Ambiguous Representations: Drawing and Its Potential Misinterpretations

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Abstract

Drawing, understood as a language, is inherently ambiguous: every mark can be misinterpreted, reinterpreted, or manipulated. Starting from Paul Ricoeur's reflection on the link between interpretation and the possibility of misunderstanding, this essay investigates architectural drawing as a non-neutral device, shaped by cultural conventions, biases, and social contexts. Through the analysis of historical examples –from the accusations of espionage against Aleksandr Alekhine, triggered by the misunderstanding of chess score sheets, to the controversial reception of Frank Lloyd Wright's Masieri Memorial project– it highlights how drawing can become a tool for ideological misinterpretation. A close reading of Jean-Jacques Lequeu's drawings further reveals how seemingly geometric inaccuracies disclose a more complex rhetorical and symbolic intention. The article proposes a classification of ambiguities into four categories: technical, epistemic, rhetorical, and perceptual. The latter is illustrated through the phenomenon of multistable images (Kippbilder), which underline the inherent instability of human perception. In conclusion, the essay argues that the ambiguity of drawing, far from being a mere source of error, constitutes a vital element of its creative and hermeneutic potential, encouraging a more critical and conscious reading of architectural representation.

Keywords: architectural drawing, misunderstanding, graphic ambiguity, Jean-Jacques Lequeu, F.Ll. Wright.

Introduction

"There is hermeneutics where there is misunderstanding". [Ricoeur 1981, p. 83].

Paul Ricoeur's assertion opens up a crucial consideration involving every form of language: wherever meaning can be misunderstood, interpretation takes root.
If drawing is a language, as semiotic tradition invites us to consider, then drawing is always a challenge: the line seeks its meaning, and the act of tracing it interrogates the world, aiming to define reality –or the idea of it, shaped through signs– by extracting significant elements; and within this perpetual process of 'artificial signification', lie both the opportunities and the criticalities that any idiom inherently carries. Thus, the 'graphic language' is never neutral either and, in its ongoing aspiration towards iconicity, it lives through interpretive ambiguities dependent on cultural conventions, social contexts, and sometimes, educational biases. In architectural drawing, these ambiguities manifest both in the act of design and in that of communication, leaving space for subjective interpretations and misunderstandings that can indeed generate misreadings, but may also enrich the creative process.
Acknowledging that the multidisciplinary nature of the theme would require a much broader scope, this paper aims to highlight the intrinsic 'fragility' of the graphic sign –linked precisely to its polysemic nature– which risks at times becoming a communicative 'trap', but at the same time –or so it is believed– can serve as fertile ground

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for research and experimentation, related to issues of drawing, representation, and the polysemic character of any activity of image reading.
Within the field of architecture, representation is the privileged tool to communicate, design, and interpret built space. Plans, sections, and modern digital elaborations are mediums that fulfill the task of translating three-dimensional reality (or the multiplicity of dimensions conceived by the mind) into two-dimensional forms.
While on the one hand, architectural drawing aims to reduce ambiguity by making the design intent as clear as possible, on the other hand, it often fails (or sometimes refuses) to eliminate areas of uncertainty, which can generate 'special effects' or illusory perceptions.
The history of art and architecture abounds with examples that critically and consciously exploit visual ambiguities, from Giovanni Battista Piranesi's *Carceri* –impossible spaces challenging perspectival logic– to Andrea Pozzo's baroque illusions, and to the 'multistable' deceptions of M.C. Escher (fig. 1). In all these cases, ambiguity does not lead to 'error' but constitutes an intrinsic component of visual experimentation. When encountering architecture, ambiguity may open new horizons for the interpretation and understanding of space.
For practical reasons, an attempt will be made to classify the ambiguities, so as to frame more organically the examples discussed later. Obviously, one must consider both cognitive and socio-cultural aspects to highlight how the nature of misunderstanding is far from being merely a source of error and instead constitutes fertile ground for exploring the complexities of graphic language capable of triggering hermeneutical processes.
One could first identify a type of ambiguity within specialist contexts, which we might refer to with the term 'technical ambiguity'.
This arises from the use of symbols, graphic conventions, or interpretive codes comprehensible only to insiders or to those with specific training, such as diagrams of electrical or mechanical systems, which are immediately legible to specialized technicians, but may appear indecipherable and ambiguous to an external observer lacking specific technical knowledge.
This form of ambiguity, well-illustrated by Nelson Goodman in *Languages of Art* [1968], emphasizes that ambiguity does not necessarily stem from the form of the sign itself, but rather from the absence of a shared and commonly understood interpretative code. The limit of

