics). engagement with epistemic plurality or marginalized perspectives (e.g., escobar's pluriverse, tallbear's (2019) caretaking ethics). critique of dominant norms (industrial taste, "naturalness," technological solutionism). articulation of multispecies or post-humanist values in design logic.	Symbolic depth alone does not guarantee impact. deep symbolism without pathways for translation or engagement risks remaining insular within design discourse.

Table 7. Heuristic Proposal Symbolic Depth to Evaluate Food Design Artefacts. Source: Authors.

SYMBOLIC DEPTH

Definition: Symbolic Depth guides to the extent to which a food design artefact interrogates, reframes, or transforms cultural, ethical, and epistemic beliefs about food, taste, nature, and identity.

Rationale: Building on Dunne and Raby's (2013) concept of "speculative design" and Tharp and Tharp's (2019) "discursive design," Symbolic Depth prioritizes the artefact's conceptual and affective resonance. It asks: Does the design generate new imaginaries? Does it reveal contradictions or make hidden systems visible? How does it re-script sensorial expectations or social rituals around food?

INDICATORS

Use of estrangement, ambiguity, or discomfort to provoke reflection (e.g., Haraway's (2023) situated knowledge, Korsmeyer's (2017) sensory ethics). Engagement with epistemic plurality or marginalized perspectives (e.g., Escobar's pluriverse, TallBear's (2019) caretaking ethics). Critique of dominant norms (industrial taste, "naturalness," technological solutionism). Articulation of multispecies or post-humanist values in design logic.

Symbolic Depth alone does not guarantee impact. Deep symbolism without pathways for translation or engagement risks remaining insular within design discourse.

SYSTEMIC TRACTION

Definition: Systemic Traction refers to the degree to which a design artefact actively engages with material infrastructures, regulatory environments, and sociotechnical systems to affect change across broader food ecosystems.

Rationale: Drawing from systems design (Jones, 2014), post-humanist pragmatism (Wilkie, 2018), and critiques of techno-solutionism (Escobar, 2018), this dimension evaluates whether a design project intervenes meaningfully in real-world systems, not just symbolically, but operationally.

INDICATORS

Capacity to influence or integrate into supply chains, policy, or public institutions. Commitment to transparency, access, and participation (especially for marginalized groups). Use of co-design, participatory, or community-based methods (e.g., Indigenous-led, feminist, or grassroots initiatives). Addressing long-term ecological and metabolic consequences (e.g., circular systems, food sovereignty).

SYSTEMIC TRACTION		
DEFINITION	RATIONALE	INDICATORS
Systemic Traction refers to the degree to which a design artefact actively engages with material infrastructures, regulatory environments, and sociotechnical systems to affect change across broader food ecosystems.	Drawing from systems design (Jones, 2014), post-humanist pragmatism (Wilkie, 2018), and critiques of techno-solutionism (Escobar, 2018), this dimension evaluates whether a design project intervenes meaningfully in real-world systems, not just symbolically, but operationally.	Capacity to influence or integrate into supply chains, policy, or public institutions. Commitment to transparency, access, and participation (especially for marginalized groups). Use of co-design, participatory, or community-based methods (e.g., Indigenous-led, feminist, or grassroots initiatives). Addressing long-term ecological and metabolic consequences (e.g., circular systems, food sovereignty).

Table 8. Heuristic Proposal Systemic Traction to Evaluate Food Design Artefacts. Source: Authors.

Systemic traction can exist without symbolic innovation - e.g., commercial products that scale rapidly while reinforcing dominant ideologies. Without symbolic depth, traction may degenerate into compliance rather than transformation.

When applied together, Symbolic Depth and Systemic Traction enable a more nuanced assessment of food design projects across four quadrants:

	HIGH SYSTEMIC TRACTION	LOW SYMBOLIC TRACTION
HIGH SYMBOLIC DEPTH	Radical infrastructure (e.g., community labs, indigenous prototypes)	Speculative design (e.g., discursive artefacts)
LOW SYMBOLIC DEPTH	Commercial innovation (e.g., NotCo, Perfect Day)	Visual novelty, short-term concepts

Table 9. Heuristic Application Proposal to Evaluate Food Design Artefacts. Source: Authors

This typology invites scholars, educators, and practitioners to evaluate food design projects not only by impact or scalability, but by the extent to which they interrogate symbolic, cultural, and ethical assumptions.

Future empirical work could adapt this matrix for participatory evaluation methods, such as co-design workshops or sensory field testing, to assess artefacts from multiple epistemic standpoints (e.g., consumer-users, Indigenous communities, sensory minorities, microbial actors). This would allow the model to evolve beyond abstraction into reflexive design practice.

7. DESIGNING AT THE EDGE: TOWARD A REGENERATIVE FOOD IMAGINATION

This study critically examined how contemporary food design projects - both speculative and commercial - navigate the aesthetic, ethical, and systemic dimensions of emerging food futures. Through a comparative analysis of four cases, it articulated how food artefacts serve not only as material propositions but also as symbolic mediators of competing imaginaries: technological efficiency versus ecological interdependence, sensory familiarity versus cultural estrangement, and critical provocation versus market integration.

The findings challenge the assumption that visibility, novelty, or technological advancement automatically equate to critical value. Speculative artefacts, such as The Sausage of the Future and Edible Growth, provoke reflection and aesthetic reimagination but often remain siloed in elite design discourses. Conversely, biotech innovations like Perfect Day and NotCo demonstrate scalability but tend to replicate extractive or opaque industrial models. Both ends of the spectrum reveal a standard limitation: a detachment from community-driven, relational, or justice-centred frameworks.

To move toward a regenerative and politically attuned practice, food design must be reframed not only as symbolic critique or technological intervention, but as a situated cultural practice - embedded in land, sensory sovereignty, and epistemic plurality. As Norman (2023) argues, "the role of design is not simply to make things attractive or easy to use, but to help guide people's values, choices, and the impact of those choices

on society and the planet" (p. 29). This view aligns with the need to reimagine food design as a mediating force between systems and communities, capable of engaging not only with form and function but also with care, responsibility, and cultural restitution. Expanding beyond techno-scientific futurisms and speculative aesthetics, food design must increasingly centre grounded methods, plural cosmologies, and multispecies ethics. In doing so, it can evolve into a meaningful tool for decolonizing systems, not merely aestheticizing their dysfunctions.

8. BEYOND THE PLATE: RESEARCH GAPS, FUTURE PATHWAYS, AND TRANSFORMATIVE POTENTIALS

This study is framed by some limitations that define both the scope and the opportunities for future work. First, the selection of case studies, while illustrative of contrasting design paradigms, remains situated within dominant techno-scientific imaginaries. The absence of grassroots, indigenous, or low-tech community-led initiatives represents a gap, particularly given their importance in challenging hegemonic narratives and offering situated, relational alternatives to mainstream food design imaginaries. As such, the study reflects a limited epistemic geography that warrants future expansion.

Second, the analysis relied on secondary data sources, including publicly available visual documentation, design publications, and media discourse. While these materials provide valuable insight into the representational and rhetorical strategies of each project, they do not capture the lived, affective, or political dimensions of how these artefacts are experienced, interpreted, or contested in context. Incorporating primary data through interviews, participatory methods, or ethnographic fieldwork could significantly deepen the analysis.

Third, the typology proposed in this article should be understood not as a predictive model or fixed taxonomy, but as an interpretive heuristic grounded in critical and speculative design theory. It serves to surface recurring tensions, epistemic positions, and design strategies within food innovation, offering a lens for critical reflection and comparative assessment. Its purpose is not empirical generalization or categorical closure, but to invite further inquiry into how food artefacts mediate symbolic depth and systemic traction within diverse sociotechnical configurations.

Looking ahead, several research pathways could meaningfully extend this inquiry. Embedding food design research within communities through participatory and ethnographic approaches, such as co-design, sensory ethnography, or collaborative prototyping, would help foreground alternative logics of value, authorship, and belonging. Equally important is the inclusion of decolonial, indigenous, and diasporic food design initiatives, which can counterbalance techno-optimistic narratives and expand the epistemological and ontological range of the field. Further exploration into material ecologies and multispecies design would also be productive, enabling a deeper engagement with the ethical and metabolic entanglements of food, microbes, nonhumans, and environments. Finally, longitudinal studies that trace food design systems over time, from prototyping to policy, from cultural adoption to infrastructural integration, would illuminate how speculative artefacts evolve within and across sociotechnical systems.

By embracing complexity, contestation, and plural ways of knowing, food

design research can move from speculative promise to transformative practice. This shift demands not only more inclusive methodologies and expanded casework but also a commitment to reimagining how we design, relate, and nourish in an era of profound ecological and cultural transition.

This study also lays the conceptual groundwork for a more comprehensive research agenda aimed at developing an evaluative model for food design practices, grounded in specific heuristics such as Symbolic Depth and Systemic Traction. While these dimensions were proposed here as interpretive tools, future work can empirically test and refine them through comparative case studies, participatory evaluation methods, and interdisciplinary design research. Given the growing proliferation of food design projects emerging from universities and research centres worldwide - from ESAD.IDEA Matosinhos and ELISAVA to Politecnico di Milano, and others - there is a crucial requirement for shared frameworks to consider their cultural, ecological, and political contributions. Such a model could support not only academic inquiry but also guide professionals in the food industry, including food designers, academics, and institutions, in aligning food design innovation with ethical responsibility, epistemic inclusivity, and regenerative impact.

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INTRODUCTION

Throughout history, human beings have sought to overcome the limitations of the body through technological, medical, and aesthetic interventions. From ancient prosthetic devices to contemporary biomedical engineering, the body has been continually reimagined, repaired, and extended. The development of prosthetics is particularly significant, as it embodies both the functional imperative of restoring lost capacities and the symbolic drive to reshape identity through design. Freud (2015) famously described man as a “prosthetic God” suggesting that technological extensions magnify human ability while simultaneously reminding us of our inherent vulnerability.

Central to this exploration are the themes of polarities, limits, and thresholds. Prosthetic technologies expose the polarity between absence and presence, natural and artificial, concealment and visibility. They press against the limits of the human body, both physical and psychological, testing what it means to repair, enhance, or even exceed/extend natural capacities. At the same time, prosthetics mark thresholds, liminal points where the body and technology merge, where medical necessity becomes aesthetic choice, and where cultural anxieties about authenticity, identity, and normality come to the fore.

In recent decades, advances in biotechnology, tissue engineering, and digital fabrication have blurred distinctions between the functional and the aesthetic. Prostheses are no longer designed solely to conceal absence or replicate “normality” but increasingly serve as sites of artistic expression, individuality, and even glamour (Pullin, 2011; Mullins, 2009). This shift reflects a broader cultural movement that regards the body not as fixed but as malleable, a canvas for transformation through medical and technological means (Haraway, 2013a; Morra, 2007).

At the same time, the history of prosthetics reveals an enduring tension between repair and enhancement. While traditional prostheses sought invisibility, contemporary practices, including bespoke prosthetic design and “medical jewellery”, embrace visibility, reframing disability as difference and prosthesis as opportunity (Kuppers, 2007; Serlin, 2004). This suggests that prosthetic design must be understood not only as a medical or technical endeavour but also as an aesthetic and cultural practice.

Sigmund Freud’s notion of the “prosthetic God” offers a foundational perspective on the relationship between humanity, technology, and embodiment. In *Civilization and Its Discontents* (1930/1961), Freud argued that technological extensions, ranging from spectacles to transportation, grant humans god-like powers by compensating for bodily deficiencies (Freud, 2015). He also emphasized that these enhancements never fully overcome human vulnerability, describing humans as “prosthetic gods” whose tools provide extraordinary power but also carry fragility and dependence. Prostheses, in Freud’s framing, are thus double-edged: they amplify human capacity while simultaneously highlighting the incompleteness of the human body.

Donna Haraway radicalises this understanding in her *Cyborg Manifesto* (1985/1991), where the figure of the cyborg disrupts binary distinctions such as human/machine, nature/culture, and male/female (Haraway, 2013a). For Haraway, the cyborg is not a supplementary prosthetic attached to a pre-existing “natural” body, but rather a hybrid ontology that emerges at the intersection of organic and technological. Unlike Freud’s

THE PROSTHETIC IMAGINATION: LIMITS, POLARITIES, THRESHOLDS, AND THE CULTURAL MEANING OF BODILY ENHANCEMENT

ABSTRACT

This paper investigates the intersection of medical function and aesthetic expression in the design and use of prosthetics. Traditionally, prostheses were conceived as medical devices that restored lost function or concealed physical difference, aiming to approximate a normative bodily form. However, contemporary practices reveal a shift toward visibility, individuality, and creative expression, suggesting that prosthetics operate not only as tools for repair but also as sites of aesthetic and cultural innovation.

Drawing on case studies ranging from historical developments in Victorian medical aids to contemporary practices such as The Alternative Limb Project, this research situates prostheses within a broader lineage of enhancement and repair. The study engages with theoretical frameworks from cultural theory, design studies, and medical humanities, including Freud’s notion of the “prosthetic God”, Haraway’s cyborg theory, and Kuppers’ exploration of scars and visibility.

The analysis demonstrates that prostheses function as more than functional replacements: they are extensions of identity, embodiments of social values, and catalysts for rethinking disability and normality. Central to this argument are the concepts of polarities, limits, and thresholds: prostheses expose the polarity between concealment and display, press against the limits of the human body, and mark thresholds where medical necessity becomes artistic expression.

The paper highlights how the fusion of medical utility and aesthetic innovation can empower users, reduce stigma, and foster new understandings of embodiment. In doing so, the research contributes to debates on enhancement, ethics, and the role of aesthetics in medical practice, positioning prosthetics as crucial mediators between technology, identity, and cultural meaning.

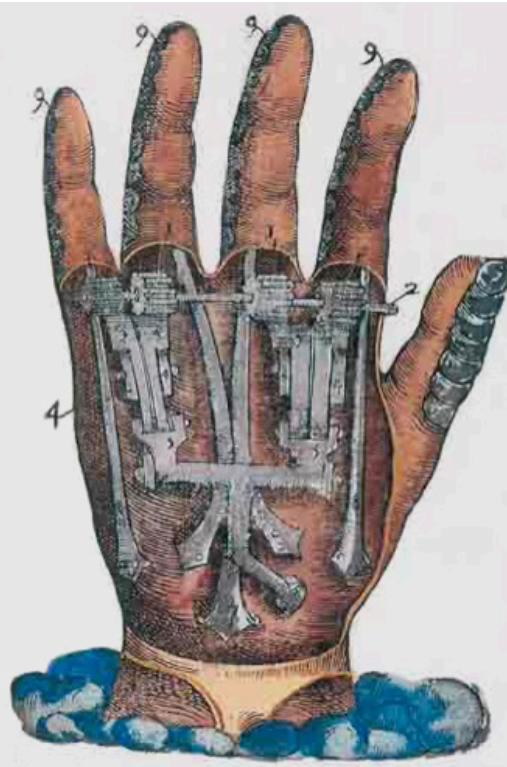


Figure 1
Instrumenta chyrurgiae et icones anathomicae (Ambroise Paré)
 (Wellcome Collection, 1564).

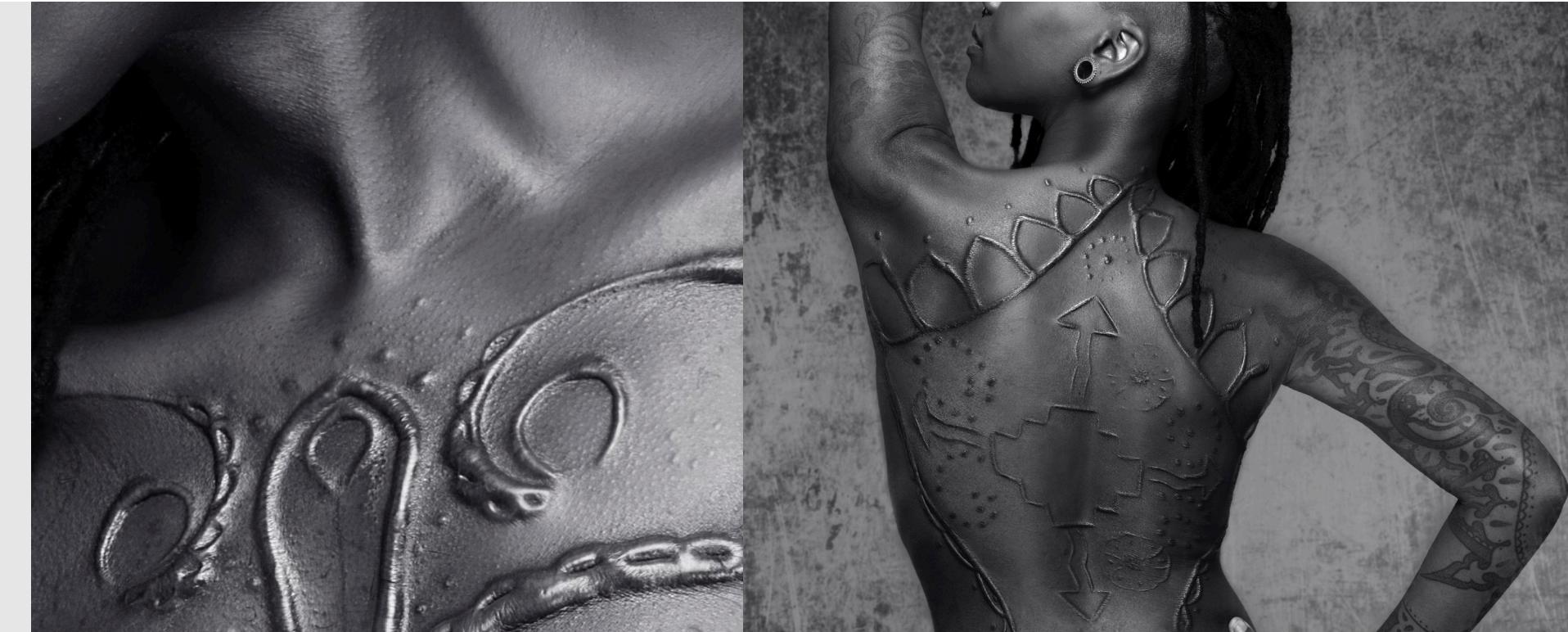


Figure 2
 Laurence Sessou
 aka 'Moniasse'
 Photograph by Stephanie Dray,
 Courtesy of Laurence Sessou

melancholic image of prosthetic dependency, Haraway positions technological embodiment as an opportunity for political re-imagination, feminist intervention, and posthuman becoming. The cyborg signals a shift from seeing prostheses as compensatory devices to recognizing them as constitutive of identity and subjectivity itself.

From research on prosthetic technology dating from the 16th century to modernist reviews of the body itself as a machine, it is obvious that the relationship between the human body and technology has been capturing people's imagination in various ways. Ambroise Paré's had already exemplified in 1564 what Haraway later argued – in *Instrumenta chyrurgiae et icones anathomicae*, the machine is structurally and aesthetically humanised (figure 1).

Petra Kuppers (2007) blurs both Freud's and Haraway's frameworks by focusing on the lived experiences of disability, scars, and bodily visibility. In *The Scar of Visibility: Medical Performances and Contemporary Art*, Kuppers highlights how scars are not merely traces of trauma but also sites of narrative, meaning-making, and embodied difference. Scars destabilize the polarity of wholeness versus damage, occupying a threshold between injury and healing. Unlike Freud's universalizing claim about prosthetic lack or Haraway's utopian hybridity, Kuppers foregrounds the material and social dimensions of embodied difference, emphasizing that repair, scarring, and prosthesis are cultural as much as medical phenomena. Her work insists on visibility, not as spectacle, but as a mode of rethinking disability, resilience, and embodied diversity.

The main reason why body art/modification affectionate and practitioners

appreciate the process of scarifying is because it is never a precise and totally predictable procedure. Also, it is thought to be more natural than the injection of artificial pigments into the skin. An example is of Laurence Sessou (figure 2), where the body is partially covered in tattoos and scarification. Sessou (2015) believes the scars to be "the markings of our tribes; it shows who we are".

Taken together, these three perspectives illustrate shifting paradigms in thinking about prosthesis and embodiment. Freud frames prosthetics as tools that underscore human insufficiency; Haraway reframes technological integration as an emancipatory reconfiguration of subjectivity; and Kuppers insists on grounding these discussions in the lived, aesthetic, and social experiences of marked and repaired bodies. The interplay of these frameworks reveals that prosthetics, scars, and cyborg identities are never neutral: they are sites where technology, culture, and embodiment converge to redefine what it means to be human.

This paper explores the intersection of medical function and aesthetic expression in prosthetics, situating them within a lineage of enhancement and repair that extends from mythological imaginings of the body's transcendence to contemporary bio-art and design. By examining how prostheses operate as both tools of repair and sites of aesthetic innovation, the research highlights their role in shaping identity, embodiment, and social perception. In doing so, it contributes to critical debates in medical humanities, design studies, and cultural theory about the meaning of enhancement, the ethics of bodily intervention, and the role of aesthetics in medical practice.



Figure 3
Icarus 1st-3rd century CE, bronze.
The British Museum, London.
The Trustees of the British Museum ©



Figure 4
Tattoo scene
from the movie Crash.

2. ENHANCING AND EXTENDING THE BODY

2.1 PHYSICAL AND PSYCHOLOGICAL DIMENSIONS

Noronha (2018) explores enhancement through different categories, each of which impacts distinct conceptions of the body. Here, we will briefly establish the basis for distinguishing physical and emotional/experiential forms of enhancement, while emphasizing how enhancement constantly negotiates polarities (e.g., natural/artificial, human/machine), tests limits (the boundary of what the body can or should endure), and crosses thresholds (moments of transition into new states of being).

Enhancement is often associated with comic book heroes, endowed with superhuman strength or the ability to fly. These figures foreshadow ideas of transhumanism, both the study of and the attempt to transcend human limitations by using technology to transform and extend body and mind. As Sargent (2012) notes, one might even imagine enhancement as a pill capable of making us smarter or extending our lifespan. The desire for "more" exposes a tension between aspiration and danger - a polarity between empowerment and risk.

The myth of Icarus exemplifies this (figure 3). His flight embodied a transgression of human limits, yet his fall revealed the peril of crossing thresholds without caution. The image of wings has long been a materialised metaphor for transcending our earth-bound condition. The story demonstrates how technologies, acting as prosthetic "wings" can momentarily suspend natural laws, but always within the shadow of collapse.

This polarity between liberation and downfall continues to shape contemporary

debates on enhancement. Technologies extend our natural capacities, but also remind us of fragile limits and thresholds - ethical, physical, and psychological - that must be negotiated.

The 2012 exhibition *Superhuman: Exploring Human Enhancement* from 600 BCE to 2050 at the Wellcome Collection, curated by Emily Sargent, questioned whether technology always improves life or whether we should instead strive for authenticity and "normality" (Sargent, 2012). Presenting artefacts spanning centuries, the exhibition foregrounded how enhancement sits at the threshold of cultural fascination and unease. Sargent frames technological enhancement as both exciting and unsettling, prompting reflection on the polarities between progress and preservation, self-improvement and identity loss.

This aligns with Haraway's (2013a) perspective of the body as a site for transcending entrenched binaries - human/inhuman, man/machine, female/male, physical/technological. Enhancement thus becomes a process of threshold crossing, destabilising what was once considered fixed. Similarly, the reflections articulated in J. G. Ballard's novel *Crash* (1973) and David Cronenberg's film adaptation (Ballard & Cronenberg, 1996) remind us that contemporary life is increasingly shaped by the fusion of flesh and technology, dissolving established categories of organic and artificial. As Cronenberg himself notes, the narrative explores the attempt to "transcend (the body) by transforming it (...) absorbing and embedding technology and having it become a part of us, literally" (Cornea, 2003). Critical readings of *Crash* (figure 4 illustrates a tattoo scene) likewise emphasize how the novel and film collapse the distinction between car and body, where "flesh (is) likened to the glitzy, fetishised surface of cars" (Brown, 2001, p. 91).

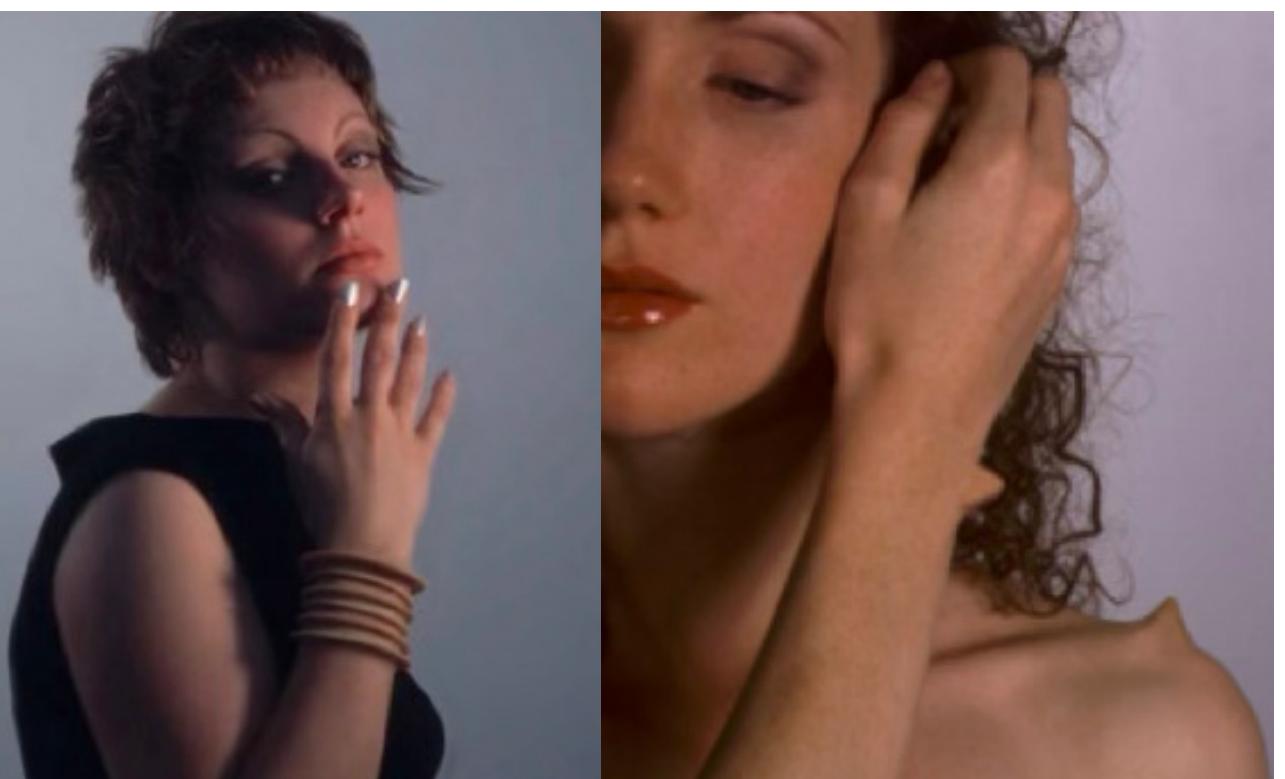


Figure 5
Angiogenetic Body Adornment
Cherry, 2013.
(photographic simulations)

Figure 6
Biojewellery Project
(Kerridge et al., 2008)

Examples such as Norman Cherry's Angiogenetic Body Adornment (Cherry, 2013) (figure 5) and Kerridge, Stott and Thompson Biojewellery (Kerridge et al., 2008) (figure 6) project, vividly illustrate the convergence of biomedical technology and aesthetic practice. Both projects transform processes typically confined to medical science into artistic and cultural interventions, deliberately collapsing polarities between science and art, function and beauty, therapy and adornment. Cherry's work envisions the body as a site of controlled cellular growth, where angiogenesis, the natural process of blood vessel formation, is harnessed to sculpt and modify the human form. Biojewellery, by contrast, situates tissue-engineered bone within a symbolic and relational framework, embedding personal and emotional narratives into the scientific manipulation of living cells.

These works probe the limits of tissue engineering, expanding its potential beyond conventional medical objectives and challenging the boundaries between repair and enhancement. Participants are positioned at thresholds of transformation, navigating the liminal space between the body as received and the body as consciously designed. Here, the body becomes both a medium and a message: a canvas upon which identity, desire, and cultural meaning are inscribed alongside cellular structures. The interplay of control, collaboration, and aesthetic intention highlights the relational and ethical dimensions of these interventions, raising questions about autonomy, embodiment, and the social significance of body modification.

Moreover, the projects foreground the emotional and experiential aspects of



enhancement. By allowing participants to engage actively in the shaping of their own tissue or symbolic representation, Cherry (2013) and Martin (2006) cultivate a sense of agency and self-authorship. The threshold between medical treatment and artistic practice becomes a site where the human subject is simultaneously repaired, transformed, and aesthetically extended. In this way, enhancement is not merely technological but also profoundly cultural and emotional: it mediates identity, challenges societal norms regarding the body, and cultivates new narratives about the possibilities of human embodiment.

Ultimately, these projects exemplify how the body can function as a site of experimentation at multiple levels - biological, aesthetic, and ethical - where polarities are questioned, limits are explored, and thresholds of transformation are actively negotiated. They invite a rethinking of enhancement as a continuum that encompasses repair, augmentation, and expressive self-fashioning, revealing the interdependence of the physical, psychological, and cultural dimensions of human experience.

2.2 EMOTIONS AND EXPERIENCE

Not only the physical and tangible aspects of the human body are matters for enhancement and extension; emotions and experience can also be augmented through design. A compelling example is Sompit Fusakul's practice-based Ph.D. research at the Royal College of Art (RCA), entitled *Interactive Ornaments: Emotions in Motion*. Fusakul's project consisted of a series of jewellery pieces designed to enhance the expression of emotions through interactively changing compositions (Fusakul, 2002). These computational pieces detected the wearer's heartbeats and responded dynamically, translating physiological data into visual forms that mediated emotional communication. He demonstrates that jewellery, or what has been termed "internet wearables" (Mura, 2008), can serve as a medium for conveying psychological and emotional states, extending the concept of bodily enhancement beyond the purely physical.

Directly connecting this to healthcare applications, Leon Williams' Ph.D. research at the RCA, *The Development of Digital Technologies for Use in Jewellery with Medical Applications*, explores how jewellery can enhance both the usability and desirability of medical devices (Williams, 2009). Williams argues that integrating qualities traditionally associated with jewellery, such as elegance, personalisation, and aesthetic appeal, can improve patient interaction with medical devices. His research focuses on digitally enhanced jewellery capable of monitoring health parameters and reimagining devices like the diabetic insulin pen, asthma inhaler, and HIV medication carrier as wearable, user-friendly objects. For example, Williams' "Slim-line Asthma Inhaler" (figure 7) was designed to reduce the social stigma associated with conventional inhalers. The device is compact, lightweight, and visually appealing, allowing it to be carried in a pocket or worn as a necklace. Trials reported that approximately 87% of users found the redesigned inhaler improved usability, with 80% expressing interest in it as a commercial alternative (Williams, 2009). Similarly, his pill-pomanders integrate modular, magnetic components for storing and organising tablets, combining practicality with aesthetic pleasure. Protective covers provide discretion, allowing patients to carry medication with dignity while retaining control over their appearance and personal expression. These examples illustrate how careful design at the intersection of jewellery and medicine can enhance both functionality and emotional experience.



Figure 7
Gold Slim-line Inhaler
with Silver Grip and Engraved
Canister (Williams, 2009).

Figure 8
LJP IU
jewellery pieces (Potter (2003)).

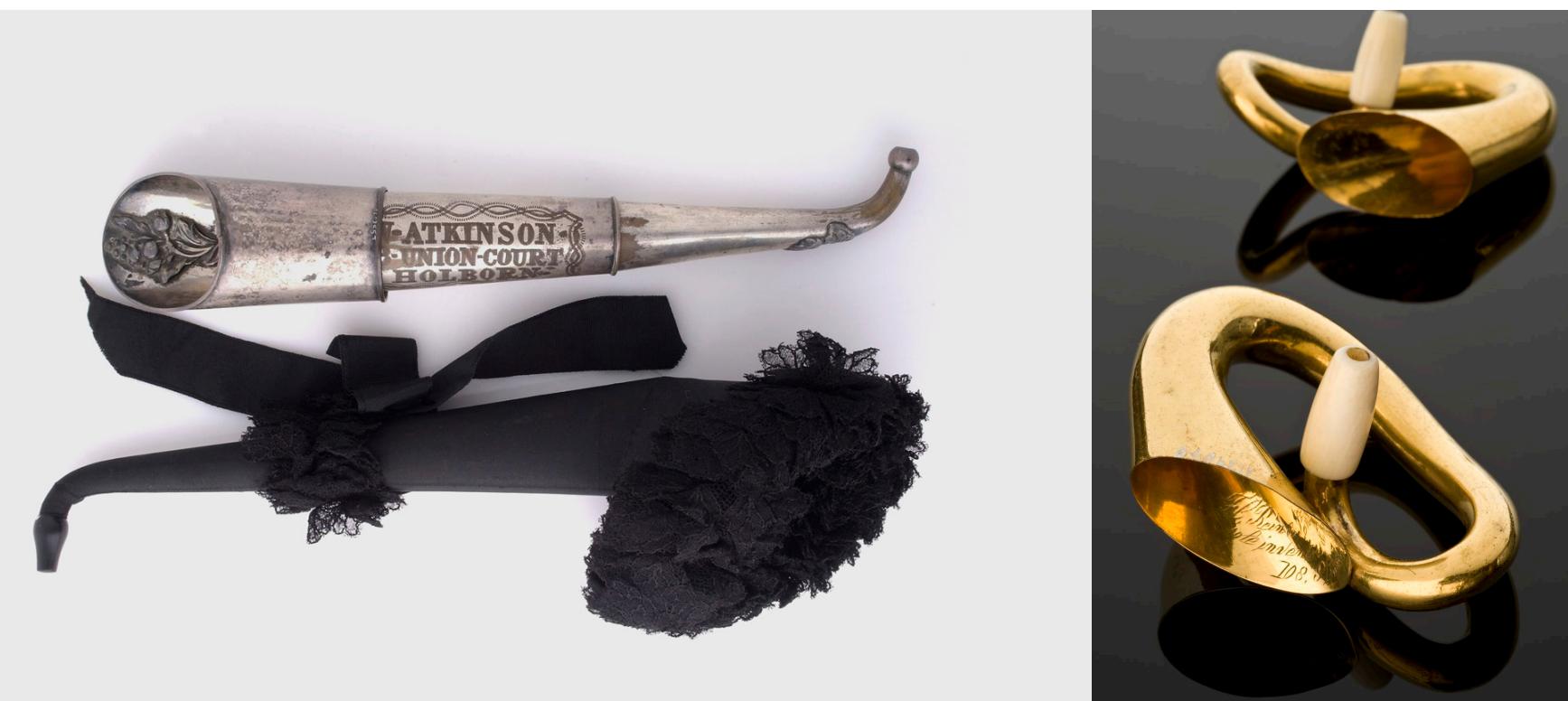


Figure 9
Victorian ear trumpet

Laura Potter's research further explores this intersection in a different context. In her project, Potter (2003) investigated women's perceptions of intrauterine devices (IUDs), framing them as a form of "internal jewellery" (figure 8). Rather than collecting purely quantitative data, she explored women's emotional and intuitive responses to IUDs, which resulted in the creation of eight jewellery pieces reflecting the interplay between medical device and personal meaning. Potter's work demonstrates that aesthetic and structural qualities of medical devices influence emotional responses and engagement, highlighting the potential for jewellery-based approaches to humanise and personalise medical technologies.

Taken together, these projects suggest that jewellery shares two key characteristics: it is intimately connected to the body, whether worn externally or internally, and it evokes personal meaning, curiosity, and admiration. By leveraging these qualities, designers can transform medical devices from purely functional objects into tools that enhance emotional experience, autonomy, and user confidence. As Pullin (2011) argues in *Design Meets Disability*, medical gadgets can become objects of joy and empowerment rather than anxiety and stigma, if designed with the same attention to desirability, aesthetic value, and personal expression as jewellery. In this way, enhancement and repair extend beyond mere physical restoration, encompassing emotional, psychological, and social dimensions, ultimately allowing patients to engage with their bodies and treatments with agency, pleasure, and dignity.

3. REPAIRING THE BODY WITH PROSTHESES

The history of prosthetics reveals a continuous negotiation of polarities, limits, and thresh-

olds, showing how human ingenuity has long grappled with absence, presence, and transformation. Prostheses occupy a liminal space between loss and compensation: they are simultaneously remedies for the body's deficiencies and instruments for producing new forms of embodiment. Rather than merely filling a functional gap, prosthetic devices operate at the intersection of the practical and the symbolic, challenging conventional understandings of wholeness, identity, and bodily integrity. In this sense, prosthetics are as much cultural artefacts as they are medical devices, reflecting evolving societal attitudes toward disability, beauty, and capability. Historically, prostheses have oscillated between the desire for concealment, imitating the "natural" body, and the embrace of visibility, celebrating artificiality as a deliberate statement of identity, aesthetic preference, or technological ingenuity (Noronha, 2018).

During the Victorian era, prosthetic devices vividly illustrated these tensions between utility and display, necessity and luxury. Objects such as hearing trumpets (figure 9), corsets (figure 10), and walking canes functioned not only as medical aids but also as markers of taste, refinement, and social status. These devices mediated the experience of the body, shaping how individuals presented themselves to society while simultaneously negotiating personal limitations or losses. Prosthetic and assistive devices thus extended beyond simple restoration of function: they explored the limits of design, identity, and social acceptability. In occupying this in-between space, they blurred the distinction between pragmatic medical aid and personal ornamentation, demonstrating that repair could be both functional and performative. In essence, prostheses became cultural texts, artefacts through which values, desires, and social hierarchies were communicated, negotiated, and performed.

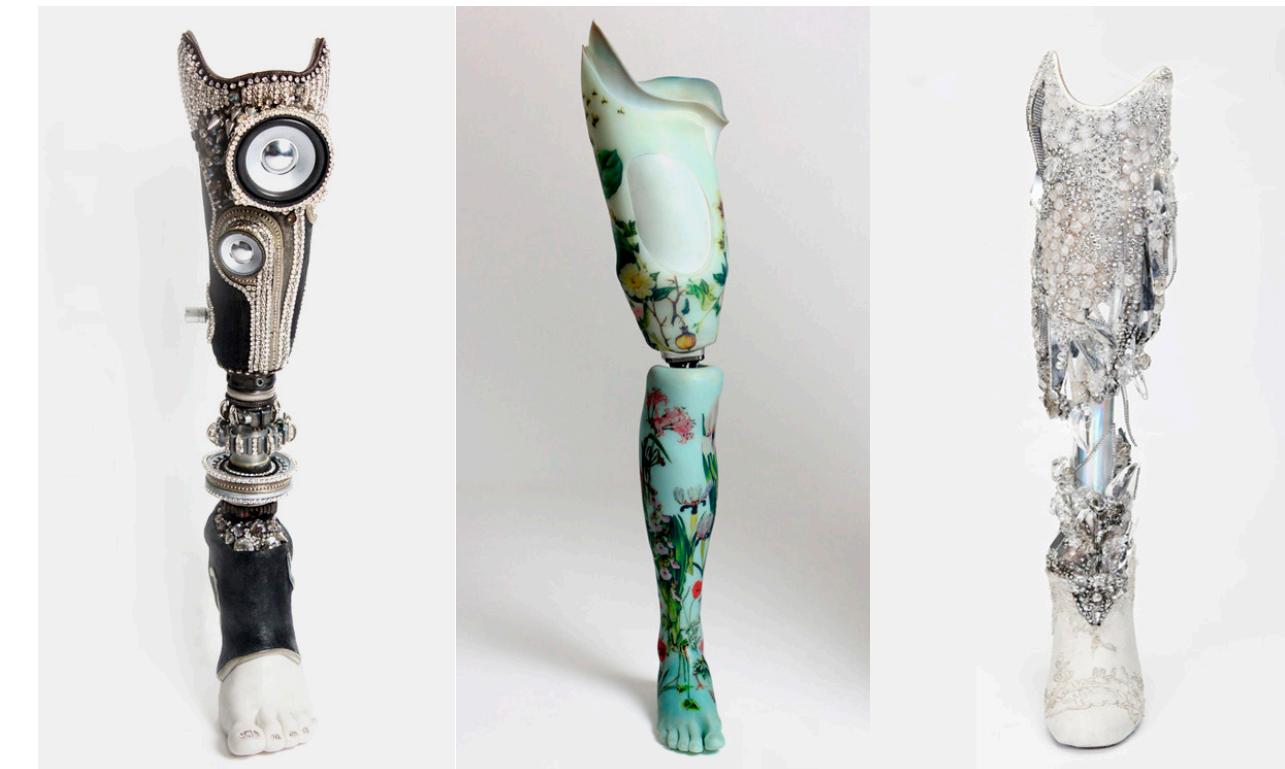


Figure 10
A brass corset used to minimise the waist or as an orthopaedic device to support the back or correct a spinal deformity, probably English, 19th Century, Wellcome Images, Wellcome Library, London, Museum No. A158256, L0035600, London.

In contemporary practice, designers and artists have radicalised this interplay of thresholds and polarities, transforming prosthetic limbs into sites of creativity, self-expression, and identity-making. Figures such as The Alternative Limb Project by Sophie de Oliveira Barata (The Alternative Limb Project, n.d.) (Figure 11) exemplify this conceptual shift. Similarly, Alexander McQueen's carved wooden prosthetic legs for Aimee Mullins (Kenion, 2022) (Figure 12), along with jewel-encrusted or sculptural limb designs, destabilise conventional notions of repair, functionality, and corporeal integrity. These prostheses operate not merely as medical replacements but as objects of aesthetic experimentation and symbolic reconfiguration. They traverse thresholds of identity, reframing "disability" as a site of creative possibility rather than limitation.

By engaging with prosthetic limbs as tools for self-expression and performative embodiment, Mullins, through her role as wearer, challenges entrenched binaries between ability and impairment, medical necessity and artistic intervention, utility and adornment. The prostheses she uses demonstrate that enhancement and repair need not be exclusively restorative; they can also be transformative, expressive, and socially meaningful.

The concept of repair extends beyond prosthetics into the broader terrain of surgical intervention, body modification, and even scarification, where physical alterations occupy liminal spaces between injury, healing, and transformation. Scars, as Kuppers (2007) observes, are simultaneously markers of trauma and carriers of narrative meaning: they signify survival, resilience, and personal history. Scars blur the polarity between damage and wholeness, existing in a threshold state that is neither entirely broken nor completely restored. Similarly, textile-based surgical implants and projects such as Julian

Figure 11
Prosthetic legs
The Alternative Limb Project by Sophie de Oliveira Barata, London.

Figure 12
The cherry wood prosthetics, designed by Alexander McQueen for Aimee Mullins (Kenion, 2022).

Ellis' embroidered "snowflake" shoulder implant interrogate the boundaries between medicine, art, and identity (Ellis, 2000). These interventions occupy hybrid spaces where functional, aesthetic, and symbolic registers converge, highlighting the potential for repair to be generative, performative, and transformative rather than merely corrective.

Across both historical and contemporary contexts, prosthetics and other forms of bodily repair reveal that interventions in the body are never purely functional. They operate at the intersection of absence and presence, utility and ornament, trauma and regeneration, disability and possibility. By negotiating these thresholds, such interventions challenge rigid binaries and conventional hierarchies, suggesting that the body, and its prosthetic, surgical, or augmentative extensions, is a dynamic site where material innovation, cultural meaning, and personal identity continuously converge, collide, and redefine one another. Prosthetics and bodily interventions, then, do more than restore, they reimagine the body, expanding the possibilities of embodiment, identity, and social engagement.

4. JEWELLERY BECOMES THE BODY

Since Greek times, the base principle of medicine has been the care of people in vulnerable conditions, guided by ethical commitments to healing and bodily integrity (Sternberg, 2003). Traditionally, medical practice has centred on diagnosing what type of intervention is required and how it should be executed. However, contemporary scholarship on embodiment highlights that care also involves how bodies are perceived, mediated, and

**Figure 13**

Examples of Medically Prescribed Jewellery (Noronha, 2018)

a) Filigree Cervical Collar, gold plated silver, hand-made Portuguese filigree and elastic. (photography credits: Artur Cabral)

b) Gold osteosynthesis and arthrodesis bone plates, (one with protruding tourmaline set 'piercings', another with pave set tourmalines and two with no gemstones), set with gold plated surgical screws to a hand anatomical model;

c) Running-X stitch gold plated silver beaded chain suture, with an onyx "figa" talisman in swine anatomical part, submerged on formaldehyde solution;

d) Lombostat (spinal orthoses) – polypropylene, gold plated silver hand-made Portuguese filigree and elastic.

materially extended through objects, technologies, and practices (Csordas, 1994; Shilling, 2012). This conceptual shift is central to understanding how medical devices and body modifications increasingly blur the boundaries between the biological body and its technological augmentations.

The notion of embodiment, wherein objects become integrated into bodily identity, lies at the core of Olga Noronha's Ph.D. thesis (Noronha, 2018). Drawing on theories of material agency and the porous, extended nature of the body (Ihde, 2002), Noronha interrogates "the becoming of the body beyond its very boundaries." Her work operates within the broader theoretical framework of posthumanism and body modification studies, which argue that the body is not fixed but continuously reshaped through artefacts, prostheses, and aesthetic interventions (Haraway, 2013b; Braidotti, 2013).