Fig. 1. M.C. Escher, Belvedere, 1958. lithograph, 46.2 × 29.5 cm.

image translation thus lies in the polymorphic essence of the interpretant, so broad as to be "suitable for any and no use" [Eco 2021, p. 125], a characteristic common to every category. This is inevitable, as drawing always –though not unequivocally– means communicating, and, as we know, "every communication always involves 'making concessions' to the notions held by the recipient" [Gombrich 1959, p. 278].
A second type, which we might explicitly associate with 'abuses of knowledge', can be called 'catachrestic ambiguity'. This refers to ambiguities stemming from historical, cultural, or ideological biases that condition the interpretative process independently of the intrinsic qualities of the drawing itself. Here, the drawing becomes a 'victim' of prejudiced, uninformed, or instrumental readings. When the observer (or the collective) projects fears, ideological resistance, or partisanship onto the graphic sign, the result is a misinterpretation that effectively severs the graphic work from the author's original intentions.
A last category concerns rhetorical or intentional ambiguity, deliberately employed by the author of the drawing for expressive, symbolic, or persuasive purposes. This form of ambiguity frequently emerges in architectural treatises and general drawing literature, where deliberately enigmatic and allegorical elements foster multiple interpretative readings. For instance, in the style of Athanasius Kircher's *Mundus Subterraneus* [1665], esoteric symbols, mythological figures, and ambiguous geometric schemes are combined to stimulate interpretations on multiple levels. In this case, 'visual ambiguity' overlaps with 'communicative strategy', becoming a medium to convey meanings that go beyond immediate description [Summers 2003].
A third category –assuming this tentative classification to be acceptable– could be described as perceptual-illusionistic ambiguity. In such cases, ambiguity resides in the graphic configuration itself, which induces the observer to perceive multiple and often contradictory visual experiences. These visual ambiguities are clearly manifested in Renaissance and Baroque perspectival illusions, such as the architectural *trompe-l'œil* by Giulio Romano, or in the famous anamorphoses by Hans Holbein, where an image appears completely different depending on the viewer's position.
This hypothetical categorization, which is hoped to be useful for reading the perceptual dynamics of the subsequent cases, should not be understood as a rigid separation: the different categories represent complementary dimensions of a single interpretative process.
The interpretative key offered by Walter Benjamin [1920] becomes particularly useful to understand that every form of representation –graphic, linguistic, or artistic– inevitably preserves an essential portion of ambiguity and untranslatability. Such ambiguity constitutes a potential for continuous reinterpretation and resignification, endowing the act of drawing with an inexhaustible and vital interpretative richness over time.

Spies, monsters, and the coercion of the sign: two case studies

An emblematic example –concerning the first two categories previously outlined– of the ambiguous and, at times, 'coercive' power of the graphic sign is offered by a curious episode linked to the history of chess: the Meisterturnier [1] held in Mannheim in 1914, which was abruptly interrupted by the outbreak of the First World War. The future fourth world champion, Aleksandr Alekhine, saw his prospects seriously endangered at the time, due to misinterpreted signs. Indeed, after spending a night in detention –because of a photograph portraying him in a school uniform mistaken for military attire– Alekhine and other Russian players registered for the tournament were authorized to move temporarily to Baden-Baden while awaiting repatriation. However, during the journey, the attention of a railway inspector was drawn to the incomprehensible signs and diagrams filling the pockets of the group of passengers: chess score sheets, which, to those unfamiliar with the 'noble game', appeared too much like encrypted spy communications. Immediately, the train was diverted to Rastatt, under the pretext of a transfer, where the local military authorities, already alerted, awaited the group of chess players.
"As soon as we stepped off the carriage, we were surrounded by so many soldiers that it seemed almost an entire company, all heavily armed, and we were arrested. In the station depot, they meticulously searched us and our belongings, and with a sense of triumph, they discovered the game score sheets, which the zealous bloodhounds mistook for evident coded messages meant for espionage communication" [2], recounts

Fedor Bogatyrčuk, another chess player from the same unfortunate group, all victims of misinterpretation.
It seems implausible that none of the authorities understood the true nature of the materials; yet, likely in the interest of preserving the reputation of the military corps –"to save face" [Kasparov 2003, p. 428]– and given the 'overwhelming' evidence committed to paper, the 'investigations' nonetheless led to the arrest of all players. For Alekhine, released after a few weeks along with a few others, the incident added another episode to his already legendary biography. However, not everyone's story [3] had a happy ending.
The sheets wrongly interpreted from the game forms activated the cognitive biases that process graphic-textual language, whether consciously or not, placing the power of the sign in the uncomfortable position of being simultaneously both 'victim and perpetrator' of erroneous interpretation. This clearly illustrates that critical threshold where the links between hermeneutics and the true form [4] of reality are severed by ideologies and prejudices inherent to the socio-cultural context.
If, as Pareyson reminds us, "undoubtedly, interpretation is knowledge in fact, for human beings, there is no knowledge except as interpretation […] to interpret is to grasp, to capture, to seize, to penetrate" [Pareyson 1974, p. 180], it is equally true that the power, sometimes 'coercive', of drawing is such that it can upend even the most favored destiny.
A similar hermeneutical system of formative prejudices brings us to Venice in the 1950s, specifically in 1951, when the young architect Angelo Masieri, accompanied by his wife Savina Rizzi, met Frank Lloyd Wright, who had been invited to the *Serenissima* to receive an honorary degree from the Istituto Universitario di Architettura. On that occasion, the couple from Udine proposed that the master design their Venetian residence, on a triangular lot facing the Grand Canal and the Rio Novo.
The vicissitudes surrounding the Memorial project [5] are well known and studied; however, of particular interest here is the central role that certain drawings played in determining the fate of the building's realization. Specifically, a perspective rendering (fig. 2) –which may have been deliberately 'inaccurate' to emphasize the building's importance– depicted the new structure as being as tall as the adjacent Palazzo Balbi, whereas, as it has been demonstrated [Sdegno 2011], its roof would not even have surpassed the noble floor of the Renaissance palace. Thus, the drawing provided the Venetian public with further fuel to inflame an already lively controversy.
The dissemination of the project's graphics shifted the dispute into the Italian press, which almost daily attacked the memorial, considering the project inappropriate and scandalous.
The controversy was further fueled by a series of inaccurate descriptions, photomontages, and falsified drawings that continued to reinterpret Wright's idea in a variety of styles, such that "shameless criticism arose everywhere" regarding the compositional aspect of the structure, its lack of dialogue with the context, and even the inadequacy of the proposed materials.
One particularly emblematic caption appeared anonymously in the weekly Candido, beneath Wright's now infamous drawing: "This is the famous 'monster house' that the American architect Wright would like to build in Venice: a kind of compromise between a bunker, a pharaonic mausoleum, and the summer residence of a Californian merchant. To better understand the situation, it should also be noted that the principal building materials would be crystal, stainless steel, and Verona stone, and that the structure would rise only a few meters from Ca' Foscari, dominating a key stretch of the Grand Canal. The worst part is that the city authorities, extremely sensitive to the honor of hosting Wright's architectural hallucinations, seem willing to authorize its construction" [6].
It seems obvious that the diffusion of perspective merely acted as an amplifier in an already tense situation; once again, the paranoid delirium of the sign triumphed over reason.
As demonstrated [7], Wright's project was significantly more modest in scale; yet the memorial was never built. Once again, the 'coercive' power of a graphic sign, amplified by a polemical context, proved decisive in transforming a visionary idea into a public scandal.
The misinterpretation of graphic works, in both cases, is inevitably tied to the role played by contextual and situational factors –both of historical-ideological and physical-social nature– which can deeply affect the perception of the subject by the interpreter. These are the same cognitive biases that often lead to judgment errors, constituting real 'thought shortcuts' from which rapid, or 'convenient', beliefs and decisions are derived.
In the analyzed examples, the triggering mechanism is common and relates to the transition in the ownership