By bridging medicine and body modification, Noronha challenges traditional conceptions of bodily limits and proposes that the jewel, conventionally regarded as an aesthetic accessory, can function simultaneously as ornament, medical device, and bodily extension. Within embodiment theory, these hybrid objects can be read as technologies that "naturalise" themselves into the sensorimotor and symbolic experience of the body. They not only aestheticize the wearer ("it becomes you") but also merge with corporeal identity, operating as prosthetic surrogates and psychological or functional augmentations of the self.

Noronha's approach frames the body as an object of re-design, aligning with theoretical perspectives that view the human body as a site of continuous negotiation between biology, materiality, and technology. Her practice humanises the 'object' by recognising jewellery, medical science, and technological craft as collaborators in the enhancement or reconstitution of the body. Consequently, "becoming the body" encompasses: aesthetic enhancement; integration and naturalisation of the object as part of the body; completion or repair of bodily structures; and prosthetic expansion of physical and symbolic capacities.

The images in figure 13 exemplify the typologies of jewelleries presented in Noronha's doctoral work, illustrating how jewellery operates simultaneously as medical apparatus, aesthetic artefact and embodied extension.

4. CONCLUSIONS

Enhancement and repair can thus be understood as practices that continuously negotiate polarities, probe limits, and traverse thresholds. Polarities emerge in the tension between natural and artificial, hidden and visible, functional and aesthetic, revealing how bodies are always simultaneously biological, social, and symbolic. Limits surface in the ethical, psychological, and physiological boundaries of what bodies can endure, accept, or imagine, underscoring that interventions, whether surgical, prosthetic, or decorative, are never neutral but always culturally and personally situated. Thresholds, in contrast, mark transformative junctures, moments in which bodies are not simply restored but remade, entering new states of being through enhancement, prosthesis, or adornment. These thresholds reveal repair not as a return to a prior state, but as an invitation to exploration, self-fashioning, and creative agency.

Ultimately, this suggests that the act of repair is not merely restorative but generative. It produces new relationships between the body, the self, and the social world, revealing that in the spaces between polarities, beyond established limits, and across thresholds, the body becomes an evolving canvas for experimentation, expression, and transformation.

By foregrounding these dynamics, this research positions medical jewellery as a practice that inhabits precisely these in-between spaces. Rather than functioning solely as remedial devices or decorative objects, medical jewellery reframes prostheses and interventions as sites of possibility and thresholds of becoming. In this framework, repair and enhancement are not endpoints of loss but processes of transformation, where medicine, art, and identity intersect.

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is not merely communicative but epistemological, as it entails reconstructing meaning and generating new modes of knowledge.

Several authors provide relevant perspectives in this regard: for Tony Fry (2011), design is a political and cultural force that shapes possible futures; for Ezio Manzini (2015), it constitutes an act of social mobilisation fostering sustainable ways of living. Likewise, Cameron Tonkinwise (2018) identifies this critical field of thought-in-action in which designing becomes a reflection on the ethical and cultural conditions of making.

This framework positions design as an act of translation — not only between disciplines but also between dimensions of human experience. The entire design process thus becomes a form of symbolic mediation between the individual and the world, between gesture and thought.

The research underlying this article is situated within this perspective, adopting a research through design approach (Frayling, 1993), in which the act of designing constitutes both process and method of knowledge production. Drawing and making, material experimentation, are here understood as epistemological tools — ways of thinking through the hands — that prioritise exploration, questioning, and transformation of social realities through design practice.

Childhood, as a social and cultural construct, is a complex theme that demands sustained reflection. The economic, technological, and symbolic transformations that have occurred, particularly over the past two decades, have significantly reconfigured how childhood is understood and experienced. Today, children's everyday lives are profoundly shaped by the ubiquity of digital devices, the intensification of educational and extracurricular routines, and by consumption practices that tend to anticipate and mimic adult behaviours.

The phenomenon of adultisation, widely discussed by authors such as Postman (2012), Sarmento (2004), and Silva (2014), highlights the loss of children's symbolic autonomy and the progressive blurring of boundaries between childhood and maturity. If, for centuries, the child was viewed as a "miniature adult" (Ariès, 1978), contemporary society paradoxically reinstates that condition, mediated by a proliferation of products, images, and advertising discourses that position the child within a socially standardised and economically profitable role. These considerations suggest that play — a fundamental domain for cognitive and emotional development (Piaget, 1952; Vygotsky, 1978) — is often replaced by guided activities or consumer objects that constrain imagination.

Within this context, design acquires a significant role. More than creating products, design can intervene critically in the material culture of childhood, promoting new forms of interaction, exploration, and learning. It is within this framework that the project The Friendm@ker emerges, proposing an object of children's clothing that integrates pedagogical, ludic, and symbolic dimensions, constituting a mediating space between playing, learning, and imagining.

Through the fusion of illustration, textile structure design, and product design, this work explores the potential of design as a translational language between distinct disciplinary domains. The result materialises an interdisciplinary practice that brings together artistic making and educational thinking, manual gesture and reflective thought, the object and the subject who experiences it.

THINKING WITH THE HANDS: DESIGN AS A PRACTICE OF INTERDISCIPLINARY TRANSLATION - CASE STUDY: THE FRIENDM@KER

ABSTRACT

This article stems from research conducted within a Master's program in Product Design, focusing on the creation of a playful and pedagogical children's clothing object conceived as a device for learning and critical reflection on contemporary childhood culture. The study starts from the observation that childhood is increasingly adultised, reduced to a logic of consumption, and distanced from the playful experiences that allow the child to develop imagination, creativity, and symbolic thought.

The project The Friendm@ker aims to counter this trend by designing a hybrid object—simultaneously clothing, a toy, and a picture book—that reintroduces play as a language essential to child development. Based on an exploratory methodology, the design process combined theoretical research, material experimentation, and visual creation, integrating principles of sustainability, inclusion, and playfulness.

The article presents design as a practice of interdisciplinary translation, mediating between fields such as pedagogy, psychology, illustration, and textile design, and generating cultural and affective meanings that go beyond the utilitarian function of the object.

INTRODUCTION

In contemporary contexts, design transcends its traditional function of producing artefacts to assume an active role in cultural mediation and social transformation. Beyond addressing utilitarian needs, design now operates as an interpretative agent, capable of translating collective values, practices, and imaginaries into material and relational forms.

The term interdisciplinary translation is introduced here to designate the process through which design acts as a medium for transmitting ideas, methods, and languages across distinct fields, reinterpreting them within new frameworks. This process

2. DESIGN AS MEDIATION AND TRANSLATION

Thinking through the hands implies understanding design as a practice of mediation and translation. The designer operates in an intermediate space between thought and matter, transforming ideas, values, and experiences into tangible forms. In this transition from one domain to another — from concept to object — design functions as a cultural translator, reinterpreting distinct languages and bodies of knowledge within a new system of meaning.

Bruno Latour (1993) defines translation as a process that connects heterogeneous elements without fusing them, enabling the coexistence of differences within a shared space of action. From this perspective, design is by definition a translational practice: it mobilises knowledge from fields such as technology, art, sociology, psychology, and pedagogy, converting them into organised matter — ultimately, into sensory experience.

Michel Serres (1982) similarly observes that the translator, like the mediator, “weaves bridges” between domains that do not mutually comprehend one another, creating fertile zones of intersection. It is precisely within these intersections that design finds its operative territory.

For Tim Ingold (2013), designing is an act of correspondence between the human and the material world — a continuous process of attention and response. The designer does not impose form upon matter but rather establishes a dialogue with it, allowing the object that emerges to materialise that encounter. This view aligns closely with the notion of thinking through the hands, in which gesture becomes thought and making becomes language.

Likewise, Richard Sennett (2008) identifies in the craftsman the paradigm of embodied knowledge: an individual who understands the world through making, whose intelligence is both manual and reflective.

However, this mediating role of design extends beyond the material dimension. Ezio Manzini (2015) describes contemporary design as a practice of social mobilisation, capable of articulating values, people, and contexts around shared visions of the future. Tony Fry (2011) reinforces this by characterising design as an ontological force that “designs the very way we live,” with profound ethical and political implications. Cameron Tonkinwise (2018) adds that design should be understood primarily as a form of critical thought-in-action — an activity that questions the consequences of making and the responsibility inherent in designing sustainable futures.

Design, therefore, calls upon both language and mediation: it is a practice of translation between disciplines, between temporalities, and between worlds. The designer is thus an interpreter — one who renders complexity legible, converting the intangible (values, affects, intentions) into the tangible (matter, form, colour, structure, gesture).

Within the cultural and pedagogical context of childhood, this interpretative function gains particular relevance. Designing for children entails translating symbolic worlds into meaningful sensory experiences, acknowledging that play itself constitutes a form of knowledge.

To understand design as mediator and translator is, therefore, to recognise its nature as a field of meaning production — a space where gesture and reflection intertwine.

Each project becomes an anchored translation, an act that traverses disciplinary and cultural boundaries to generate new ways of thinking and, above all, of inhabiting the world.

Peter Zumthor (1998) reminds us that the essence of design lies in the sensory relationship between body and matter — in the capacity to create atmospheres that evoke meaning prior to rational interpretation. Similarly, Merleau-Ponty (1945) emphasises that knowledge is embodied: the body does not merely observe the world; it participates in it.

From this phenomenological standpoint, the designer’s act is interpretative — an active dialogue between perception, environment, and gesture. The research through design approach (Frayling, 1993) finds its validation here: knowledge emerges from the very process of designing, from the interaction between thought and materiality. Design thus becomes a materialised epistemology — a practice born from both intellectual reflection and sensory experience through action.

Barthes (1980) reminds us that every expressive act contains an affective and tactile dimension — a punctum whose nerve lies in the distance between subject and object. In design, that moment of contact is the locus of decoding: the point at which matter becomes language. While Sennett (2008) portrays the craftsman as one who thinks with the hands, Barthes conceives the gesture as the trace of meaning. Both authors converge on the notion of a sensitive intelligence, where making itself becomes a form of critical thought.

3. METHODOLOGY AND RESEARCH PROCESS

The methodological process of the project was not conceived as a linear sequence of stages, but rather as a field of discovery. In design, thinking and making are rarely separate — reflection emerges through action itself. Within this research, through design logic (Frayling, 1993), gesture is already thought in motion. The methodology adopted here is therefore both practical and translational: through drawing, illustrating, sewing, and testing, the designer converts ideas into matter and returns to culture a tangible form of knowledge.

The methodology underlying the development of The Friendm@ker project followed a qualitative and exploratory approach centred on design practice as a research instrument. The methodological path was structured around a set of interconnected stages involving theoretical research, contextual analysis, material experimentation, and project-based creation. The aim was to understand how design can respond critically to the phenomenon of childhood adultisation and to propose alternatives that restore to the child the symbolic space of play.

The research began with a phase of bibliographic collection and analysis, drawing on authors from developmental psychology, childhood sociology, education, and design. Piaget (1952), Vygotsky (1978), and Bronfenbrenner (2000) provided the conceptual foundations for understanding children’s cognitive and social development. In parallel, the studies of Ariès (1978), Postman (2012), and Sarmento (2004) helped to situate the historical evolution of childhood and its contemporary transformations. Additional contributions were considered from authors addressing children’s consumption and material culture (Cardoso, 2006; Machado and Souza, 2011; Weber and Maffezzoli, 2016).

In a second phase, the project evolved into empirical observation and contextual analysis, which involved studying behaviours and objects present in children's everyday environments, both domestic and educational. The objective was to understand play practices, aesthetic preferences, and how children interact with the objects surrounding them. This observation revealed the predominance of stereotyped toys and short-lived products, often linked to media franchises and with limited creative potential.

Based on these findings, the need was identified to develop a ludic and pedagogical clothing object conceived as a mediator between body, imagination, and learning. The design process followed an inductive method in which drawing and material experimentation played a central role. Drawing was understood as a form of thinking (Sennett, 2008) — an exercise in thinking through the hands that translates ideas and values into concrete solutions.

The process included successive phases of textile experimentation and prototype construction using different materials and techniques. Textures, colour compositions, three-dimensional elements, and illustrative applications were explored to integrate both the functional character and the expressive potential of the object. Collaboration with specialised technicians and an industrial partner enabled the production of prototypes employing sustainable materials and low-impact digital printing techniques.

The methodological trajectory thus followed a spiral model — alternating research, design, experimentation, and evaluation. Each iteration contributed to refining formal and symbolic decisions, guiding the project towards a balanced synthesis between design, pedagogy, and sustainability.

4. CASE STUDY: THE FRIENDM@KER

4.1. PROJECT INTENTIONS AND OBJECTIVES

The Friendm@ker emerged as a response to a market saturated with clothing, books, and toys that often fail to address children's real needs, frequently reinforcing logics of consumption and adultisation. The project proposes an interactive, gender-neutral, and ludic-pedagogical object aimed at children aged 5 to 10, designed to foster learning processes that integrate knowledge and play, encourage responsible consumption, and promote an enduring emotional bond between the child and the object. It intends to "restore time and space to the realm of play," to reintroduce children to books, and to support processes of socialisation, communication, and visual and verbal literacy, with an emphasis on emotional sustainability and on "fewer things for longer."

4.2. NARRATIVE AND ETHICAL MATRIX: PETER AND THE WOLF

The symbolic structure of the project is anchored in the musical tale Peter and the Wolf (Sergei Prokofiev, 1936), chosen for its ludic-pedagogical nature and its capacity to communicate values such as courage, responsibility, friendship, teamwork, respect for animals, preservation of habitat, and emotional regulation (fear, joy, sadness). Each character in the story is associated with a specific instrumental timbre, reinforcing sensory legibility and the mediation between sound, image, and action. Within the framework of the project, the tale functions as a cultural mediator, providing both a narrative lexicon and an ethical field that are translated into illustrations, textures, sequences, and manipulations.

4.3. CONCEPT OF THE HYBRID OBJECT (CLOTHING-BOOK-TOY)

The Friendm@ker integrates three functions within a single artefact: vest (a wearable garment with pockets), book (a narrative with illustrations and captions), and play mat (formed when the piece is disassembled and unfolded). These elements are connected through a system of flaps (detachable captions and icons). This hybridisation of languages — seeing, reading, interacting; verbal, visual, and auditory — extends the object's life cycle, reduces material consumption, and transforms the spectator into an active participant: the child wears, reads, and plays, engaging with the narrative through interaction.

4.4. ILLUSTRATION DEVELOPMENT: "DRAWING WITH SCISSORS"

The graphic process shifts from manual drawing to material drawing, employing interlinings (white and black), calico, and tulle. The act of "drawing with scissors" induces formal synthesis — silhouettes of characters, trees, houses, and animals — while the superimposed tulle adds colour, transparency, texture, and veiling, completing the image and enriching the palette. Some tulle layers were digitally printed (three elements), introducing subtle nuances into the environments. The illustrations were then digitised and integrated into the vest pattern, adjusting composition and visual rhythm.

4.4.1. VERBAL-VISUAL RELATIONSHIP

A non-conventional model was adopted: the visual narrative possesses semantic autonomy, and the text does not occupy a pre-defined space. Reading emerges from interaction and from the coupling of elements (flaps and scenarios), preserving the child's creative autonomy and enabling both individual and adult-mediated reading experiences.

4.5. THE "FLAPS" AS TRANSLATIONAL DEVICES

The flaps are circular fabric pieces with distinct functions, identified by chromatic embroidery:

- Flaps I (blue/red): story captions (Peter version and Maria version), numbered and sequenced to facilitate reading;
- Flaps II (green): illustrated fragments (cropped scenes and details) for use within the play scenarios;
- Flaps III (orange): blank circles designed for drawing or writing with an erasable pen, allowing for restarts and reinterpretations;
- Flap IV (cyan blue): a single message associated with sharing and sustainability ("When I no longer want to play with my Friendm@ker, I will offer it to another child.").

The flaps operate as a mobile lexicon that the child reconfigures, translating the narrative into new sequences and games. The inclusion of letters and numbers was introduced after observing sequencing difficulties during early user interactions.

4.6. PLAY MAT: SCENARIOS AND INTERACTION

When the vest is opened and unfolded, the child discovers that play continues: the piece transforms into a play mat featuring three large illustrated settings — Forest, City, and Garden. In these scenarios, baby-snap fasteners allow flaps II and III to be attached,



enabling free associations between image and scene, inventing stories, drawing characters, or writing messages. The mat thus becomes a platform for imagination and a testing ground for memory, creativity, and symbolic reasoning.

4.6.1. APPROPRIATION AND RECOMBINATION

Flaps II consist of cut-out illustrations from the story, decontextualised to serve new purposes of narrative reassembly. Flaps III enable original creation. The erasable pen grants reversibility to the gesture — to draw, erase, and rewrite — reinforcing the iterative nature of play and the ongoing recomposition of meaning.

4.7. MORPHOLOGY AND PLAYFUL INTERFACE

The object integrates a vest with pockets (for support and transport), a book (images and captions), a play mat (an expanded ludic space), and flaps (text and image open to manipulation). Its hybrid materiality and multifunctionality imply synaesthetic engagement and interaction: to access the story and activities, the child must wear, open, attach, exchange, and fold — translating narrative into action and text into play.

4.8. TARGET AUDIENCE, GENDER NEUTRALITY, AND SAFETY

The research led to a clear decision: the creation of a gender-neutral product that counters patterns of adultisation associated with gender stereotypes. Development focused on comfort, safety, age-appropriateness, and usability — always to support motor, cognitive, and social development and foster positive experiences.

4.9. NAMING AND SOCIAL FUNCTION: THE FRIENDM@KER

The name encapsulates the project's intention: a play companion, a social facilitator that helps the child to make friends. The use of "@" asserts inclusivity and rejects binary stereotypes. The designation operates as both an ethical–pedagogical sign and an identity marker of the object.

4.10. MATERIAL AND EMOTIONAL SUSTAINABILITY

Sustainability is conceived here as a design strategy: multifunctionality and long-term usability reduce the need for new products, while affective engagement prolongs the sense of belonging ("when the vest no longer fits, it still fits the imagination"). The transition from wearing to playing and remembering reinterprets durability as continuity of meaning — beyond mere physical endurance.

4.11. VALIDATION AND ITERATION

The introduction of numbering and lettering on the flaps responded to sequencing difficulties identified during early trials; the transition from manual drawing to textile-based illustration consolidated both visual identity and tactile experience; the play mat and fastening devices enhanced autonomy, narrative recombination, and the child's active participation in constructing the play experience.

5. RESULTS AND DISCUSSION

The results obtained from the development of The Friendm@ker project demonstrate the



distinctive position of design as a mediator between disciplinary fields and as a translational practice between thinking and making. The process of tactile engagement and the dialogue between illustration, form, and materiality reinforce the importance of the body and gesture as active dimensions of children's learning. Although the experimental observation phase was conducted with a small group of participants, the outcomes revealed significant tendencies toward engagement and spontaneous appropriation of the object. The children showed curiosity and autonomy, reinterpreting the illustrations and attributing their own meanings to the depicted characters. The vest thus proved to be a mediator of narratives and social interactions, fostering collaboration, emotional expression, and symbolic play.

From the perspective of sustainability, the project demonstrated that it is possible to integrate materiality, symbolic depth, and durability. In contrast to most contemporary children's clothing — marked by rapid obsolescence and dependence on media-driven trends — The Friendm@ker proposes an ethic of prolonged use and affective identification. The object's value lies in its capacity to generate memory, to become meaningful through lived experience.

The analysis of this process also enabled reflection on the role of design as a field of expanded knowledge. The Friendm@ker asserts itself within design as a practice of translation and mediation, in which knowledge emerges from material exploration and sensory interaction. The object functions as a catalyst for narratives and learning, revealing design's potential to generate embodied knowledge through experience.

This translational process is both manual and cognitive: the act of drawing, structuring, and composing textiles transforms thought into matter and form. As Sennett (2008) notes, "the hand thinks as much as the mind," and it is precisely within this dialogue between gesture and reflection that design affirms itself as a critical and cultural practice.

6. FINAL CONSIDERATIONS

The study developed within this research evidences the potential of design as an instrument of cultural and educational mediation. Through the object The Friendm@ker, it is demonstrated that it is possible to conceive children's products that transcend market logics and restore to the child the right to symbolic construction, imagination, and play. More than an object that can be worn, it constitutes an ethical and epistemological proposition: design as a platform of knowledge that interconnects body and thought, making and understanding.

The vest created through this project functions simultaneously as a physical support and as a narrative device, materialising a vision of design committed to sustainability, inclusion, and the affective dimension of objects. The reflection emerging from this research suggests that design in contemporary contexts can act as an agent of interconnection between information, culture, and sensibility, grounded in matter that can be shared. In this sense, The Friendm@ker demonstrates that design can operate as a universal language, crossing boundaries between art, pedagogy, and technology, serving as the essential translator of human values into tangible experiences.

The notion of thinking through the hands, which gives this article its title, synthesises this mediating capacity. To think through the hands is to understand that

knowledge can arise from gesture, and that the design object is, above all, a form of materialised thought.

This perspective reaffirms design as an interdisciplinary practice of translation. Contemporary design may assume an exploratory and pedagogical basis, whose epistemological stance aligns with approaches that position design within learning, critical design, or relational design. Thus, it is recognised that design produces its own form of knowledge — distinct from that of other fields — grounded in a process where thinking and making are inseparable, and where knowledge emerges from project-based practice, material experimentation, and interaction with the human and social context. This view acknowledges design as a form of research with its own distinctive position, capable of translating complex questions into visual, tactile, and relational propositions.

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CULTURAL METAMORPHOSIS: KAFKA AND THE THRESHOLDS OF EDITORIAL DESIGN

ABSTRACT

In 2024, the centenary of Franz Kafka's death inspired a collaborative academic project between the University of Design, Innovation and Technology (UDIT), Madrid and the School of Arts and Design (ESAD), Matosinhos. The initiative, entitled Kafka 2024, reinterpreted *The Metamorphosis* (1915) through editorial design as both a tribute to Kafka and a pedagogical experiment. The project was developed in five phases: an online workshop, a shared editorial briefing, six weeks of remote collaborative production, a public presentation at ESAD, and the final synthesis in a bilingual publication.

This article analyzes the experience in relation to the theme "Polarities, Limits and Thresholds". Results show that cultural and media polarities functioned as generative dialogues, institutional and temporal limits operated as catalysts for innovation, and pedagogical thresholds facilitated the transition from local classroom learning to international collaborative practice. Beyond the printed outcomes, the project fostered intercultural competencies, critical reflection on design processes, and reinforced institutional networks.

The study demonstrates that editorial design can serve as a laboratory for applied research, capable of producing both creative artifacts and transferable pedagogical models. The collaboration between UDIT and ESAD illustrates how canonical literature can be reactivated as a framework for contemporary design education, where metamorphosis becomes a metaphor for learning in transition—from local to global, from theory to practice.