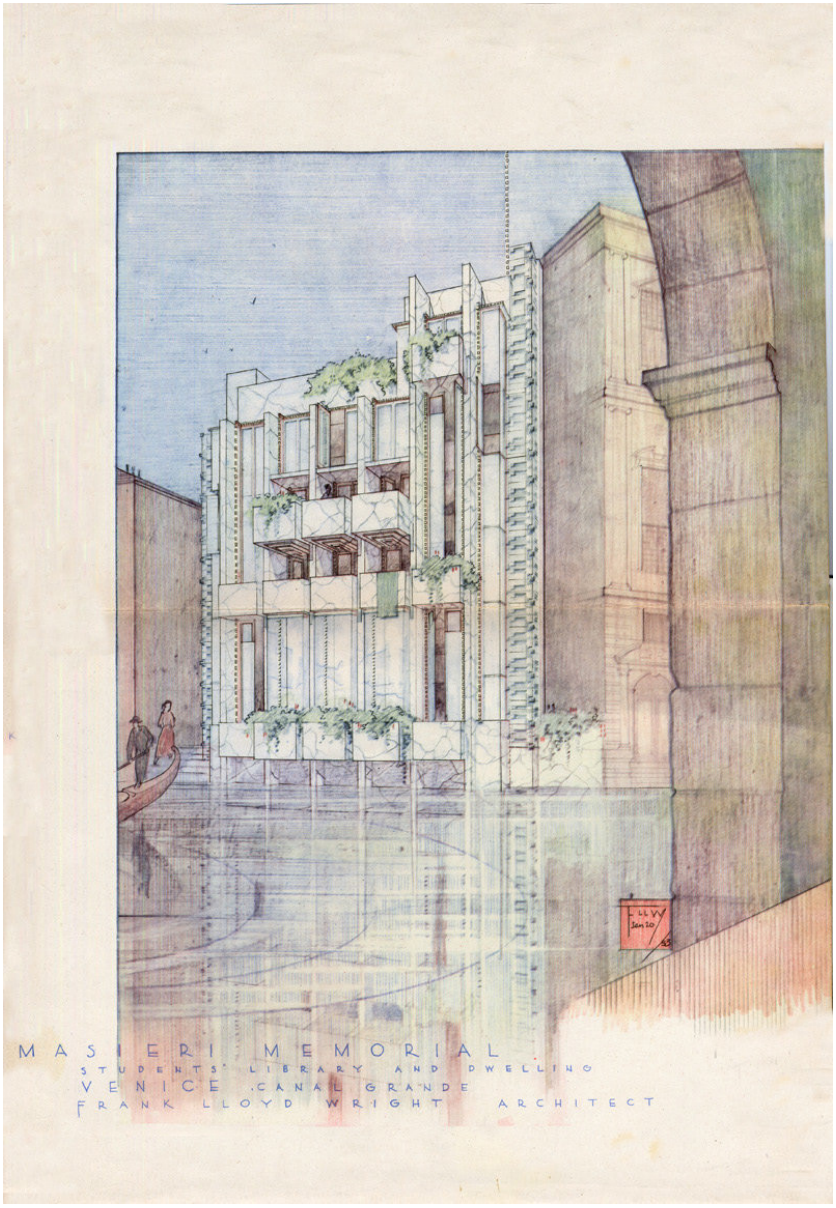


Fig. 2. F.Ll. Wright, Perspective of the Masieri Memorial, Venice 1953 (The Frank Lloyd Wright Foundation).