INTRODUCTION

In 2024, the centenary of Franz Kafka's death was commemorated. Kafka is one of the most influential writers of the twentieth century, whose work has inspired not only literature but also philosophy, cinema, and the visual arts. Among his most emblematic texts,

The Metamorphosis (1915) occupies a central place due to the symbolic power of its narrative and its capacity to engage diverse audiences across a century. The story of Gregor Samsa, who awakens transformed into a monstrous and undefined creature, remains a paradigmatic account of alienation, transformation, and the fragility of human identity.

On the occasion of this anniversary, the University of Design, Innovation and Technology (UDIT), Madrid, launched an international academic project and invited the School of Arts and Design (ESAD), Matosinhos, to participate. The initiative, carried out during the 2023/24 academic year, aimed to reinterpret Kafka's work through a collaborative exercise in graphic and editorial design, culminating in the production of a bilingual magazine conceived both as a tribute to Kafka and as a pedagogical experiment.

The project brought together students and faculty from both institutions in a process articulated in two complementary phases. First, an online collaborative workshop was organized, focused on analyzing *The Metamorphosis*, its historical context, and its cultural references. To support this work, participants were provided with a creative kit designed as a tool for experimentation, serving as a starting point for generating ideas for the editorial project. This workshop constituted the first contact between the two universities, fostering mutual understanding and laying the foundations for collaborative development.

The following stage consisted of six weeks of remote work, structured through collaborative production dynamics that enabled the advancement of editorial proposals. Subsequently, in April 2024, a group of students and faculty from UDIT traveled to ESAD in Matosinhos to present the final results in the institution's auditorium. This face-to-face encounter included the public exhibition of the collective magazines, spaces for academic dialogue, and detailed feedback, significantly enriching the learning experience.

This article analyzes the experience in relation to the theme "Polarities, Limits and Thresholds". It argues that the UDIT–ESAD case constitutes a revealing example of how international collaboration in design can be interpreted through these three categories. The research questions that guide this study are as follows:

- How did the cultural, temporal, and media polarities of the project contribute to enriching the creative experience?
- In what ways did the academic, formal, and organizational limits transform into catalysts for innovation?
- What pedagogical and conceptual thresholds did the students cross in their transition from the local classroom to an international, professionalizing project?

It is hypothesized that polarities, limits, and thresholds did not operate as obstacles, but rather as generative structures that enhanced both the creative outcomes and the development of intercultural and professional competencies.

3. THEORETICAL FRAMEWORK

This theoretical framework brings together the conceptual perspectives that allow for the interpretation of the Kafka 2024 project. Four dimensions are addressed: cultural polarities and thresholds, design pedagogy and collaborative learning, editorial design as an

experimental laboratory, and creativity under constraint. These axes provide the basis for analyzing both the creative processes and the learning outcomes generated.

3.1. CULTURAL POLARITIES AND THRESHOLDS

The concept of cultural thresholds has its roots in the studies of van Gennep (1960 [1909]) on rites of passage, in which the stages of separation, transition, and incorporation were distinguished. This structure was later expanded by Turner (1969), who emphasized the importance of intermediate moments in which ordinary social categories are suspended, giving rise to states of indeterminacy where new forms of identity emerge. From this perspective, polarities—old/new, local/global, individual/collective—are not rigid oppositions but generative tensions that stimulate transformation.

Building on these foundations, Bhabha (1994) transferred the debate to cultural studies through the notion of “in-between spaces.” These intermediate spaces are understood as sites of negotiation and hybridization where identities are not eliminated but reformulated, resulting in hybrid cultural configurations. In the educational field, this vision makes it possible to understand international design projects as border environments in which students learn to operate at the intersection of diverse languages, traditions, and methodologies.

More recently, Castells (1996) has demonstrated how the network society multiplies these dynamics of hybridization in a globalized context characterized by the digital circulation of information and cultural references. In this scenario, cultural thresholds are not produced only in rituals of passage or face-to-face encounters, but also in virtual and transnational spaces that define much of contemporary experience.

The collaboration between UDIT and ESAD can be interpreted in light of these approaches. The project positioned itself at a cultural threshold between institutions and countries, embodying the dynamics described by Castells: fluid academic identities, the digital circulation of references, and the hybrid production of visual knowledge. In this way, Spanish and Portuguese students constructed a shared space that overcame linguistic and institutional differences, producing editorial works that reflected a transnational aesthetic.

3.2. DESIGN PEDAGOGY AND COLLABORATIVE LEARNING

The teaching of contemporary design is increasingly oriented toward active methodologies in which learning is constructed through practice, research, and collaboration. In this regard, Kolmos and de Graaff (2014) highlight the value of project-based learning (PBL) and problem-based learning (PBL) as strategies that place the student at the center of the process, confronting them with complex situations that require inquiry, prototyping, and creative problem-solving.

These proposals dialogue with Schön's (1983) vision of the reflective practitioner, who learns through action and critical reflection on action. This perspective is particularly relevant in graphic design, where each visual decision involves not only a formal aspect but also a conceptual justification linked to processes of communication.

In the same vein, Biggs and Tang (2011) emphasized the importance of constructive alignment, understood as the coherence between learning objectives, activities, and evaluation. From this perspective, the Kafka 2024 project can be considered

a clear example of how design pedagogy integrates formative competencies with tangible professional outcomes: the production of a bilingual magazine with a real briefing and international deadlines.

In the Spanish context, Hernández (2008) has stressed the need to incorporate educational practices that promote creativity, collaboration, and the connection between theory and practice in art and design teaching. These reflections reinforce the relevance of experiences such as the UDIT–ESAD collaboration, which placed students in an intercultural and experimental learning environment, transforming the classroom into a space of shared research and creation.

3.3. EDITORIAL DESIGN AS AN EXPERIMENTAL LABORATORY

Editorial design has historically been a space of aesthetic and conceptual innovation. Drucker (1994) demonstrated how the typographic avant-gardes of the early twentieth century transformed the page into a field of experimentation, challenging the linearity of text and proposing new forms of reading. In a complementary line, Lupton (2004) argued that typography and editorial design should be understood as an autonomous visual language, capable of producing meaning beyond the mere transmission of verbal content.

These perspectives have been extended in later debates on design as a cultural and critical practice, in which Bonsiepe (1999) emphasized the possibilities of the editorial medium as a site of inquiry and reflection. In this way, editorial design is configured not only as a vehicle for communication but also as a laboratory of aesthetic and conceptual exploration.

The Kafka 2024 project can be read as an update of this experimental tradition. The integration of heterogeneous techniques—collage, illustration, photography, animation—enabled the creation of a visual laboratory in which print and digital media intersected. The polarity between literary text and graphic image became the generative core of a hybrid discourse that not only reinterpreted a literary classic but also explored new forms of editorial narrative in an intercultural pedagogical context.

3.4. CREATIVITY UNDER CONSTRAINT

Numerous studies have demonstrated that constraints can function as stimuli for creativity. Stokes (2005) argues that innovation arises precisely from working with limitations that compel creators to seek original solutions, while Amabile (1996) maintains that intrinsic motivation increases when challenges combine freedom and structure.

In the field of design, Brown (2009) emphasized that well-defined problems generate fertile environments for innovation, in line with the tradition inaugurated by Simon (1969), who conceived design as a discipline oriented toward the creative resolution of problems.

The Kafka 2024 project illustrates how restrictions can be transformed into catalysts of visual exploration. The editorial briefing, which established dimensions, typography, and a commemorative logo, provided a framework that encouraged experimentation. Added to this were the temporal and organizational conditions of an international collaboration, which required students to articulate clear and efficient proposals within a limited timeframe and in dialogue with another institution. Far from



Figure 1/2/3
Overview of the international project *The Metamorphosis*, presentation by Professor Renato Seixas exploring the symbolism and artistic context of Kafka's work; communication and promotion of the workshop through social media; and the creative kit that served as the starting point for students to develop their visual concepts.

being perceived as obstacles, these constraints enhanced the search for contemporary graphic languages to update a 1915 text, confirming that creativity in design thrives on the tension between norm and innovation.

4. METHODOLOGY

The Kafka 2024 project was developed in five main phases that articulated the collaboration between UDIT (Madrid) and ESAD (Matosinhos). A total of 60 students participated in the experience—30 from UDIT and 30 from ESAD—, supported by faculty members from both institutions. To encourage intercultural interaction, participants were organized into mixed groups of ten, composed of five Spanish and five Portuguese students. The collaborative work unfolded over a total period of six weeks, combining virtual and face-to-face dynamics.

4.1. ONLINE WORKSHOP

The project began with an online workshop divided into two sessions. The first introduced students to Kafka's *The Metamorphosis* (1915), its historical context, and a selection of visual references from diverse creative fields. The second session took the form of a practical workshop, in which students received a creative kit designed as a tool for experimentation. The kit encouraged them to explore the theme of metamorphosis through the protagonist's transformation, using graphic resources as a starting point for generating editorial ideas.

This workshop constituted the first contact between the two institutions, promoting mutual understanding and establishing the foundations for collaborative development. As a closing activity, a multimedia animation was produced that integrated the students' contributions, symbolizing the ongoing transformation of the character and reinforcing the central theme of the project.

4.2. EDITORIAL PROJECT BRIEFING

Following the workshop, students were organized into mixed working groups combining participants from both Spain and Portugal, and the editorial briefing was presented. The assignment consisted of creating a collective magazine that reinterpreted *The Metamorphosis* (1915) in a bilingual format.

The briefing specified key design parameters—format, number of pages, and the inclusion of a commemorative logo marking Kafka's centenary—while granting students freedom in the use of creative techniques (photography, collage, digital illustration, vector graphics, among others). In addition to the visual proposals, students were asked to produce a reflective essay exploring the symbolism of the work and its relevance to contemporary contexts.

At UDIT, the project was integrated into the second-year curriculum of the Multimedia and Graphic Design degree, within the course on Editorial Design and Layout.

4.3. REMOTE PRODUCTION

Over a six-week period, the groups advanced their editorial proposals through collaborative dynamics supported by digital tools. This phase required students to coordinate schedules, share files, and negotiate design decisions in an intercultural and multilingual environment.



gual environment. Remote collaboration not only facilitated the comparison of ideas and progress but also functioned as training in professional competencies related to teamwork and project management in international contexts.

4.4. ON-SITE PRESENTATION AT ESAD

In April 2024, students and faculty from UDIT traveled to Matosinhos to present the results at the ESAD auditorium. This event represented a moment of academic and professional validation, offering students the opportunity to publicly exhibit their collective magazines and justify their design decisions before a specialized audience.

The session included academic dialogue, critical feedback from faculty, and intercultural exchange, reinforcing the international dimension of the learning process.

4.5. SYNTHESIS AND DISSEMINATION

The final stage involved compiling the results into a publication that documented both the creative processes and the pedagogical dynamics of the project. Beyond serving as an academic record, this publication operated as a closing product that consolidated learning, enriched students' portfolios, and enhanced the institutional visibility of the UDIT-ESAD collaboration.

4.6. RESEARCH DESIGN

The study is framed as a qualitative case study (Yin, 2009), aimed at analyzing the Kafka 2024 experience through the categories of polarities, limits, and thresholds. These categories serve as interpretive lenses for examining both the editorial outcomes and the learning processes derived from the collaboration. The analysis also incorporates pedagogical criteria—interculturality, collaborative competencies—and design criteria—creative processes, editorial solutions, and graphic experimentation. This dual perspective positions the project at the intersection of academic training and professional practice in design.

5. ANALYSIS

The analysis of the Kafka 2024 project is organized around the categories of polarities, limits, and thresholds, as proposed in the ESAD call for papers. These categories operate as interpretative frameworks for examining the creative and pedagogical dynamics of the project, showing how international collaboration in design was articulated through tensions, constraints, and transitions.

5.1. POLARITIES

The Kafka 2024 project engaged a series of polarities that functioned as creative drivers. Culturally and geographically, the interaction between Spanish and Portuguese students enabled a productive crossing of pedagogical traditions and aesthetic approaches. Temporally and conceptually, a literary work from 1915 was reinterpreted from the cultural horizon of 2024, updating its symbols for contemporary audiences. On the level of medium and message, textual essays were combined with graphic explorations in both printed and digital formats. Finally, at the individual and collective level, personal contributions were synthesized into a joint publication.

Clear examples of this interplay were observed in the heterogeneous techniques employed: some students worked with manual collage inspired by historical avant-gardes, while others explored digital collage in Photoshop and vector illustration in Illustrator. The result was a dialogue between visual languages that enriched the project with a distinctly transnational aesthetic.

5.2. LIMITS

Constraints also played a central role in the pedagogical dynamics. At the formal level, the briefing established parameters such as page count and the inclusion of a commemorative logo. At the organizational level, the project had to be completed within six weeks, combining virtual phases with a final on-site presentation in Matosinhos. At the creative level, the initial kit provided a common framework that each student interpreted in their own way.

Far from acting as barriers, these restrictions became stimuli for exploration. This was evident in the typographic reinterpretations of the logo, the conceptual photography experiments, and the hybrid solutions that combined traditional and digital techniques. In this sense, limits functioned not as obstacles but as catalysts for innovation.

5.3. THRESHOLDS

The project also made it possible to identify different thresholds of learning and creation. On a pedagogical level, students moved from literary analysis to the complete production of an editorial artifact, experiencing the passage from theory to practice. On a technological level, digital platforms such as Zoom and WhatsApp were integrated with face-to-face dynamics, producing a hybrid learning environment characteristic of contemporary education. On a conceptual and cultural level, Kafka's symbols were reinterpreted as metaphors for current issues—alienation, digitalization, and contemporary anxiety—granting the project both critical and cultural resonance.

This transition was not only technical but also identity: students shifted roles, moving from local participants to agents in an international project, with implications for both their academic formation and professional development.

6. RESULTS

The results of the Kafka 2024 project can be examined on multiple levels—creative, pedagogical, institutional, and cultural—articulated through the categories of polarities, limits, and thresholds proposed in the ESAD call for papers.

6.1. POLARITIES AS CREATIVE DIALOGUE

The crossing of cultural and aesthetic traditions from Spain and Portugal generated a space of exchange materialized in the bilingual magazines produced collectively. These magazines embodied a productive tension between tradition and contemporaneity: a 1915 literary work was reinterpreted within the cultural horizon of 2024 through contemporary graphic languages.

The combination of text and image—reflective essays alongside visual explorations—resulted in a hybrid discourse that positioned editorial design as a medium for experimentation. Some groups employed manual collage techniques inspired by histor-





Figure 10/11/12
Viaje a través del cambio
[Journey Through Change]
(2024).

Images from the magazine
 created by Ayla Cano, Candela
 Sobrino, Laura Lozano and Sara
 Sánchez.
 Manual collage with digital
 treatment.

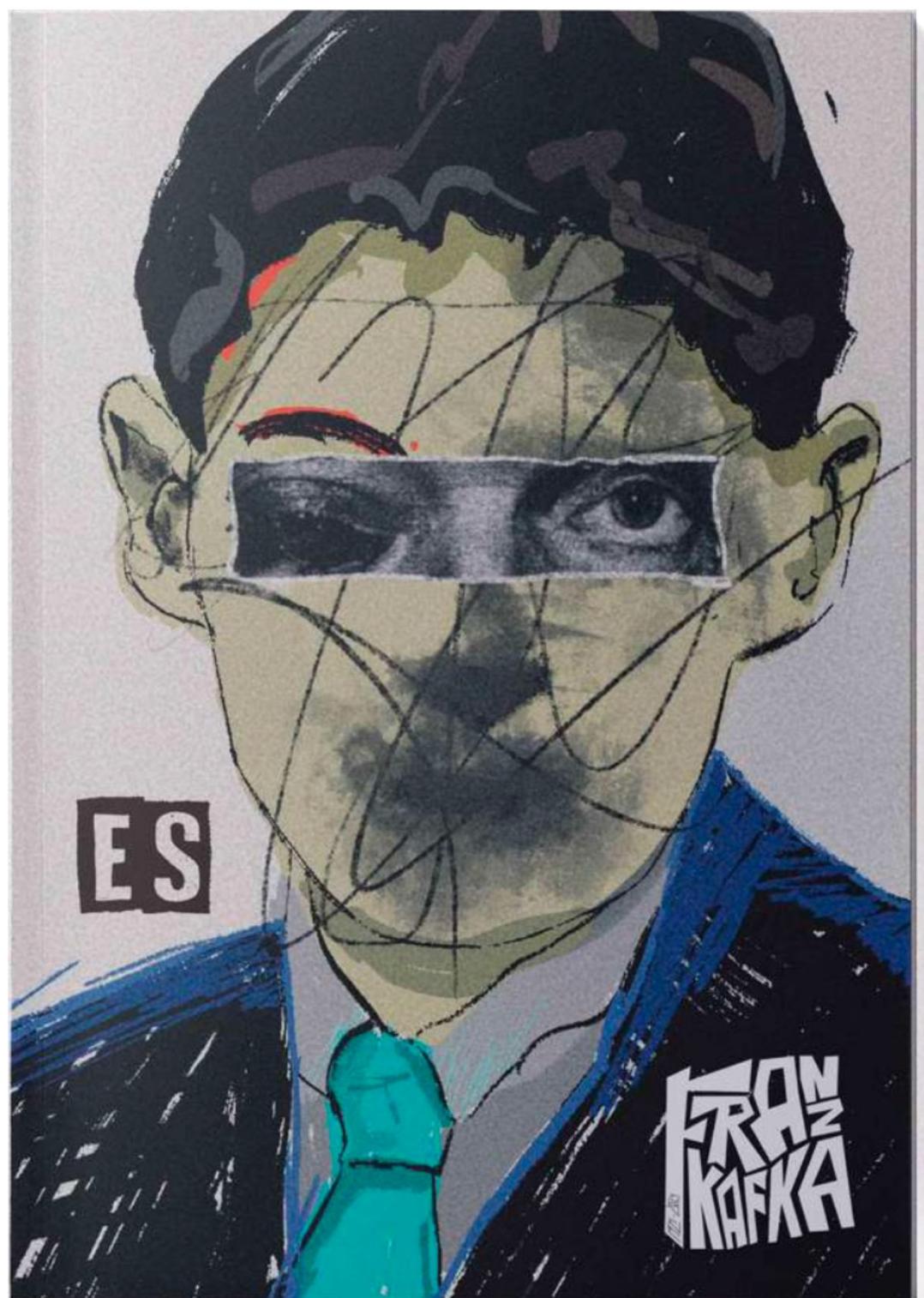


Figure 13/14/15
Distorsiones [Distortions] (2024).

Images from the magazine
created by Blanca Ruiz, Lorena
Sánchez, Miguel Barahona and
Teresa García.
Manual collage with digital
treatment.

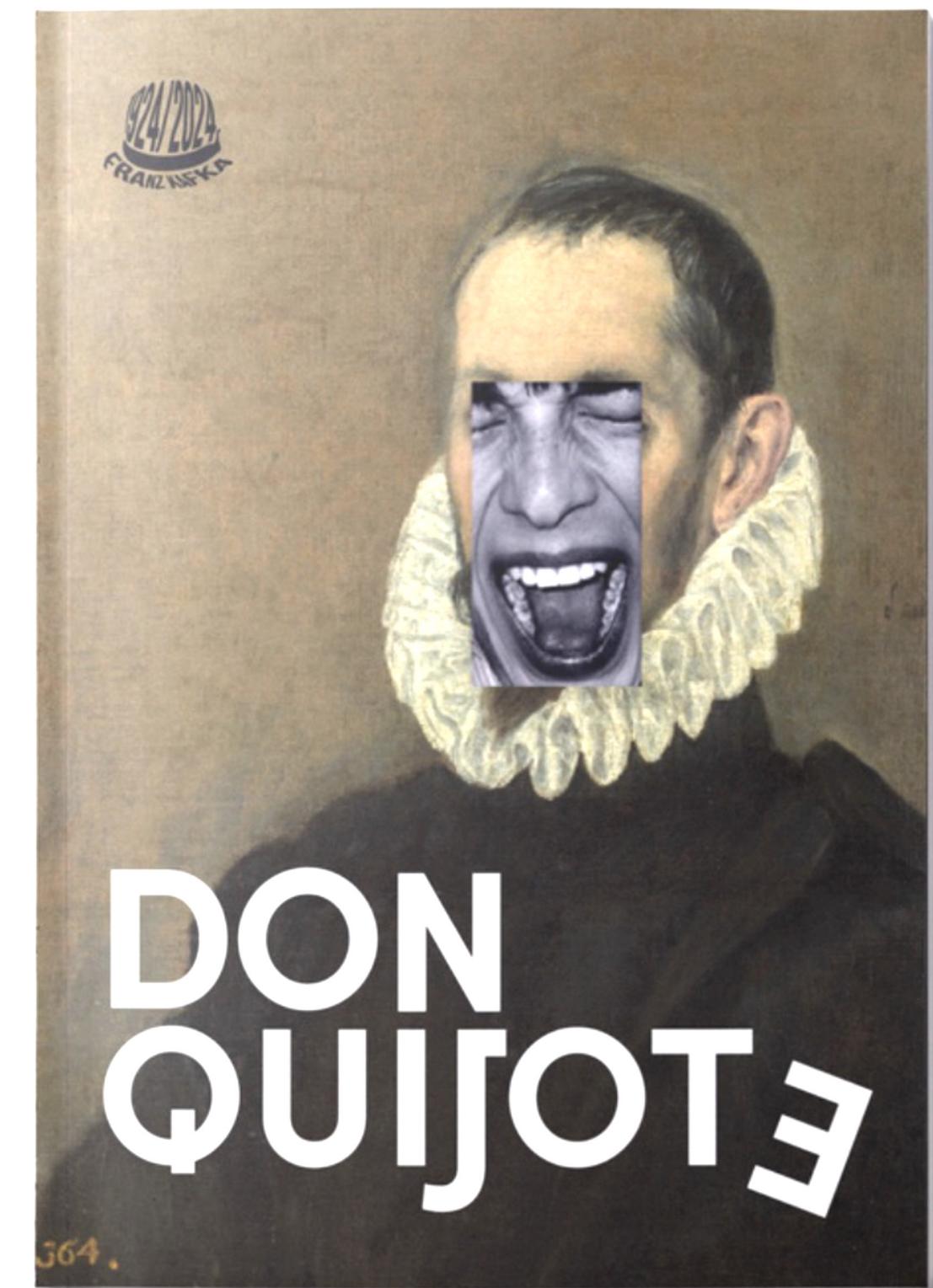


Figure 16/17/18
Don Quijote [Don Quixote] (2024).

Images from the magazine
created by Adriana Baena,
Alejandra Viveros, María Reyero
and Pedro Álvarez.
Manual collage with digital
treatment.

ical avant-gardes, while others worked with digital collage and vector illustration in software such as Photoshop and Illustrator. This interplay demonstrated how polarities, far from producing conflict, became engines of innovation and enriched the project with a transnational aesthetic.

6.2. LIMITS AS DRIVERS OF INNOVATION

The editorial briefing defined a clear formal framework that included parameters such as minimum page count and the use of a commemorative logo. These requirements, combined with the time constraint of six weeks and the coordination between two institutions in different countries, became stimuli for creative exploration. Students reinterpreted the logo through typographic variations, experimented with conceptual photography, and combined traditional techniques with digital resources. The outcomes showed that limits were not perceived as obstacles but as catalysts for innovative solutions in editorial design.