of the represented object: both the soldiers' searches for the chess players and the premature dissemination of Wright's drawings by the press highlight this fracture. The swift transition from the merely instrumental and private nature of the elaborations –as are all design drawings and chess notations (fig.3)– to their extraction "from their practical (heuristic) framework and their paratexts" into "an entirely public domain" [Gay 2020, p. 66] becomes apparent.
The episodes of misunderstanding outlined above demonstrate how drawing effectively triggers cognitive biases and 'thought shortcuts' [8], which prompt hasty judgments.
The so-called framing effect reveals how the frame in which a problem is presented can strongly influence the way we evaluate it.
An architectural prospectus, a competition panel, or a specialized notation thus becomes a genuine 'interpretive trap' if the observer lacks the necessary tools to decode the language or conversely, if they approach it with pre-formed prejudices. This dynamic can lead to 'convenient', rapid, but potentially fallacious choices.

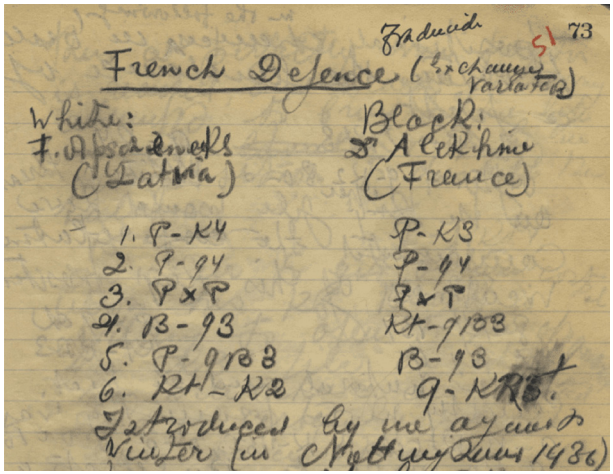


Fig. 3. A. Alekhine, Commentary on the game against Latvian master Fricis Apsenieks, played during the eighth round of the Chess Olympiad in Buenos Aires, 9 September 1939.

Kippbilder: ambiguity, reversibility, and multi-stability

Even broader, yet more readily delineable, is the category related to visual perception, understood not as a mere faithful transposition of sensory experience, but rather as a phenomenon "derived from the cognitive functions of the mind, namely from the sensory perception of the external world" [Arnheim 1954, p. 176]. It thus constitutes a dynamic process, one that may lead to misunderstanding and to unstable interpretations.
Pertaining to this typology are the so-called '*Kippbilder*', or multistable or reversible images, in which the same graphic figure, observed without any material change, triggers sudden shifts from one perceptual configuration to another.
This effect arises from the way our brain selects, connects, and interprets visual stimuli, often leading to mistaken evaluations that highlight the subtle boundary between perception and misinterpretation (fig. 4).
In these images, the shift between different 'readings' is sometimes triggered by contours that, as in the famous *Rubin vase* (fig. 5), can be seen simultaneously as a vase or as two human profiles. Other times, the recall of familiar forms intervenes. For example, when the same