6.3. PEDAGOGICAL AND CULTURAL THRESHOLDS

The project also revealed the crossing of thresholds at different levels. Pedagogically, students moved from literary analysis of *The Metamorphosis* to the complete production of a professional-grade magazine, experiencing a situated learning process that integrated theory and practice. Technologically, digital platforms such as Zoom, WhatsApp, and shared online workspaces were combined with face-to-face dynamics, consolidating a hybrid model characteristic of contemporary education.

On a conceptual and cultural level, Kafka's symbols were updated as metaphors for current issues—alienation, digitalization, and contemporary anxiety—granting the project a critical and socially resonant dimension. This passage also implied a change in the students' roles: from local participants to active agents in an international project with institutional visibility.

6.4. VISUAL DOCUMENTATION

The creative outcomes were also synthesized into visual documentation that illustrates the variety of approaches explored by the student groups. These include bilingual magazines that reinterpret Kafka's narrative through hybrid editorial strategies. The following figures 1–12 present selected pages from the projects, highlighting the diversity of visual languages and the experimental use of collage, illustration, and digital media.

7. CONCLUSIONS

The analysis of the Kafka 2024 project shows that polarities, limits, and thresholds did not operate as obstacles but as generative structures that enriched the learning experience in design. Cultural, temporal, and media polarities confirmed the relevance of negotiation spaces described by Bhabha (1994), fostering creative dialogue between diverse traditions and languages. Limits—whether formal, temporal, or organizational—validated what Stokes (2005) and Amabile (1996) emphasize: well-defined constraints can act as engines of innovation. Thresholds—pedagogical, technological, and conceptual—resonated with Castells' (1996) observations on the network society, where contemporary learning emerges at the intersection of the local and the global, the physical and the digital.

Beyond the specific results, the UDIT–ESAD case demonstrates that graphic design education can function as a laboratory of applied research, capable of producing not only editorial artifacts but also pedagogical knowledge. The model developed here is transferable to other international academic contexts, where the combination of real-world projects, productive constraints, and intercultural collaboration can foster meaningful learning and professional competencies.

At the same time, certain limitations must be acknowledged: the study was limited to a single project, carried out over six weeks and involving only two institutions, which restricts the generalizability of its findings. However, these limitations open the way for future research, which could replicate the model in other academic contexts, explore its application to different creative disciplines (such as fashion, video games, or music), or evaluate its long-term impact on students' professional trajectories.

Ultimately, the project reaffirms Kafka's continuing relevance as a framework for exploring processes of transformation. In this sense, metamorphosis extends beyond the literary character, becoming a metaphor for learning in transition: from the classroom to the world, from the local to the international, from theory to practice.

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DWELLING IN-BETWEEN US AND ALTERED REALITIES: TIME STANDS STILL

ABSTRACT

From Aristotle to Bazin, the concept of art as mirror to reflect reality and the ontological level that establishes an existential relationship between image and reality respectively, depicting space, time and causality, is still today subject of constantly evolving. At the turn of the twenty-first century, understood as pictorial turn or Age of simulation (W. J. T. Mitchell, 1992), or even Age of disposable people (Rey Chow, 2010), the contribution of moving images to collective and individual memory relies, precisely, on questioning its boundaries when relating to visual literacy (James Elkins, 2008). The landscape of memory coming to fruition, dwelling in-between staged and altered realities, creates, then, the illusion of transparency as a catalyst to provoke re-actions.

INTRODUCTION

By evoking and questioning mediation as “creator’s essence” alongside with the vision of the “world as a picture”, this visual essay and research is structured in two parts. Firstly, looking at family polarities and childhood house emotional territories, places as the main goal the need to emphasize the relevance of observational cinema’s narrative work methodology towards the depicted surrounded realities: the self and the other. Secondly, and consequently, memory’s territory and polarities encompass cinema as a place to be or have been towards a projection in the future: the relevance of ways of seeing towards cinema as memory’s visual representation layers.

The continuous process of looking forward, emerging from artistic disquiet, and as part to discover an idea to build narrative, merged down with the need to seek challenges, as were tried to meet the expectations of everyone involved in the project. The urgency to materialize it, in a moment of closure and within a limited time-frame, met the opportunity of developing this project, which is itself an expected outcome placed previously. Above all, it came about the eagerness to start building a meaningful path for us as artists, when seizing every opportunity became essential.

In brief, this visual essay intends to contribute to foster critical thinking related

to cinema’s social value regarding the realm of literacy of memory, and its impact on viewer’s attention. Then, in the eyes of “Entre Nós” (Between Us, 2025) - directed by Joana Pinto, Hien Anh Tran, and Maria Miguel Silva - is raised the following issue: to what extend does space play “life time” and “life experiences”?

THE SELF, THE FAMILY, AND THE HOUSE: DWELLING BETWEEN STAGED AND ALTERED IMAGES

As the writing process began, were quickly realized that the frustration of not being able to convey a story that wasn’t ‘ours’ only disappeared when the role of an actress was played a little. It was then found the connection between the self and premise that the pen allowed itself to depict the right words on paper. It came to understanding what it means for a house to become a source of belonging, besides to be apart. In other words, to what extent the past and memory interfere with someone’s comfort zone towards a space that supposedly belongs to them.

The narrative is structured according to staged atmospheres that emphasize the ambiguity made of uncertainties and anxieties, at same time that characters ‘past events are in the present told. In this regard, time along narrative might be understood as place of waiting, and a place where characters look themselves into the mirror or an introspective manner. Thus, it’s not about self-portray, but instead self-expression, addressing how people are able to deal with their own pasts and overcome ordeals. In this case, the storyline approach is deeply related with the image and narrative making, namely its creative process. It began, precisely, with the simple image of a bird captured by a surveillance camera, which led us to realize that the storyline could be told by someone who observes without intervening. This way of looking at memory is mirrored in the two characters’ profile outline, as follows: one somewhat freer, and one whose vision is confined to a space. So, we also confined ourselves to a space to create and build our storyline, and from there, everything became then clear: two people experiencing the same house and never meeting each other. In this regard, memory plays an important role in the act of spectating or the act of watching a film, since it comprehends the narrative construction form and characters’ actions, recalling events of a certain segment film to another. This process enables to produce a memoria, when overlapping symbolic and imaginary, which comprehends amplification, enrichment, complexification.

In sum, the house plays, then, a major role in “Entre Nós” (Between Us, 2025): not only represents the characters’ childhood, in particular a family relationship and experience that no longer exists, but also the emotional distance between the two siblings. It is the authenticity and simplicity of childhood that makes protagonists to realize the urgency of not letting their relationship become part of the past that torments them. The narrative centers its plot on the self, the family and the house, and the storyline dwells between staged and altered images.

CHARACTERS PERFORMING MEMORY’S TERRITORY AND POLARITIES

As mentioned before, the storyline depicted in “Entre Nós” (Between Us, 2025) revolves



around two protagonists returning to their childhood home after a long time. The protagonists are in fact sister and brother, Lu and Vítor, dealing in silence for the very first time with their own grief and lost self-experiences. Even when growing up in the same environment, it's common for each to have a different relationship with family life.

In this case, Vítor, the elder brother, developed a more distant relationship with his parents. Since he always felt worth the expectations due to his own personal journey, Vítor pursued the need to prove himself facing a more independent way of living apart from his family. Now, as an adult, and at an age closer to that of his parents when he was a child, he feels the weight of regret. That house represents everything he chose not to experience. For him, it is a constant reminder of that pain and a symbol of how heavily the past still rests on his life. Lu, on the other hand, has always maintained a close relationship with her family. She finds it easier to take joy in the small things of everyday life and to live in the present without being consumed by anyone's expectations. Perhaps her brother's absence contributed to a deeper bond with their parents, as she felt a sense of duty, to make up for the time he wasn't there. Unlike Vítor, she feels no regret about the past. Her memories are both a source of comfort in grief, as well as a distraction that keeps her from moving forward and investing in her own life. These contrasting relationships with memory and the past have set them apart since the moment they found themselves alone, trying to navigate the house they grew up in, now without their parents, who had always been their foundation and the bond that united them despite their differences. Over time, this emotional distance became familiar. Yet, this very distance becomes more than just an emotional state — it shifts into a narrative device, shaping how each character exists within the shared space. A distance that, while justified, ultimately remains a choice, enhancing the subject's relationship within time and space, through mise-en-scène and frame. It means, the place and time, where personal sentimental fabulations attachment stage essentially a script or roadmap made of ambiguity and uncertainty towards future, portraying the tension between two perspectives. As follows: the space encapsulating so much that, because it is distant, we do not want to let it escape; and also, precisely because of everything it represents from the past, we no longer feel it is ours. Thus, it was never sought to frame this as a question of right or wrong. Rather, it is the story of two people whose survival depends on radically different relationships with memory and the space they once shared: "The house shelters day dreaming, the house protects the dreamer, the house allows one to dream in peace." (Bachelard, 1994: 6)

In brief, and in this regard, the film's final moment reveals the first sign of possible reconciliation. Throughout the story, as both characters inhabit the same house, they explore different rooms and deliberately avoid each other. The corridors act as barriers, splitting both the physical and emotional space. Lu retreats to rooms and familiar comfort objects, while Vítor examines the house with the intention of closing it down. No matter experiencing real space revolving around the protagonist's childhood, evoking house past memories, viewing video tapes, tends to manage to break down obstacles imposed by time. They are the real proof of the truth, leaving no room for memory to corrupt it.

CONCLUSIONS

This short-fiction encompasses cinema as a self-expression form, unveiling diegetic and

non-diegetic realities, and naming the subject for observational narratives. The gaze seems to be, then, no longer innocently looking at reality. In this regard, Stanley Cavell contends, "(..) film is a moving image of skepticism" (1979: 188). The narrative territory outline and its polarities in this short-fiction, anchors its memory's performativity on the fictional atmospheres built.

Like Ken Loach's "Kes" (1969) and Wong Kar-Wai's "In the Mood for Love" (2001), "Entre Nós" (Between Us, 2025) pursues, in somehow, the documentary method of re-searching and re-framing for reality, being the self, family, and community, key narrative elements, dwelling between self-conscious and society's morality. Peter Brook contend- ed that any empty space could become a stage for a performative act towards memory's territory, as it happens when unfolding a filmic narrative and its polarities. In fact, Brook's concept evokes voided-time concerning a physical space, in this case the house, leading protagonists, Lu and Vítor, to a sense of emptiness state of mind, thus the possibility of knowing each other better taking "(...) any empty space and call it a bare stage." (Brook, 1996: 9) Thus, it is crucial to emphasize the need to debate visual representation. In particu- lar, the real and altered realities engagement, placing them into perspective a trajectory of different possible paths of memory's territory and polarities: the image as awareness of the self and the other. At first, turning visible the unseen stresses the latencies that concern belief and disbelief, overlapping realities with altered worlds, and coming to fruition when engaging "reading", "viewing", and "interpreting" processes.

To conclude, the imagery sensory experience becomes, then, personal, addressing raw human emotions when depicting true stories dealing with feelings from experiences that most people can relate to. As visual representation is a certain version of the real, both "socially and culturally constructed", "Entre Nós" (Between Us, 2025) recalls the metaphor of the invisible world or faded memories, figuring the possibility to experience new narrative fluxes: what does the image mean? And what paradoxes and what tensions does it raise?

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POLARITIES LIMITS AND THRESHOLDS \ 109

THE LIMITS OF THE ILLUSTRATOR IN CONTEMPORARY TIMES: BETWEEN THE POLYMATH, THE DESIGNER-AUTHOR AND MARKET IMPOSITIONS

ABSTRACT

Over the past few decades, illustration has undergone a profound transformation, shifting from its traditional role as a form of commercial art to a multifaceted discipline that intersects with design, authorship, and contemporary art practices. This article, included in the Artwork/Portfolio section of the Arts, Culture and Design Journal, examines the evolving position of the illustrator in this complex scenario, focusing on three central dimensions: the rise of the polymath model, the economic and professional constraints imposed by the market, and the pursuit of authorship as a strategy for artistic and intellectual emancipation.

Drawing upon theoretical contributions from Alan Male, Roderick Mills, Sue Clark, and others, alongside the author's own academic and professional experience, and some of his portfolio pieces, the article analyses how illustrators are required to navigate between versatility and specialisation, service and expression, commercial viability and creative autonomy. The polymath principle, which values interdisciplinarity and intellectual adaptability, is discussed in contrast with the precarious economic conditions that characterise much of the illustration industry, particularly in peripheral markets such as Portugal.

The article also explores the tension between authorship and legibility, highlighting how the quest for individual style and artistic recognition may compromise communicative clarity, especially in children's publishing. Through the author's own body of work, illustration is positioned as a discipline that continually negotiates its boundaries, questioning its place between applied design and fine art.

Ultimately, this reflection argues that the contemporary illustrator operates in a state of productive contradiction: simultaneously constrained by market demands and liberated by expanded modes of practice and authorship. In this sense, illustration today functions as a field of negotiation - between economy and expression, legibility and ambi-

guity, art and service - revealing the complexity and richness of its current identity.

INTRODUCTION

In recent decades, the discipline of illustration has undergone profound changes in its secular nature. The advent of digital drawing, the explosion of illustration courses in universities around the world, and the creation of illustrations specifically for exhibitions in galleries and similar spaces are some of the reasons for this situation. This article, included in the Artwork/Portfolio section of the Arts, Culture and Design Journal, has a minimum length of 2500 words and should be read as such. We seek to present some of our work from the last few decades as examples of some of the characteristics and transformations in the field of illustration during this period.

Historically confined to the limits of 'commercial art', the field of illustration has, in recent decades, redefined the role of the illustrator and the contextual limits of their practice. According to Alan Male, the definition of an image as an illustration lies in its context, the factor that drives the image in the first place, underpinning the essence of the entire brief. Susan Doyle, Jaleen Grove, and Whitney Sherman expand on this idea,



Image 1
"Old Designer Dreaming", 1997

stating that illustration communicates specific messages to a specific target audience and context, inherently existing 'in the service of an idea' (Male, 2019, p.9).

However, the field of illustration is in constant flux and transition, with its boundaries becoming increasingly blurred, overlapping and deeply intertwined with other disciplines (Male et al., 2019, p.9). The impact of this evolution has led illustrators to redirect their talents towards more experimental formats and exhibitions, invading galleries and blurring their role with that of a traditional painter or visual artist.

When we were studying at the Faculty of Fine Arts in our city, expectations in



Image 2
Illustration for editorial article,
Flirt, text by Adília Lopes,
Magazine (Books) No. 17,
O Independente newspaper,
Lisbon, 2001

Image 3
Illustration for children's picture
book, O meu Urso, text by Tiago
Salgueiro, Edições Lobo Bom,
Porto, 2001

this area were certainly more optimistic. Delighted by our admiration for illustrators such as Květa Pacovská, Kent Williams, and Lorenzo Mattoti, we remained fearful of the demands of the market. Image 1 is an illustration from that academic period. In it, an old designer briefly reviews a life that never lived up to the expectations of his youth. It is an image that already showed an awareness that academic creative freedom could be constrained by



the limits imposed by commercial offers. Overcoming these constraints and achieving full expressive satisfaction is perhaps the greatest difficulty for many young illustrators.

1. THE SHIFT TO THE POLYMATH MODEL: THE REQUIREMENT FOR MULTITASKING FOR ECONOMIC SURVIVAL

One of the most significant changes in recent decades is the transition from specialisation to versatility, a practice that Male refers to as the Polymath Principle (Male et al, 2019, p.xxii). This principle implies that the practice of illustration must exude authority, facilitated by a wide range of intellectual and learning skills. The ability to multitask across various creative and practical disciplines has become a fundamental precept.

As Roderick Mills points out, historically, after the Second World War, illustration established itself as a specialisation within graphic design education. Traditionally, students were prepared for freelance work as sole traders or artisans (Male et al., 2019, p. 505). However, this concept is now obsolete. Modern illustrators and designers take ownership of the entire problem-solving process to a certain extent. Today's best illustrators are recognised for being socially and culturally aware, keeping abreast of current affairs and visual trends.

This demand for versatility and interdisciplinarity is reinforced by the need to ensure stable incomes, especially in a competitive and precarious market (Anonymous, 2014). The illustrator's field of activity has expanded enormously, and it is now common for individuals to call themselves 'illustrator-writer' or 'illustrator-designer,' among other varied combinations (Male, 2019). Current practice covers a wide range of contexts, including the music industry, advertising, design, publishing, fashion, the internet, animation, street art, reporting, cartoons, graphic narrative and concept art.

The status of illustrators has increased, with them taking on more responsibility for the context and content of projects. This is partly due to the renewal of university education in art and design, which has reduced the emphasis on pure vocational practice, integrating studio work with contextual, critical, liberal, historical and cultural studies (Male et al., 2019, p.9). This educational model allows graduates to be more independent and intellectually capable.

As Sue Clark points out, the need to be an interdisciplinary visual problem solver is vital for the contemporary illustrator (Male et al., p.200, 2019). The specialist illustrator is categorised as highly educated, visually articulate, socially, culturally and historically aware, an empathetic communicator with a wide range of practical and intellectual skills. Illustrators are urged to engage in a broader education that includes social and cultural studies. In addition, the ability to investigate and apply knowledge across multiple disciplines (science, medicine, entertainment, fashion, etc.) is seen as a shift in professional practice, valued by education programmes.

This need for knowledge is certainly not unrelated to the diversity of requests that contemporary illustrators are required to respond to. From illustrated picture books to covers of award-winning novels and everything in between. Teaching promotes depth in the research process. Illustrators are also educated by this research.

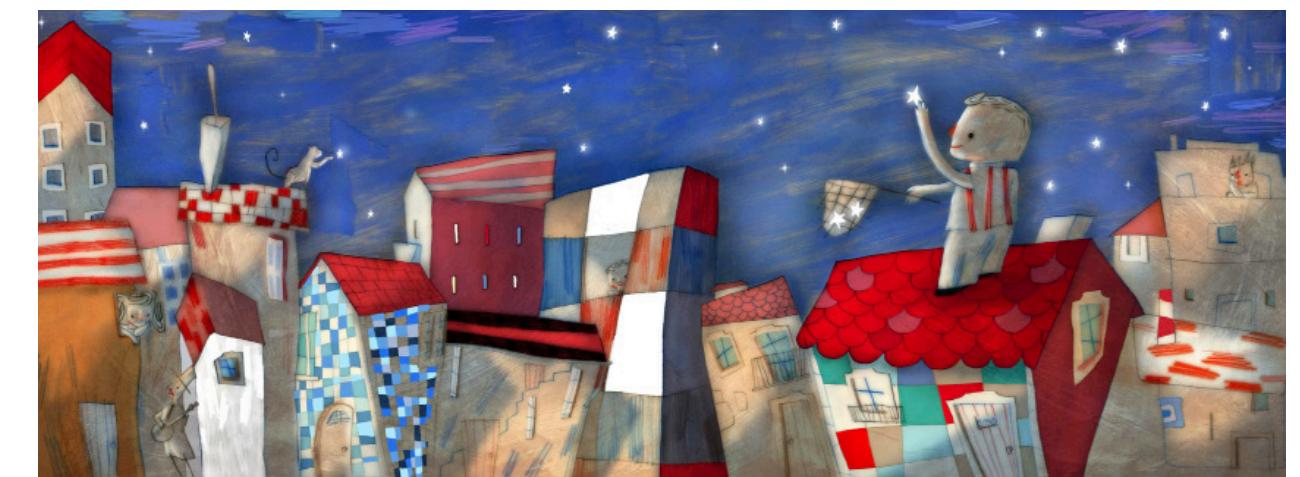


Imagen 4
Juste à ce moment-là, text by
Davide Cali, Éditions Sarbacane,
França, 2004

Imagen 5
Rouge Cerise, text by François
David, Éditions Sarbacane
Paris, 2005



Image 6

Ghosts from Porto, Ó! Galeria,
2023

2. THE MARKET AND THE LIMITS IMPOSED BY ECONOMIC REALITY

Despite the expansion of roles and the appreciation of the Polymath Principle, illustrators face severe limitations imposed by market realities, which condition their professional and creative choices.

In Portugal, the economic situation for illustrators, especially in the area of children's and young adult books, is precarious. The national market is small, and the saturation of published titles makes it 'extremely difficult, if not impossible, for Portuguese illustrators of children's books to earn enough income to devote themselves exclusively to this area' (Anonymous, 2014, p.26).

The fees paid for the illustration rights to a narrative album, for example, are low (ranging from €1,000 to €1,800 up front). The alternative, a percentage of 8 to 10% to be divided between the author of the text and the illustrator, is also not encouraging, given the low average print run (around 2,000 copies). As Klimowski attests, this precarious financial reality is widespread (Klimowski, 2011).

Traditional professional outlets, such as newspapers and magazines, have been using illustration less and less, often replacing it with photography. The only area that offers some regularity of publication, although not very interesting from a commercial point of view, is the school and children's book market (Moura, 2011).

To combat this precariousness, illustrators are forced to be self-employed and to reinvent their own media (such as fanzines, posters, graffiti, Tumblrs and Facebooks). An illustrator can teach, do commercial work, produce their own publication or be a gallery artist, without any major conflicts. The need for internationalisation is seen as crucial to sustaining the careers of Portuguese illustrators.

Also subject to the financial constraints of the market in Portugal, internationalisation was a path we explored at a certain point in our career. The publication of books by publishers who invest in the sale of copyright internationally was an opportunity that took a long time to develop (images 4 and 5). Participation in illustration fairs and exhibitions abroad made a decisive contribution to this.

This economic pressure not only dictates the need for multitasking, but also influences artistic choices, such as the exhibition of originals. Exhibition in galleries, despite having gained visibility, is often seen as a means of promotion. Interestingly, the economic factor can be decisive in the return to traditional, handcrafted originals (as opposed to digital ones), as the value of an original is higher (4 to 10 times) than that of a digital reproduction.

However, the market demands that the illustrator's message meets the needs of the client who is paying for it, and the message needs to be conveyed in a language that the target audience recognises and understands (Alves, 2020). Alan Male emphasises that illustration is a service (Male, 2007, p.10), and that the illustrator must evaluate the result in terms of the target audience, client, environment and purpose. This is therefore an approach similar to that of a communication designer.

3. THE SEARCH FOR AUTHORSHIP AND TRANSGRESSION OF BOUNDARIES

The desire to escape commercial restrictions and elevate their professional status leads many illustrators to explore what is known as Author Illustration.

Authorship is categorised as a form of illustration practice and expertise, where the professional takes on the role of writer and image creator in the production of an original literary work (David Blaiklock in Male et al., 2019, p. 191). Authorship is associated with the notion of “vision” and creativity. Author illustrators have the freedom to create without the inhibitions of a commission, allowing their imagination to run wild without external pressures.

With the development of digital culture, illustrators today operate with greater autonomy, driven by self-publishing, online stores and print on demand. This leads to a ‘dispersion of authorship’ and a greater emphasis on individual visual identity (their style) as a fundamental design. The need for illustrators to build their individual style — a distinctive visual language that identifies their ‘brand’ or personal iconography — is a cultural imposition in the field of illustration (Anonymous, 2014, p. 187).

However, this search for an authorial voice and a strong individual style introduces a series of limitations and problems, especially in relation to the status of the work and its legibility.

In our journey, we found the possibility of developing books or illustrations for galleries in which we were simultaneously the authors of the concepts or the original texts on which the image was based. These have undoubtedly been projects in which the expressive potential is maximised and where the sense of personal fulfilment is richer (Image 6).

4. AUTHOR ILLUSTRATION VS. ARTWORK

When exhibiting their work in galleries, author illustrators face an ‘existential limbo.’ Mario Moura observes that illustrations exhibited in a gallery specialising in illustration become a form of art that can be purchased for personal taste, placing them in a niche ‘almost outside the art market’ (Moura, 2011). It is as if the illustrator were neither a ‘painter’ nor a ‘sculptor’ in the contemporary art circuit, nor were their work strictly illustration in the sense of providing a service.

Often, in these spaces, what underpins drawings and paintings as ‘illustration’ is essentially the status of their creator (illustrator/designer by training). The insistence on exhibiting originals as illustrations, often based on the desires or anxieties of their authors and existing in the form of a title, places these images in a denial of their functional identity (Anonymous, 2014, p. 29).

The attempt to validate them as ‘works of art’ requires that illustrations be perceived as suggestive and ambiguous, emphasising the subjectivity of interpretation. This appreciation of interpretative imprecision and formal ambiguity is a goal to be achieved in order for illustrations to be elevated to the category of works of art (Anonymous, 2014, p. 214). This aligns with the thinking of Arthur Danto, who defines works of art as representations that are distinguished from real things by having semantic content, a meaning (‘Aboutness’), which cannot be found only in sensible properties. The difference between a work of art (such as Warhol’s Brillo Box) and a real thing (the Brillo box from the



Image 7
Ghosts from Porto
Ó! Galeria
2023



Image 8
Ghosts from Porto
Ó! Galeria
2023

supermarket) is not perceptual, but contextual and meaningful. Danto argues that 'seeing anything as art requires something that the eye cannot discern — an atmosphere of artistic theory, a knowledge of art history: a world of art' (Ferreira, 2014).

In this sense, illustration by an author who aspires to the status of art often values conceptual, symbolic and expressive elements that invite interpretation, but which are not always clear.

Examples of illustrations whose conception does not differ from that guided by a painter or writer are those created for the series 'Fantasmas do Porto' (Ghosts of Porto). Starting from the imagery of spirits and souls that have already departed from earthly life, we constructed fictional episodes set in the city of Porto. We sought to create an intimate atmosphere, sometimes permeated with humour, in order to engage the viewer and suggest multiple interpretations and evocations (images 7 and 8).

5. THE LIMIT OF LEGIBILITY: AUTHORSHIP VERSUS TARGET AUDIENCE

The most obvious dilemma in illustration by authors seeking artistic validation is the conflict between individual style and the need for clarity or legibility, especially when the target audience is children.

The insistence on suggestive, ambiguous images with aggressive formal distortions or complex tones, often beyond the cognitive reach of pre-readers and early readers (children between 2 and 8 years old), compromises legibility. Shulevitz and Munari argue that illustrations for narrative albums must be pictorially clear in order to be legible (Anonymous, 2014, p.167).

Illustrators who are overly concerned with style or symbolism may distract the reader's attention from the content, interfering with readability. When illustrations emphasise expressive and conceptual aspects, children may be unable to decipher the image, disrupting effective communication.

The use of advanced stylistic devices, such as visual figures of speech (visual metaphors or synecdoche), is common among Portuguese illustrators. However, the ability to understand literary figures of speech only consolidates in pre-adolescence (10 to 12 years old). The arbitrary use of these visual devices for younger ages contradicts the premise of clarity for children. Thus, the use of ambiguity in the illustration of narrative albums may have the adult reader as its preferred target.

The difficulty lies in finding a balance. The illustration must bear the marks of authorship and expressive richness characteristic of a mature author, but at the same time be seductive and accessible to the understanding of its privileged reader, the child. This controlled ambivalence, as in the work of Danuta Wojciechowska, which skilfully conceals the expressive resources that could disrupt reading, demonstrates that clarity and style can coexist, allowing for a selective interpretation of the visual message, decipherable by both children and adults (Anonymous, 2014).

In short, the limits of the contemporary illustrator are defined by a complex set of factors: the economic need to become a polymath and master multiple areas, the artistic ambition to give their work an authorial status, and the constant negotiation with a

market that imposes functional and, at times, aesthetic restrictions. Breaking free from the shackles of the commercial brief in favour of authorship can lead to an uncertain status (the limbo between art and service), especially if this quest for interpretative imprecision compromises the primary function of illustration: to communicate effectively with its target audience. Illustration, in attempting to break through the boundaries of its historical legacy of service, faces the barrier of legibility, a crucial limit that defines its communicative effectiveness, particularly in the world of children's publishing. Our work over the last few decades reflects many of these concerns.

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POLARITIES LIMITS AND THRESHOLDS \ 0123

RENA PAPASPYROU: AN EXPLORER OF THE URBAN SPACE SINCE THE 1970'S

ABSTRACT

Review of the exhibition Rena Papaspyrou: Images Through Matter, at the Hellenic Centre, London (October 2 – November 16, 2024). Curated by Inès Costa, Curator of Focal Point Gallery and Nayia Yiakoumaki, Director of the Hellenic Centre with Grace Strasen, Public Programme & Events Co-ordinator, The Hellenic Centre.

The Hellenic Centre, in London, hosts Rena Papaspyrou's Images Through Matter, her first solo debut exhibition in London and the United Kingdom this autumn. The audience has the opportunity to view and appreciate the work of one of the most important artists of the generation of the 1970s in Greece, and the first woman elected Director of the Third Painting Studio at the Athens School of Fine Arts (1993–2005). Her artistic expression involves elements and materials of the urban space, such as wood, metal, mosaic tiles, which until today play a central role in her practice. She explores the possibilities of matter by drawing most of the times on materials connected to the city, such as on wall surfaces that she removes from buildings. She marks and wades in with color and ink on the subtle changes on each surface, projecting simple images that emerge from the existing patterns.

INTRODUCTION

In autumn 2024, the Hellenic Centre in London hosted the solo exhibition of one of the most important artists of the generation of the 1970s in Greece and the first woman elected Director of the Third Painting Studio at the Athens School of Fine Arts (1993–2005). Rena Papaspyrou's Images Through Matter, her solo debut exhibition in the United Kingdom was curated by Inès Costa, Curator of Focal Point Gallery and Dr. Nayia Yiakoumaki, Director of the Hellenic Centre. In the open plan room, the twenty-two works exhibited, coming from different private and public collections located in Greece and directly from the artist's studio, were the most representative of her oeuvre, from 1977 onwards, a period of her strong presence in the Greek art scene. The exhibition brought

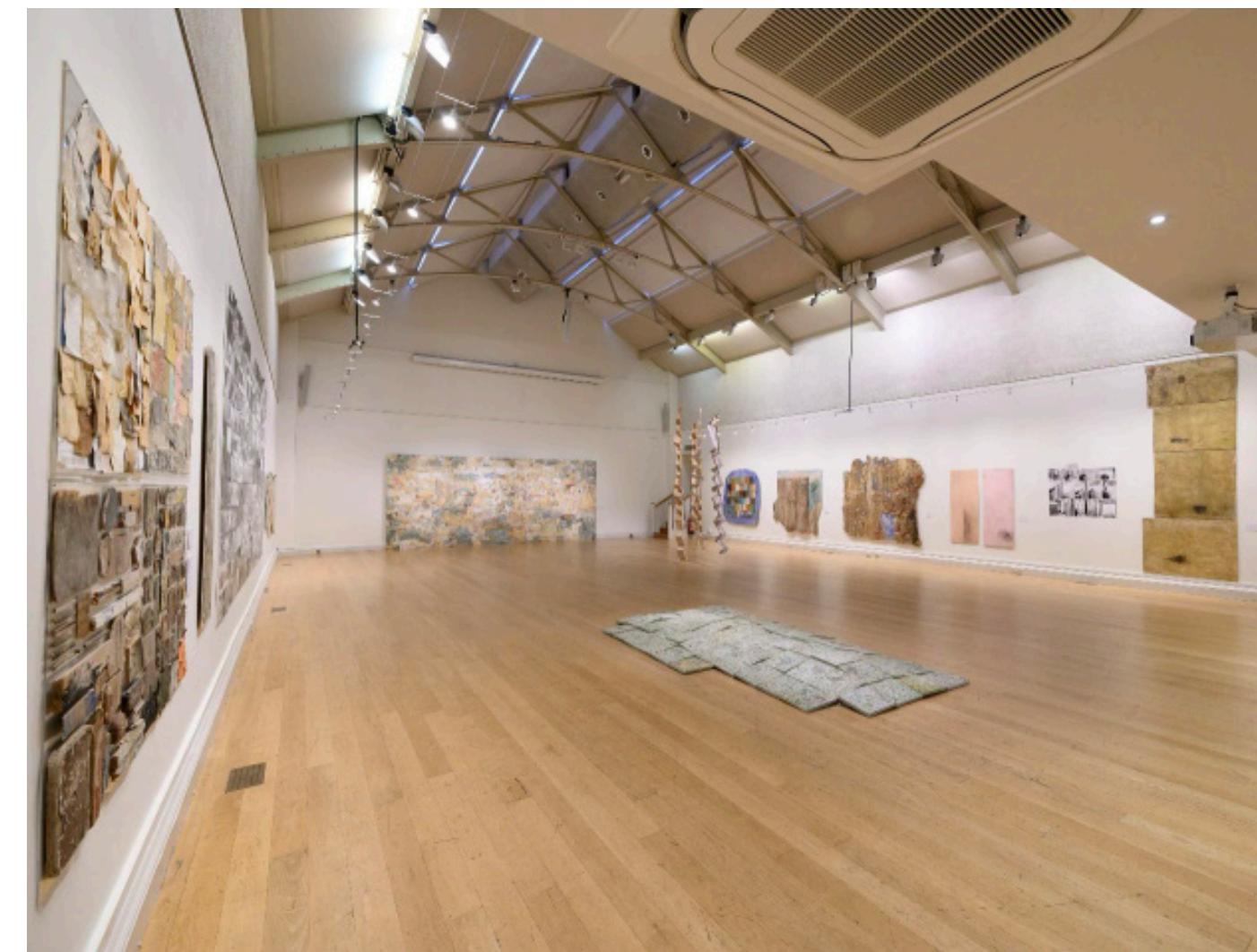


Figure 1
View of the exhibition.
Photo by Ash Knotek,
provided
by the Hellenic Centre.

together examples of Papaspyrou's works, incorporating wood, metal, mosaic tiles and other materials connected to the city, which eradicate the boundaries between public and private, outdoors and indoors, visibility and invisibility, permanence and decay, painting and sculpture among other, and bring to the fore an alternative point of view of how these can be perceived and treated [Fig. 1].

In the last years, the Hellenic Centre, founded in 1994 and located in an early 20th-century building in central London, has made an effort to familiarise its audience with Greek postwar art. By organising this exhibition in a city with international audience and by inviting art critics and curators of London's main art institutions, the Hellenic Centre managed to show how Papaspyrou's experimentation and engagement with elements and materials of the urban space is equally important to that of other Postwar artists outside of Greece who opened the borders of painting and sculpture. After all, in the short introductory text of the show, Dr. Yiakoumaki puts Papaspyrou's work in an international context by noting: "The exhibition presents a thorough body of works by a female contemporary European visual artist." I believe that the Hellenic Centre makes



Figure 2
 Rena Papaspyrou,
Shadows of the hand (detail), 1974,
 1 to 12 ball point pen drawings.
 Courtesy of the artist.

an effort to bring important Greek Postwar artists to the forefront, as they are not widely known outside Greece, apart from those of the Greek diaspora such as Jannis Kounellis (1936-2017), Lucas Samaras (1936-2024) and Stephen Antonakos (1926-2013). In 2023, it organised the launch of the publication *After the explosion you still hear the light* (2023), which focuses on the artistic practices of the 1970s in Greece, and presented the solo exhibition of Vlassis Caniaris (1928-2011). Prior to Papaspyrou's exhibition in March 2024, it had invited Costas Tsoclis (b. 1930) to talk on his work. Similarly, it had organised a conversation on Papaspyrou's art between Linsey Young, Curator of British Contemporary, Tate Britain and curators from Greece on the occasion of her exhibition.

Papaspyrou was born in Athens in 1938. She studied painting and mosaic at the Athens School of Fine Arts (1958-61). After her graduation, she left immediately for Paris with a scholarship from the French government and the National Organisation of Greek Handicrafts, to attend the École des Beaux-Arts (1961-67), where she continued her studies in mosaic. During her stay in the French capital, she had her first solo exhibition at La Maison des Beaux-Arts. After completing her studies, she moved back to her home city

where she presented her second solo exhibition of mosaic works at the gallery Astor in May 1967. According to Papaspyrou, already in this first body of work, she experimented with different materials. She incorporated large pieces of glass, broken bottles, metals and tiles. Moreover, she had developed an interest in mixing different materials in her colors during her studies in painting in Athens. On April 21, a few days before the opening of her show, the dictatorship came into power, which lasted until 1974. As a protest against the Junta, Papaspyrou, similarly to other artists of her generation, decided not to participate in any exhibitions. After the restoration of democracy in 1974, she focused on the concept of shadow, an experimentation that drove her to the important future development of her art. In the work *Shadows of the hand* (1974), she draws with pen the projection of a hand and its distortion on a sheet of newspaper [Fig. 2]. During this experimentation with shadow and light, Papaspyrou "faced the problem of the autonomy of the material surface." As she notes: "In other words, how will the special character of each material...be preserved, both in the light and in the shaded part, without being lost under the layer of coloring matter (paint, ink, etc.)?"

Although these early experimentations with shadows and mosaics were not included in the Hellenic Centre exhibition, which could be perceived as retrospective – since it focused on her art from the late 1970s onwards – it is important to mention them, as they form the basis of Papaspyrou's core visual vocabulary. The exhibition was not arranged in chronological order. Instead, it offered the freedom to the viewers to discover visual, material and conceptual connections between the artworks. On the left wall, entering the gallery space and next to the introductory text of the curators, Papaspyrou, who was personally involved with the arrangement and installation of the show, placed her four *Small samples from the Urban Landscape*, produced from 1979 to 1981 [Fig. 3]. They served as an introduction of the main materials she has focused on. On the first square-shape Plexiglass, the artist has attached numerous pieces of paper, of different shape, size, quality and texture, such as wrapping papers, napkins and black and white photocopies, along with plastic bags and bubble wrap. They are damaged, burnt, cut, creased, stained and marked. In the next three pieces, we come across used metals, wood and wall surfaces respectively, of different size, quality and color. These materials can be found in any city; however, the particular ones originate from Athens – the city that Papaspyrou has lived her whole life. Similarly to other artists of her generation, mostly in Europe and the United States, she is following the Duchampian concept of readymade. She turns to the urban space to collect her materials, her discoveries. Her art is no longer the result of the artist's work in the studio, as was the case of the early avant-garde art at the time of Cubism, instead it is the result of her interaction with the urban space and its conditions. Moreover her works remind us the 'Non-Site' sculptures of Robert Smithson (1938-1973), who, in 1968, exhibited in the gallery space bins of rock, sand or earth (monuments of antiquity) found during his journeys mostly in the countryside of his birthplace, New Jersey and the rest of the country. Likewise, Papaspyrou brings the outdoors in the gallery, moving away from painting and sculpture.

In her *Small samples from the Urban Landscape*, we see the damage caused by the surrounding environment and time. They seem to share the same qualities as living organisms. They carry the anticipation of many postwar artists to bridge art with life and to foreground contingency and duration, such as of the *Arte Povera* artists Giovanni Anselmo (1934-2023) and Jannis Kounellis, who incorporated living or degradable mate-

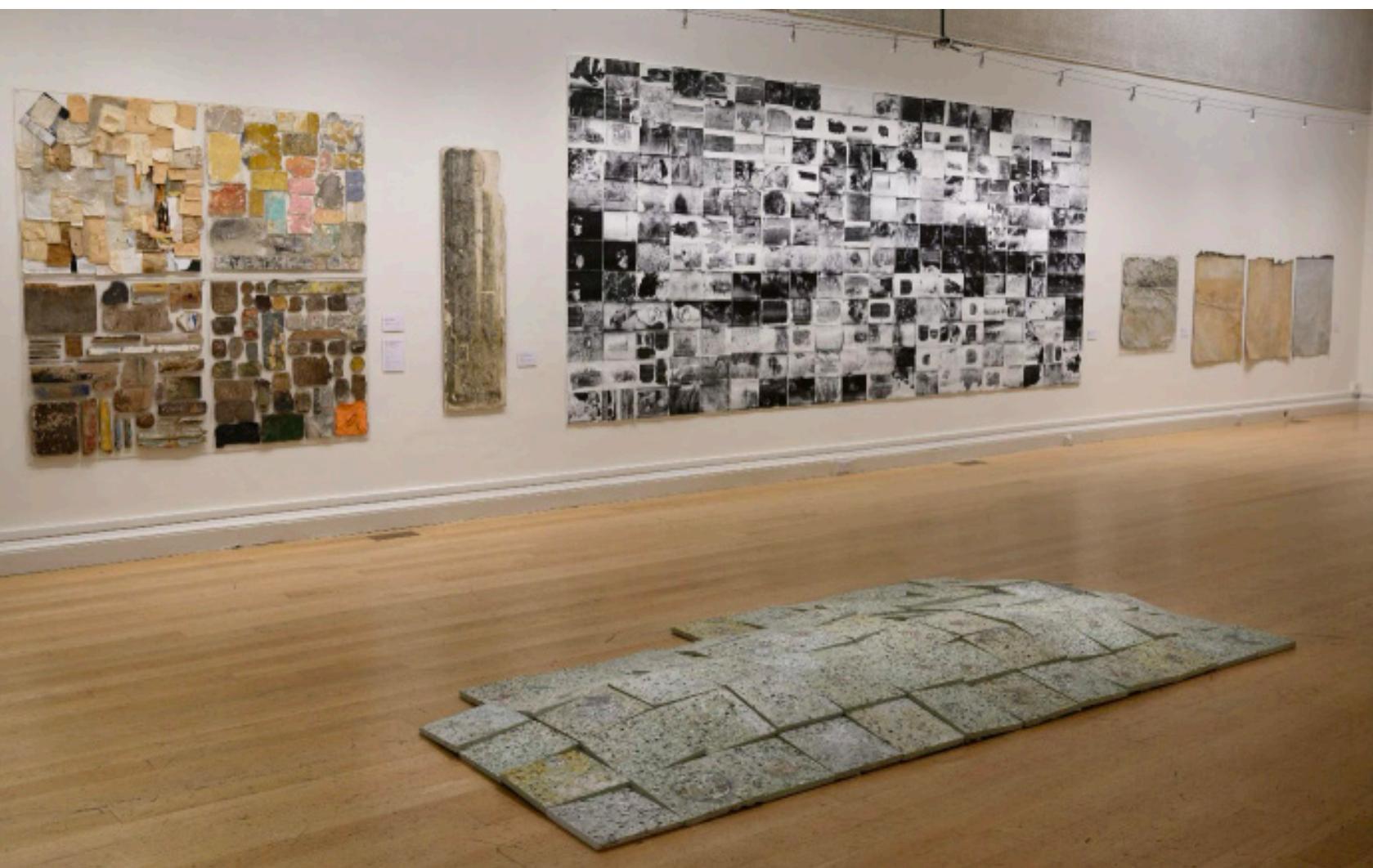


Figure 3
View of the left wall of the exhibition.
Photo by Ash Knotek,
provided by the Hellenic Centre.
Small samples from the Urban
Landscape, 1979-81 (on the left),
Photocopies Directly from Matter,
1980-82 (in the centre);
Images through Matter, 1983-1984
(on the left of the previous work);
Episodes in Matter, 1980 (the group
of three metal works at the right);
Images through Matter, 2018 (on the floor)

rials. Especially the first “sample,” according to the art historian and curator Christoforos Marinos, who has worked closely with Papaspyrou, “is intentionally exposed to time and the wear it brings.” The artist has not framed the papers, but instead she has attached them on the Plexiglass surface, aiming at their further alteration by the environmental conditions. The dust, the slightest air and the movement of the viewer can affect the paper. In particular, this “sample” and the one with the different metals are stimulated by the movement of the viewers, as they lean close to the works to read them, since some of the papers are pages from art books (in English and French) and some metal pieces have words, indicating their previous life.

On the same wall, a large synthesis of black and white photocopies (1979-82) was exhibited [Fig. 3]. Papaspyrou first started projecting shapes in the dark on photosensitive photocopy paper in the beginning of the 1970s. At the end of the same decade, she

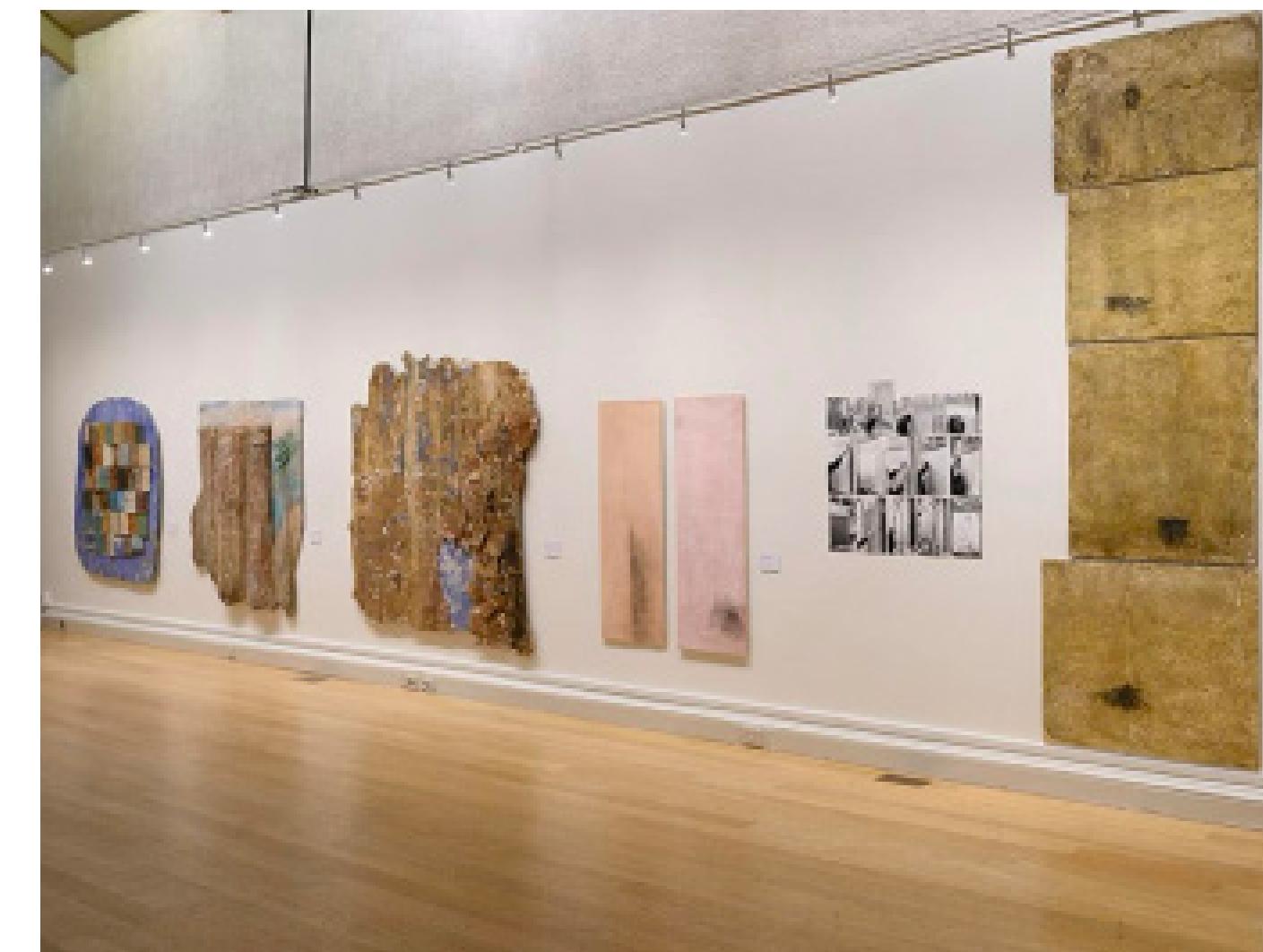


Figure 4
View of the right wall of the
exhibition. Photo by Ash Knotek,
provided by the Hellenic Centre.
Stilponos 7 (Episodes in Matter), 1979
(three vertical wall pieces at the right
and photographs next to them)

began photocopying the materials that she found in the urban space. She was using the photocopy machine of the Athens School of Fine Arts, where she was teaching, as photocopies were very rare at the time. According to Papaspyrou, she got into the process of photocopying because she could not keep all the materials that she was collecting from the streets. To some extent, these photocopies served as evidence, as an archive/catalogue of her materials, but they also functioned as experimentation, a novel and unconventional way to produce art, as was the case with other artists in the 1970s, who embraced technology’s accessibility and new potentials.

In her photocopies, we can detect the four main materials – and even the exact same objects – that she uses in the Small samples from the Urban Landscape. Papaspyrou’s works expand the sense of their own space literally and imaginatively, a stand similar to Frank Stella (1936-2024), who argued that a painting should not end at its framing



Figure 5
Rena Papaspyrou,
Vryaxidou 11 & Aspasia, 2021 (right
work), detachment of large pieces
of wall plaster, paper and pencil.
Photo by Ash Knotek,
provided by the Hellenic Centre.

edges but should expand in the surrounding space and should take into account the act of viewing. The viewers discover the range of Papaspyrou's materials that connect one work to another, a process that stimulates their imagination.

Three large pieces of metal sheets and a detachment of a wall surface from the 1980s were exhibited on the same wall, connecting the works but also making a transition from the "samples" and the "photocopies" artworks. The metal sheets belong to the series *Episodes in Matter* (1974-81) [Fig. 3], where Papaspyrou concentrates on more solid elements from the urban space, such as detached wall surfaces, pieces of asphalt, floor slabs, wood and metal sheets. They carry subtle physical changes on their surface, which she calls "episodes," due to corrosion and wear over time. In most cases, she highlights the "episodes" with pencil. The adjacent wall piece [Fig. 3] belongs to the series *Magic Rooms* (1984-85) and is under the umbrella of the general series *Images through Matter*, which started in 1981 as continuation of the series *Episodes in Matter*. In this body of work



Figure 6
Rena Papaspyrou,
Staircases – 9 Krissila st., 2017,
paper, polyester, pencil.
Photo by Ash Knotek,
provided by the Hellenic Centre.

Papaspyprou marks and wades in with color and ink on the subtle changes on each surface, projecting simple images that emerge from the existing patterns of the wall. Her viewpoint is very close to that of Leonardo Da Vinci in "Treatise on Painting," who argued that if we look closely at walls stained by dampness, we might discover strange forms, landscapes, remains, rocks, battles and other images. In both cases – the Episodes in Matter and the Images through Matter – the viewers are encouraged to discover and create with their imagination new images and shapes other than the ones pointed out by Papaspyprou.

On the wall across, her first detachments of the surface of the walls of an old building was presented, which took place in front of the public, on Stilponos Street, in Pagrati, and then exhibited at gallery DESMOS in Athens in 1979. This work is always accompanied by photographs, capturing the artist during the process of the detachment in front of the public [Fig. 4]. Influenced by the innovations taking place in the artworld – the exploration of the relationship between art and life expressed through the integration of everyday materials and the development of performance art and happenings – her first attempt took place in front of the public because Papaspyprou wanted to emphasise that her art was not the result of her work in the studio. In part, it is created in the urban space, the source of her materials. She adopts the strappo technique, used by conservators to detach frescoes from the walls. She gives a new life and voice to these surfaces, which will gradually fall apart in the streets of the city. Papaspyprou becomes a "ragpicker," a "collector of traces," who discovers and gives attention to traces of the past on the fragile surfaces of the walls, the pieces of wood, the metal sheets and pieces of asphalt, while at the same time she expresses her imagination and inner world. This art piece is the first step of working with the detachment process and technique, which became her unique artistic expression, also visible to the adjacent works.

By bringing parts of architecture and other elements of the urban space, destined to be destroyed either by time or by human intervention, into her studio and working on their elements, Papaspyprou strips off their original character and transforms them into 'a space in between.' In architectural terms, it is a space, which is neither internal nor external, but rather a transitional, connectional space. Her surfaces become the meeting point of her inner reality with the external world, a transitional object that provides security to explore, imagine, create and express herself.

The three artworks exhibited in the central zone of the gallery were produced in the last ten years, proving how Papaspyprou's art is progressing and remaining fresh and at the same time loyal to her artistic practice. On the central wall, *Vryaxidos 11 & Aspasia* (2021) is a large installation of various detached wall surfaces from a dilapidated house that until recently was on the streets 11 Vryaxidos and Aspasia in Pagrati near her apartment [Fig. 5]. She started the process in 2015 and completed it in 2020, during the first quarantine period of COVID-19 pandemic. Here, Papaspyprou creates a new and improvised wall with the pieces she removes, without following the original arrangement on the building. Without any intervention on her part, her associative images spring from the unseen side of the wall. The viewer discovers stratifications and traces that belong to different periods, such as old graffiti and different coats of painting. Between the wall fragments, she has added notes of scattered phrases, left by friends as a form of communication during the quarantine, and sheets of newspapers. In different parts of the surface, Papaspyprou has written the dates she carried out their removal. In a way, the installation

serves as a diary, with a twist. The public wall enters the private sphere of the exhibition space, while the private notes become public spectacle.

Papaspyprou also creates installations that move away from the wall, but still carry painterly and drawing elements. Her installation of tiles (mosaic type) on the floor of the gallery belongs to the series *Images through Matter* [Fig. 3]. The tiles are readymades, commonly found in houses and middle-class apartments of the early postwar years in Greece. Papaspyprou creates with ink images emerging from the existing mosaic patterns. Her tiles usually cover the floor or the walls and are reminiscent of interior spaces. In the Hellenic Centre, Papaspyprou presented its latest and reworked version, first exhibited in 2018. In particular, the tiles are placed on the floor on top of gravel, giving the illusion that they break or explode, revealing the gravel underneath.

The last central installation of staircases entitled *Staircases – 9 Krissila st.* (2017), hang from the ceiling beams, cannot be categorized as sculptural or painterly work, but rather a hybrid [Fig. 6]. They are constructed by special modeling paper and polyester, materials that offer the potentiality to mold the wavy shape of the mosaic steps outside the artist's apartment. Papaspyprou then drew the "episodes," including her footprint, in the resulting surfaces. This work presents the artist and the curator with the freedom to exhibit them in different ways: hanging on the wall or from the ceiling, leaning simply on the floor or even "hovering" over the heads of viewers.

It is clear that the human being is in the centre of Papaspyprou's art. The incline and dimensions of the staircases and the instability of the floor with the mosaic tiles determines the movement of the body, the relationship of space with the body and vice versa. Additionally, the majority of her works have been created within the limits, dimensions and possibilities of her own body, since Papaspyprou peeled off the pieces of wall plaster to the height she could reach. We should keep in mind that her art takes as a point of departure the urban space, the city of Athens, which is tailored for the needs of its inhabitants. As a result her art is connected to the idea of measure and harmony, concepts that preoccupy the ancient Greek philosophers (and later Humanism), who argued that the human being is the measure of all things. She digs for the measure in the fragments of the past and the present of the city, a stand similar to other artists of the 1960s and 1970s, especially in Europe, who tried to create novelty by turning to history and memory in order to express their concerns for the present. Those who are not familiar with the history of Greek postwar art, may think that these experimentations of Papaspyprou and other artists were belated. They occurred at the same time, in parallel to the postwar art tendencies that developed in the rest of Europe and the United States. Similarly to Papaspyprou's effort to shed light on the unseen side of the walls, I hope this exhibition, its reviews by different art critics, together with the presentation of the important Greek artist Vlassis Caniaris' work along with that of Joseph Beuys (1921-1986), which is still on view at Tate Modern, have contributed in bringing to the international foreground the "unseen" development of Greek art, which flourished in this crucial for the visual arts decade.

NOTES

- 1 After 1977, Papaspyprou strongly entered the Greek art scene, with apogee among other: her long collaboration with DESMOS (1971-93), one of the most important Greek galleries that gave voice to many postwar Greek artists; her participation in numerous group exhibitions in

and outside the borders of Greece; and her numerous solo exhibitions in important museums and galleries in Greece; the honor to represent Greece at the São Paulo Biennial (1983); and finally her large installation in one of the metro stations in Athens (2011). Rena Papaspyrou, <http://renapapaspyrou.gr> (Online: September 9, 2024)

2. Hellenic Centre, <https://helleniccentre.org/event/rena-papaspyrou-images-through-matter/> (Online: November 24, 2025)

3. Ibid.

4. Elpida Karaba, theorist and independent curator, and Stamatis Schizakis, Interim Deputy Director and Curator, Lens-based and New Media, National Museum of Contemporary Art in Athens were invited.

5. Many biographical information are found in Papaspyrou's website <http://renapapaspyrou.gr> (Online: September 9, 2024)

6. Conversation with the artist Rena Papaspyrou at her apartment in Athens, August 28, 2024.

7. Bia Papadopoulou, in the exh. cat. *The years of defiance: The art of the '70s in Greece*, curated by the author, organised by the National Museum of Contemporary Art, Greece (EMST), December 15, 2005 – May 7, 2006, Athens: EMST, 2005, 9.

8. Rena Papaspyrou, “Φως και σκιά, η αυτονόητη συνθήκη” [Light and shadow, a self-evident condition], interview with the author, CultureNow, Athens, Greece, 20 October 2021.

9. Andrew Causey, *Sculpture Since 1945*, Oxford & New York: Oxford University Press, 1998.

10. T.R. Brookes, “INSIDE / OUTSIDE and the [in between]” (Doctoral dissertation) Wellington: Te Herenga Waka–Victoria University of Wellington, 2012.

11. Robert Smithson, “A Sedimentation of the Mind: Earth Projects,” in Nancy Holt, ed., *The Writings of Robert Smithson*, New York: NY University Press, 1979, 82. First published in *Artforum*, September 1968.

12. Christoforos Marinos, *Εικόνες στην' Ύλη: Η Ζωή των Μορφών στο' Έργο της Ρένας Παπασπύρου* [Images in Matter: The Life of Forms in the Work of Rena Papaspyrou], Athens: futura, 2023, 40.

13. Ibid. 41.

14. She talked about this, during the press conference, in the morning before the opening of the exhibition.

15. Frank Stella, *Working Space*, Cambridge, Massachusetts & London: Harvard University Press, 1986, 9-10.

16. Conversation with the artist Rena Papaspyrou at her apartment in Athens, August 28, 2024.

17. Yorgos Tzirtzilakis, “The Mystery of the Smeared Wall,” in the exh. cat. *Rena Papaspyrou: The Unknown Side*, edited by Christoforos Marinos, Afroditi Panagiotakou and Yorgos Tzirtzilakis, Athens: Onassis Foundation 2021, 265. This catalogue was published on the occasion of the installation *Vryaxidos 11 & Aspasia: The Unknown Side* by Rena Papaspyrou, presented at Onassis Stegi, December 2021 – February 2022.

18. T.R. Brookes, “INSIDE / OUTSIDE and the [in between]” (Doctoral dissertation) Wellington: Te Herenga Waka–Victoria University of Wellington, 2012.

19. Sofia Eliza Bouratsis, “Rena Papaspyrou, Surfaces A User's Manual, The Dialectical Relationship Between Everyday Life and Matter,” in the catalogue of the exhibition with the same title curated by the author, Athens: National Gallery Alexandros Soutsos Museum, 2024, 26.

Bourachis' approach is based on Donald W. Winnicott's psychoanalytic study of the connection of the true self with the external world. See Donald W. Winnicott, *From Playing & Reality*, United Kingdom: Tavistock Publications 1971. Found at <https://web.mit.edu/allanmc/www/winnicott1.pdf> (Online: 17/10/2024).

20. For the Hellenic Centre, Papaspyrou adjusted the installation according to the specific architectural elements, dimensions and conditions of the particular space. When exhibited at Stegi, the Onassis Foundation Building in Athens in 2021, it had the shape of a corner wall.

DESIGNING THE NARRATIVE: TELLING COLONIALISM THROUGH RULES, ILLUSTRATIONS AND COMPONENTS

ABSTRACT

This article explores how rules and mechanics in board games, in conjunction with their setting – illustrations and components – form the narrative that the game transmits to the player. Rules, even abstract ones, represent elements of the board games' setting and it's in their relationship with the game as an object that we can find the message that a board game transmits. While board game themes have not always been defined by designers, and rules have not always been designed with themes in mind, they are still vehicles for transmitting hegemonic societal values and narratives, even when not consciously intended by the designers or publishers. With the development of board games as authorial art objects, and the increased focus of designers on their games' narratives, the study of how rules contribute to, or even contradict, the intended narrative becomes increasingly relevant.

In this study, we develop a comparative documentary analysis of the rules, artwork and components of three board games: Settlers of Catan, Spirit Island and Pax Pamir second edition. All these games have settings relating to the topic of colonialization, central in the history of board games. We analyze how the rulebooks and artwork of these three games construct different narratives all relating to the same topic, and, at the same time, the way that the narrative intent of the designer may be reinforced or undermined by the ways that the colonialization processes are represented in the rules.

INTRODUCTION

We are currently witnessing the golden era of board games (Antunes, 2023; Konieczny, 2019). The board game medium is continually growing in the 21st century, both at the level of the increased number of games produced, and at the level of continual evolution of game design. Notably, this rise starts after the popularization of video games. This leads

researchers to theorize about the board games' position in the post-digital movement (Scoats & Maloney, 2024), due to the value placed on the materiality and sociability inherent in the hobby (Rogerson et al., 2016), in accordance with post-digital values (Cramer, 2014). This golden era, while centered in Europe and North America, is not exclusive to these regions (Junior, 2021).

From the 1990s onwards, with the popularization of eurogames outside of Germany (Woods, 2012), the design of the game – understood as the design of the game's rules (mechanisms and mechanics) – became the focus of the industry, that attempted to continually evolve board games' mechanics, and of the gamers, who sought, as they still do (Rogerson et al., 2016), varied and innovative games (Woods, 2012). This tendency led to a higher recognition of designers as authors – aided by the creation of board game design awards and board game magazines – which was also embraced by game publishers that used designers' names and recognition as a marketing point (Woods, 2012).

Board games' definition as an authorial art form (Woods, 2012), evidenced by gamer's curatorial collecting tendencies (Rogerson et al., 2016), alongside the increasingly higher control of the final product by the designers, leads the way for the study of the medium through the lens of narrative and theme. Even though some may consider board games (and tabletop games in general) as a poor medium for transmitting narratives, this is a wrong assumption. Despite the lack of opportunity that board games present for direct storytelling, through setting, mechanisms and the games as an object a narrative is constructed and understood by the player (Duncan, 2019). In fact, board games, due to their interactive nature, are particularly adept in imparting their narrative (Flanagan & Jakobsson, 2023). However, due to the way this narrative is transmitted, the designer must find ways to convey their intentions through setting, themes, components and illustrations. The way that the designers design these elements to work together, or not, to create the intended narrative is precisely what we seek to understand with this research.

COLONIALISM IN GAMES

While games have not always been considered as storytelling mediums, they have a long history of acting as representations of different aspects of the societies they are a part of. Folk games – games that are part of a society's cultural heritage, usually without a known author (Donovan, 2018) – such as Chess, serve as an example that even pre-modern games represent parts of the context in which they are played, whether intentional or not. In Chess's particular case, the different pieces on the board, in the European tradition, represent the King, Queen, Knights and the general population (amongst others), giving more importance and ability to the higher class of pieces, to the point that you must sacrifice your other pieces in protection of the King. The queens being the most powerful pieces (in terms of movement options) is also a reflection of societal perceptions – at the time when chess was adapted from its Indian or middle easter origins (Flanagan & Jakobsson, 2023) – as queens were seen as “mad” for demonstrating almost super-human strength in the defense of their kingdoms' interests” (Carretta, 2024, p. 215)1.

As printing techniques developed in Europe in the 18th century, board games entered into their “mass produced” era (Donovan, 2018). During this period we find the proliferation of “race2” games, best identified by the popular (at the time) Goose Game

(Flanagan & Jakobsson, 2023). Games were printed with their rules directly on the board and had an explicit moralizing goal. Publishers and designers shared political and societal perspectives through this medium (Donovan, 2018; Flanagan & Jakobsson, 2023). Games were based on luck, with movement decided by the roll of the dice, and when a player landed on a space in the board it served as a moralizing moment (Carretta, 2024), as spaces represented different societal values, whether positive or negative. In here we can once again observe the marriage between rules and narrative, given that the negative moral spaces usually also meant that the player had to track back, or stay put for a certain period of time (Arnaudo, 2018).

It's during this era of board games that colonialism becomes a common theme in the medium. European colonial empires felt the need to create consensus amongst their population regarding the colonizing efforts by defending and reinforcing the ideal of empire, and by teaching players about the far-off places of said empire. Colonies were shown through an orientalist and exotic lens, showing the general population the rich resources they have to offer (Flanagan & Jakobsson, 2023). These territories are presented, commonly, as part of a journey in which the player witnesses all the different places and societies through travelers googles (Flanagan & Jakobsson, 2023).

With the advent of the popularization of eurogames, jumpstarted by the one-two punch of the mass appeal of Settlers of Catan and El Grande outside of Germany (Woods, 2012), we observe the process of the "strategic twist" (Antunes, 2023): games in which randomness is a core mechanism start being replaced by board games where strategic choices that may be taken by the player are the sole (or main) way to achieve victory (Costikyan, 2011; Schreiber, 2011).

Eurogames mark the start of the modern phenomenon of board games (Donovan, 2018), as games that focus mostly on their mechanics (Costikyan, 2011; Woods, 2012), with an aversion for representation of direct conflict in favor of resource management and efficiency puzzles (Sousa & Bernardo, 2019). Themes in eurogames are secondary to their rules, often being defined by the publisher as a means to attract a particular audience (Flanagan & Jakobsson, 2023; Paz, 2025; Trammell, 2019; Woods, 2012). Often, in the "traditional small business model" (Trammell, 2019) of board game productions, designers think about themes and narrative in last place. They are aware that publishers may require any changes for commercial reasons (Trammell, 2019), therefore rules were treated as blank canvases to which you could add many different skins.

However, even with themes and narratives taking a back seat, colonialism continued to be one of the most common (Flanagan & Jakobsson, 2023; Foasberg, 2019). Despite the lack of intention on the designers and publishers part, the use of eurogames' particular mechanical tendencies of favoring economic management, resource production and gathering, colonialism is presented to the gamer through an European colonialist lens (Flanagan & Jakobsson, 2023; Foasberg, 2019). The particular post-World War II German aversion to representing armed conflict in media (Sousa & Bernardo, 2019; Woods, 2012) that influences eurogames' design, leads to a lack of representation of the conflicts between colonists and native populations (Robinson, 2016). This results in a presentation of the colonial process – by placing players in the position of colonists – as the brave efforts of the colonizing nations that overcome strange foreign lands and their exotic dangers (Flanagan & Jakobsson, 2023). Some

games, such as Goa, explicitly recognize the presence of native populations in colonized places, however, both the description of these people and their homelands are going only so far as to mention the relevant characteristics for the colonization, something that's reinforced in the mechanisms in place that assume the colonizers capacity to act unimpeded by native populations, colonizers' ownership of the land and their eventual prosperity (Foasberg, 2019). When native people are represented in the rules, however, it is usually in the form of obstacles or resources without any real agency (Costikyan, 2011; Flanagan & Jakobsson, 2023). It should be noted that, even when native population are represented as resources (generally workers), mentions or depictions of slavery are still excluded from the explicit narrative of the games.

Although eurogames are the basis for the design tendencies of modern board games, the practices of design and the traditional means of producing board games have evolved to the point in which the themes are increasingly being defined by the designers, who have also started to create modern games with specific narrative intent, (Arnaudo, 2018; Junior, 2021; Paz, 2025; Anonymous 2025) trying to associate mechanisms with, often, counter-hegemonic, or at least, alternative themes and narratives. However, with the risk-aversion characteristic of the board game industry (Trammell, 2019), and the general "geek" context of attempted "depoliticization" of many artistic mediums (Robinson, 2016), designers are forced to adopt tactics that allow their games to be produced (Emigh, 2016). These tactics include creating print-to-play games, print on demand production runs, or sharing rules digitally for players to use other games' components in play (Emigh, 2016). However, the tactic that seems to be preferred by designers and that has the most mass appeal is production through crowdfunding (Roedenbeck & Lieb, 2018). This tactic allows creative freedom in the design process, particularly in the narrative and thematic design, skipping the risk involved in the production of a game that may not sell well (as the game is only made if enough funding is achieved by the crowdfunding campaign), although creating a game through crowdfunding campaigns also introduces certain pressures in the way the game is designed and produced (Anonymous 2025). Both Pax Pamir, 2nd edition and Spirit Island were produced while using this tactic.

METHODOLOGY AND OBJECTIVES

The research for this paper was based on a qualitative methodology. We completed a documentary analysis of the three board games' rules, components and artwork, through the means of a thematic categorical analysis (Bardin, 2012; David & Sutton, 2004). The categories we used emerged from the research and were organized in three broad themes: artistic representation; constructed narrative; mechanisms and mechanics. We chose these three particular games in an attempt to compare a traditional eurogame with more modern games produced through crowdfunding in the different ways that they explore a colonialist setting. We chose Settlers of Catan due to being the board game responsible for the popularization of eurogames, and, therefore, genre defining. The remaining two games were selected based on two criteria: popularity on the BoardGameGeek (BGG) platform – a database commonly used as a reference point by researchers (Pobuda, 2018) – both games are in the top 100 best games list; and games that explicitly desired to offer an alternative, or counter-hegemonic, narrative of colonialism.

The study was orientated by three objectives all related to the guiding research question: how do board games' components, illustrations and rules create and condition the game's narrative and theme? The objectives are as follows: understanding the designers explicit intended narrative; understanding how rules, components and illustrations contribute to the intended narrative; understanding how rules components and illustrations may contradict the intended narrative and what is this contradictions impact. With these objectives we wish to understand the way that the game as an object, the rules and the setting interact, whether in intended ways or not, in order to create a narrative that is transmitted to the player through play.

ANALIZING THE GAMES

GAME DESCRIPTION

While all three games we analyze focus on depictions of colonialism, the lens through which each approaches the topic differs significantly. In this subchapter we will present a short description of each game, its mechanics and the explicit intended narrative that is presented to the players.

Starting off with Settlers of Catan, it was originally published in 1995 and designed by Klaus Teuber. The older of the three games, it follows a lot of design conventions, that itself helped to cement, common to eurogames. The narrative and setting are secondary towards the gameplay rules, noticeable on the lack of space devoted to them in the – typically short (Woods, 2012) – rulebook. Gamers are presented with the Island of Catan and told that it is their job as "settlers" to develop the island and explore its resources. There is no further explicit narrative guidance given to the player nor a contextualization of the place in which the game takes place. The player's turn starts when they roll two six-sided dice. The result of this role determines the hexagonal tiles that produce their corresponding resource this turn, and each player receives one of such resources per each adjacent village they have, or two in case they have a city instead. The tiles and resources that exist in the game are as follows: lumber, produced in forest tiles; wool, from pastures; grain, from fields; brick, from hills; and ore from mountains. There is also one extra tile called desert that does not produce anything. After the production step, the players whose turn it may trade resources with other players (at any exchange rate agreed upon by the players), with the resource bank (at an exchange rate of 4:1), or with one of the ports on the island, if they have a city in the port's intersection, with more favorable exchange rates of 3:1 or 2:1 in case they are a port exclusive to a particular resource. Players can later use their accumulated resources to accomplish the build action, with different combinations allowing for the building of four different game elements: villages, cities (upgrading a village); roads; or the purchase of a development card.

Each player starts the game with two villages and an adjacent road to each, and their objective is to have 10 points. Points are acquired by having buildings, a village is worth one point and a city two, having the longest road, worth two points, having the largest army (by playing the most Knight development cards), also worth two points, and from development cards that are worth one point. When a player reaches 10 points, they immediately win the game.

Pax Pamir, 2nd edition is the reedition of this game that marks the beginning

of Wehrlegig Games as a board game publisher. Originally published by Sierra Madre Games, this edition of the game (from 2019) was designed by only one of the two original authors, Cole Wehrle, with the objective of better representing the setting and intending narrative through gameplay. Cole Wehrle and Wehrlegig Games seek to produce games with historical themes, while trying to simulate or represent certain aspects of the historical setting they take place in. In Pax Pamir, 2nd edition's rule book the author clearly delineates his intentions of designing a game that presented the "great game" – the historical conflict between the Russian and English empires in central Asia – through the eyes of the Afghan population, instead of the more common depictions of the conflict that focuses on the European perspectives.

The game seeks to simulate the political intrigue and the influence games that took place after the fall of the Durani empire. Players embody Afghan leaders that must use their influence and cunning in order to manipulate the actions of one of the three coalitions involved in the conflict: Afghan; British; Russian. Players create their tableau by buying cards from a shared market. Cards have special abilities that allow players to take actions such as mobbing and building armies, building roads, buying gifts for their coalition, battling and betraying. Players seek to have the most influence with the coalition that can achieve dominance on the board – a coalition is dominant if they have more than four pieces that each other coalition – that can be accumulated by giving gifts to the coalition, playing cards affiliated with the coalition or getting trophies (betrayed cards). During a game dominance is checked when one of the four dominance cards is bought or leaves the shared market. During this check players receive points if they have the most influence in the winning coalition or, in the lack of a dominant one, being the player with the most influence discs in play. Players may change coalitions throughout the games by taking actions that earn them influence with a new coalition. The game ends after the last dominance check or when a player has four points more than any other player.

Spirit Island was published in 2017 and designed by R. Eric Reuss is a game that depicts the conflict between colonialists (called invaders in game) and the spirits that inhabit the titular island. The game's designer, Eric Reuss, states in the rulebook that his inspiration for creating this game was the realization that all board games he previously played, with colonialist settings, always presented the western colonialist point of view to the player, as well as the understanding that such tendency was taken for granted, and therefore a default, by other players close him.

While set on a fantasy island, full of supernatural spirits, the game aims to represent real colonization efforts while placing the players in the shoes of the ones that struggle against it. Players are spirits with unique powers, related to their elements or supernatural theme, that work together in order to expel the colonizers. Each turn, players must play cards from their hand. Every card has an energy cost (gained at the start of each turn) and unique effects that may assist other players, destroy Invaders, move them, reposition the Dahan, remove Blight, generate fear or trigger a wide variety of other abilities. Throughout the game, players can gain new Power Cards by discarding others. Each card also shows elemental symbols and when these elements appear in specific combinations, they can unlock a spirit's innate powers. Automatically, the invaders expand, build and ravage based on the cards of the invaders deck. Each turn, one card is revealed from this deck, showing a specific terrain type. It's the players' goal to limit



Figure 1
Illustration of the Development Cards
in Settlers of Catan (Authors, 2015)



Figure 2
Resources and Terrains of Settlers
of Catan (Authors, 2015)

this expansion, as the game ends when enough blight (damage to the land as a result of the invaders' ravaging action) accumulates or when a player's presence on the board is eliminated. In order to win players must generate fear, which can be done directly through cards and abilities or, most commonly, through the destruction of settlers' villages and cities. Also present on the board are the Dahan. They are the island's native population and are working together with the spirits in order to eliminate the colonizing threat.

COMPONENTS, ILLUSTRATIONS AND RULES

The relation between these three games' rules, components and illustrations and their narratives and setting is very different. However, there is a much clearer distinction between Settlers of Catan and the other two in the way that the designer took to impart their intended narrative on the players.

As mentioned before, Settlers of Catan follows closely the formula of the eurogame both relating to the subordination of theme and setting to mechanics, and to the common tendencies in the representation of colonialization (Foasberg, 2019; Schreiber, 2011). Players are presented with land without previous population, a land rich in resources ripe for the taking that they must explore without reservation. There is no direct conflict between players, the closest to it is the use of the robber piece that may take resource cards away. Players compete to see which player more effectively explores the resources of the island, following the trend of representing this process through an economic management point of view. Native people are not present, unless one interprets the robber as their

representative, and therefore there is no conflict in this process. However, Settlers of Catan does stand out in comparison to other eurogames of the time in the representation of a colonial land. The illustrations and components of the game seem to clash in their temporal and geographical representation of the island of Catan. Medieval and European neoclassical buildings coexist with cranes and armored knights, all supposedly located on an island undergoing colonization (as the game's name suggests), yet without any representation of the colonial as exotic (see figure 1). The resources depicted are typical of those found in Europe (particularly notable with wool), rather than the kinds of resources one might expect to be portrayed as part of colonial exploration (as seen in Figure 2). This indicates to us that the game exhibits a common trait of eurogames: a lack of thematic and narrative definition, where these elements are applied over the mechanics like a final coat of paint, merely to help sell the product – which is, in essence, the rules. In any case, the illustrations and components (by their indistinctness) present a form of colonization devoid of victims and exploitation. The colony is created on virgin lands, occupied and made productive by the "discoverers" or "settlers."

Also breaking with common eurogame depictions of the colonial reality is the lack of profit for the colonial empire. The only possible reference to a colonial exploitation that benefits a (presumed) imperial country is mechanical, through the ports that allow for more efficient resource exchanges (with the resource bank) but which only allows the player to trade resources already present on the island for others also present, unlike what would be expected of colonial resource extraction. A sterile version of colonialism is presented, consisting of a "terra nullius" (Foasberg, 2019), with features very similar to

those of Europe, ready to be exploited by settlers who do so without any violence – except, once again, for the robber, who appears as the only obstacle or hindrance to the players' actions. Even then, the robber being (mostly) activated randomly is always controlled by one of the players, thus functioning more as an agent of competition between settlers than as a challenge to colonization. The lack of intentional narrative design by the original designer is noticeable in this abstraction of the colonial process. Even more than in other colonial eurogames, in which the process is represented without reference to conflict, it is completely represented by economic management and expansion so abstract that could be applied to any setting.

Pax Pamir, 2nd edition and Spirit Island, on the contrary, very clearly try to represent elements of their setting through mechanics and subsequently creating their narrative – as is explicitly stated by the designer in the rule book of both games. Pax Pamir's card suits reveal the models of power valued by the game, with a particular emphasis on the importance of information. Each suit is associated with different forms of action, reflecting the representations of power that the game conveys. The game devalues direct combat between players (and coalitions), aiming instead to equally emphasize the ability to influence through conflict via espionage and betrayal (illustrated by the purchase of gifts and the assassination of cards). This devaluation of conflict cannot be confused with the lack of representation of it in eurogames, instead it is a favoring of the representation of other types of resistance and struggle that the game focuses on. Despite this, the represented struggle is not that of the general population facing the imperial powers, but of the elite that plays them against each other in a way that guarantees them standing once the conflict is over. While players' actions contribute to this narrative of political intrigue and scheming, particularly the mechanic that allows players to change coalitions, the players' goals in-game seem to conflict with the stated narrative intent. Even though the designer presents players ultimate objective as the guarantee of Afghan independence, the way the game attributes points through coalition dominance, as well as the possibility that multiple, or even all, players support the same coalition (that may not be the Afghan) creates the idea that one empire will succeed over the others, instead of the intended careful maintenance of the delicate balance of power that makes such dominance impossible. This intention is, however, enforced by the difficulty of placing pieces on the board which forces prior planning, at the same time as the constant changes in the board situation and cards available for purchase encourage players not to stick too rigidly to a specific plan.

Spirit Island, on the other hand, is able to more closely correlate its anti-colonial message and narrative with the players' actions and goals. By creating the game as a cooperative one, the designer is more successful in constructing a colonialist narrative of conflict, one that is not reduced to competition between colonial powers. However, it does not escape the tendency to deny agency to the native population: the game's focus, also evident in its illustrations and components, is on the land itself, depicting the land's rejection of colonization and how it, with only marginal support from the native people, fights against the colonizers. This somewhat aligns with colonial representations of settlers struggling against hostile terrains and climates.

The "Dahan" (name of the fictional native population) are granted even less agency than the colonizers themselves, who, as automatic opponents, have a complete



Figure 3
Pax Pamir's card illustrations
(Authors, 2025)

system managing their actions independently of the players' will (players merely need to move the pieces to the correct spots). In contrast, the "Dahan" have no form of action by their own "initiative"; they only attack when directly attacked, and they can only act when a player plays a card or activates an ability that allows manipulation of these pieces. The narrative conveyed is that of the colonizers as an almost unstoppable force destroying the land, which in turn tries to reject and expel them. The "Dahan" are marginalized within their own story, and their continued presence or absence on the board is not even a victory or, more importantly, a defeat condition. The theme presented is one of natural conservation, portraying colonialism as the exploitation and destruction of the land, with success defined as creating enough friction against the invading forces to make them abandon their attack.

More than in the other two analyzed games, Spirit Island illustration and components are an integral part in setting the narrative and mood of the game. The greater direct representativity has the effect of increasing player immersion in the game and their actions. The armies are not abstract; they are pieces shaped like people, and the colonies are houses that the player can see on the board (see Figure 3). Interestingly, the Dahan are represented only by their houses (Figure 3), which can be dehumanizing for players less attentive to the rulebook and cards illustrations, who might not realize that the Dahan are not some kind of sentient mushrooms – something plausible given the game's fantastic elements. The land is depicted as idyllic and suffering when in contact with the colonizers, with illustrations evoking the damage the land endures and the anger it feels in its retaliations. The rulebook itself is framed in every page by

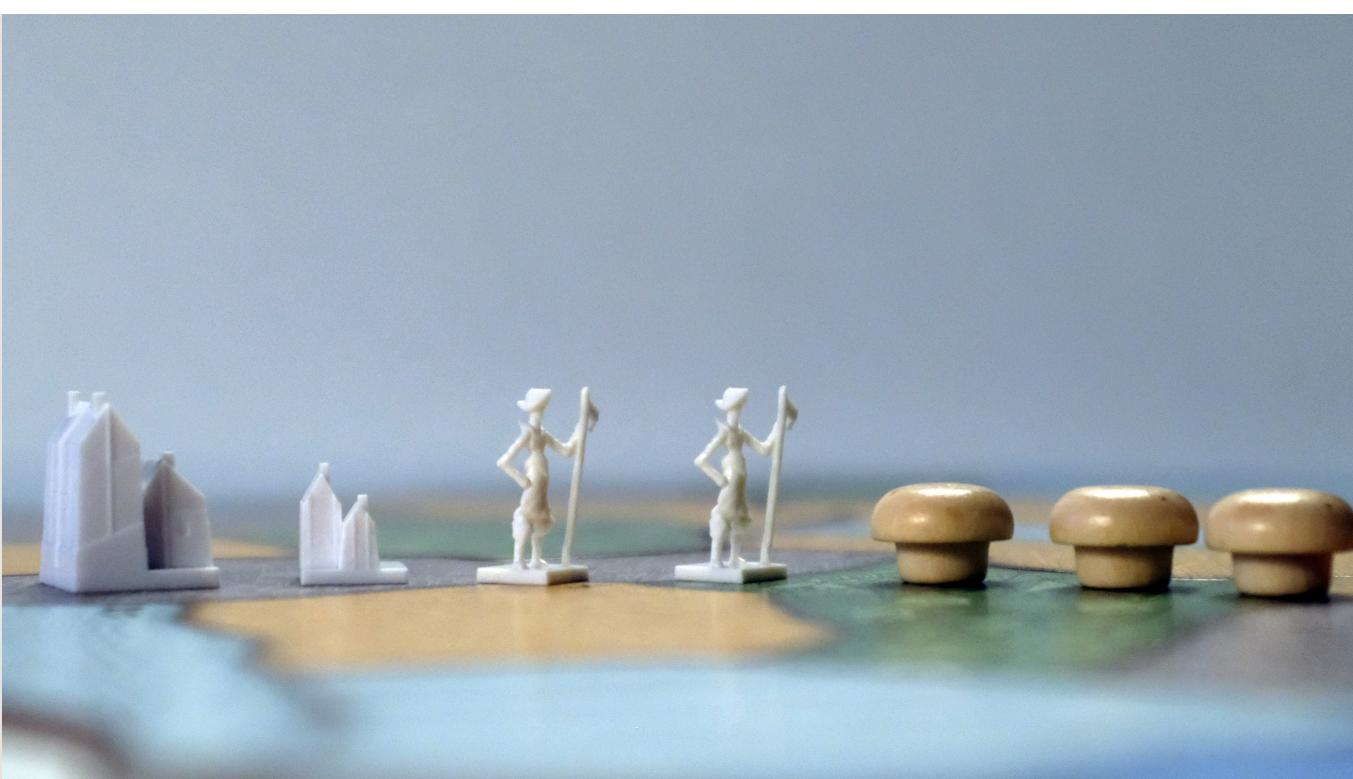


Figure 4
Naturalistic themes and idealistic representation in the illustrations of Spirit Island (Authors, 2025)



Figure 5
Pax Pamir's Board and components (Authors, 2025)



Figure 6
Pax Pamir's card illustrations (Authors, 2025)

vines a naturalistic imagery (see Figure 4). The colonizers are represented with a set of references that align them with the imagery of the Spanish colonizer, through their clothing, the use of galleons, and most notably, the helmet commonly associated with the Spanish “conquistadores”, even though the Spanish are not one of the colonial powers that can attack the island in certain game modes.

By contrast to this more directly representational style of illustration and component design, Pax Pamir, 2nd edition opts for more abstract depictions of the setting. The game seeks to represent the region where it takes place. The terrain is primarily presented in a stylized manner; however, the people are depicted according to the portrait painting trends contemporary to the time of the game’s setting (see figures 5 and 6). Additionally, the iconography present in the various components aims to evoke the imagery of the intersection between Central Asian culture and Islamic religion, through the use of floral and geometric patterns, as well as the use of cloth as the material for the board (traditional in this region) (Figure 5). The game’s art, alongside its components, is consistently evocative of its setting, so much so that at no point can the player dissociate or abstract themselves from it while interacting with the components—except when focused solely on their personal board.

CONCLUDING REMARKS

It’s clear after this analysis the difference in the ways that Settlers of Catan and the two remaining games make use of their components, illustration and rules as part of the narrative

building process. While the eurogame seems to have not been designed with any narrative intent in mind, both Pax Pamir, 2nd edition and Spirit Island intentionally designed their rules with the simulation of some aspects of the game’s theme in mind, having used as well their component’s design and all illustrations as a way to immerse the player in the games’ settings. Even so, in both games, several elements of the rules (and illustrations in the case of Spirit Island) contradict the intended narrative goal of the designer.

It is clear that Pax Pamir, 2nd edition was designed by a historian seeking an accurate representation of the specific historical period being portrayed. The focus on the perspective of Afghan actors reinforces what the designer explicitly states in the rulebook as a desire to represent this conflict without relying on the perspective of colonial forces or framing this history through the lens of the “Western imagination.” The use of visual elements that evoke these places and cultures is done without resorting to the exoticism common in this type of game, and the inclusion of components such as the fabric board, typical of traditional games from the depicted area, indicates that these elements were included from a place of respect and an effort to represent local cultures. Even though it is not the place of these researchers to assess the success of that intention. The focus on political intrigue – and the mechanical experience it provides – however, prevents the game’s perspective from aligning with that of the majority of the Afghan population during this period, leaving the narrative confined to the actions and experiences of the local political elite.

In Spirit Island It is also clear that the game’s narrative goal is to recreate the processes of colonization, although in a fantasy setting, with the explicit design objective

of producing a game that represents these processes from the perspective of those who were victimized by them, giving players the opportunity to fight back against those same processes. However, the game's narrative, alongside its mechanics, ends up sidelining the actions of the native people in favor of the game's more fantastical elements - the spirits. The "Dahan" have no real agency in the current version of the game, as they are weakened by disease, and when they did have narrative agency, in an earlier stage, they acted in a manner similar to that of the colonizers now (this is part of the game's lore, described in the rulebook). The narrative that emerges is one of colonialism as primarily a force that destroys the natural land, and only secondarily as a destroyer of local cultures and exploiter of their people.

As games continue to evolve as an artistic medium, the challenge to convey narrative through rules, components and illustrations will continue to be posed to aspiring designers. Even with the depoliticization attempts inherent in "geek" culture (Robinson, 2016), the tendency that can be observed in the medium is one of increased narrative focus and increased expectation of a match between rules and their setting. This goes alongside the apparent continuous shift of the perception of games from a product to an art form: as game's production and distribution methods continue to evolve, placing more autonomy in the designers' hands, who are increasingly considered as authors.

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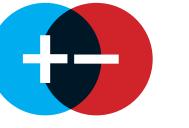
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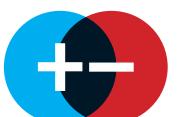
1. Own translation

2. Race games refer to games using a track of spaces in which the players compete with the goal of reaching the final square first, not to race as a social construction.

3. In the Portuguese edition, the game is called Os Descobridores de Catan (The discoverers of Catan) instead of the original settlers. We imagine this is an attempt to adapt the game to the Portuguese market whose colonial imagination is more closely associated with discovery than settling – the period is commonly referred as "os descobrimentos" (the discoveries).



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DESIGNING AT THE EDGE:
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THE PROSTHETIC IMAGINATION:
LIMITS, POLARITIES, THRESHOLDS,
AND THE CULTURAL MEANING
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Olga Noronha
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Olga Noronha

OLGA NORONHA was born in Porto in 1990. She lives in Portugal and works between London, Portugal, and Italy. Olga Noronha is a visual artist and researcher in the fields of Art, Science, and Design. She holds a PhD and an MA in Design Research from Goldsmiths College, and initially graduated in Jewellery Design at Central Saint Martins. Currently, as a guest lecturer and speaker, she is connected to several national and international academic institutions, such as the Royal College of Arts (UK), Central Saint Martins (UK), Winthrop University (USA), UCA Rochester (UK), POLIMI (IT), ESAD (PT), among others. Her work and research focuses on creating pieces that combine the robustness of the mechanical and technological with the elegance and delicacy of matter itself. Olga Noronha argues that each work should convey more than just the simple idea of an accessory/ornament, with her practice being mostly contextualized as sculptural work that reconfigures and reimagines the human body, in the form of an autonomous, concrete "object" that lives beyond the (implicit) presence of the body. She is currently Principal Researcher and Coordinator of the project Design of bone fracture fixation plates in filigree, funded by the Portuguese Foundation for Science and Technology (FCT). Her work moves between distinct areas, characterized by contrasts and dichotomies, aiming to merge scientific pragmatism with the conceptualism of Art, notably in the project Medically Prescribed Jewellery®, which she has been developing since 2011. With multiple national and international exhibitions and publications in the fields of Art, Design, and Science, her work is

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THINKING WITH THE HANDS:
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CULTURAL METAMORPHOSIS:
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RENA PAPASPYROU:
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STRATIS PANTAZIS holds an MA in Museum Studies from Seton Hall University (USA) and a PhD in Art History from the University of Manchester (UK). His doctoral dissertation concentrates on the work of Jannis Kounellis. He has curated the following exhibitions in Greece, Cyprus, Austria, Bulgaria and the United States. He teaches Art History courses at the Cyprus University of Technology in Limassol. He has published articles, reviews and interviews in various magazines and newspapers such as Nka: Journal of Contemporary African Art (USA), Flux Magazine, Art History Supplement (UK), Art History Magazine, The Art News, The Art Newspaper Greece, Culture Now and Avgi (Greece). He is a member of AICA International, AICA HELLAS and the Association of Greek Art Historians.

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