line is perceived either as a rabbit's snout or as a duck's beak (fig. 6). These representations reveal our tendency to recognize faces and bodies from minimal clues; it is enough to think of how, in an otherwise innocuous landscape, the traits of a face may suddenly appear once discovered, leaving us suspended between observing a human silhouette or a twisted tree.
Such ambiguities demonstrate how mental processes can deceive us or lead us into alternative interpretations, emphasizing the kind of 'misinterpretation' to which we are constantly exposed, even in everyday life. The phenomenon also emerges on the perspectival level: for instance, when a cube drawn with transparent lines abruptly inverts its depth direction, causing our perception to oscillate between two opposing spatial configurations. It constitutes an error of reading, but at the same time it serves as evidence of a formidable creative potential with which we engage, stimulating the active function of seeing, wherein the brain strives to extract a unified sense from uncertain traces.
Researchers have sought to explain this perceptual multi-stability both as the result of physiological processes –where the neurons responsible for one 'solution' become exhausted, favoring the alternative one– and because of cognitive factors involving memory, selective attention, and prior knowledge [9]. Experimental evidence, however, suggests an intricate interplay between the two levels: low-level neural circuits work in tandem with higher-order cognitive evaluations, and in some cases, voluntary attempts to cling to one of the two interpretations fail, as it takes very little for perception to 'flip' to the opposite reading.
This mechanism highlights how the mind is predisposed to filling informational gaps and to invent ever-new interpretations. Such occurrences happen not only when confronted with deceptive drawings but also in real-life situations where the lack of a decisive clue can generate misunderstandings or even illusions of reality.
Indeed, *Kippbilder* reminds us that every act of perception is potentially exposed to misunderstanding. The certainty that what we see corresponds unequivocally to what exists can vanish, with a mere shift in perspective or concentration. Nonetheless, while most everyday experiences provide a sufficiently clear context to prevent dangerous reversals of meaning, when faced with an ambiguous stimulus, our sensitivity to detail transforms into fertile ground for misunderstandings,

Fig. 4. W. E. Hill, My Wife and My Mother-in-Law, Puck, November 6, 1915.

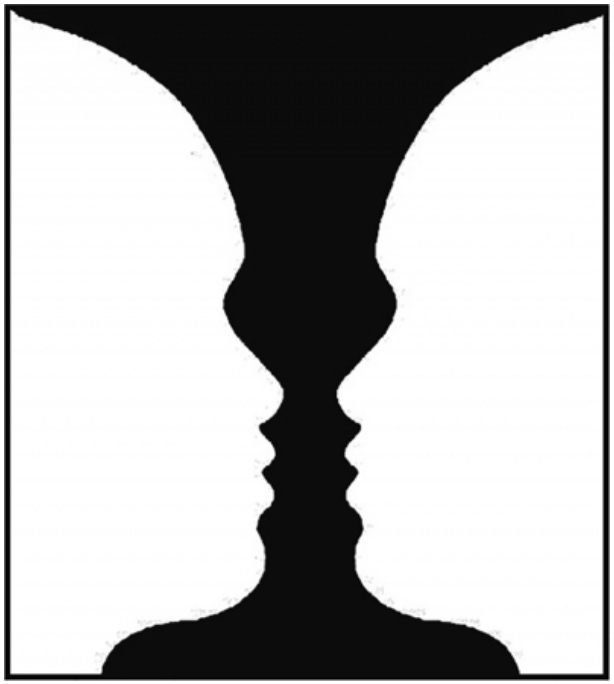


Fig. 5. E. Rubin, Rubin's vase, 1915 ca.

Fig. 6. J. Jastrow, Duck-rabbit illusion, Fliegende Blätter, 23 October 1892.

double meanings, and rival interpretations, in a fascinating intertwining of perceptual science and the narrative of how –and to what extent– the mind can deceive itself.

Duality of shadow: a single drawing

Within the undoubtedly vast and inexhaustible context of the fourth category of ambiguity –the 'rhetorical-intentional'– the following example is proposed: a fragment of a broader study currently being conducted by the present author, dedicated to the intense eighteenth-century debate on the issues of shadow in architectural representation. The example is based on a 'close' analysis [10] of a drawing by Jean-Jacques Lequeu (fig. 7).
The drawing constitutes the second frontispiece of his most famous and studied work, *Architecture Civile* [1777-1825], and it presents itself as an exhaustive compendium on the theory of shadows, seemingly useful to be shown to students of art and architecture schools.
Within a rectangular frame, it contains an additional octagonal border that delimits a sort of imaginary plafond, animated solely by a luminous sphere, set against a clear sky devoid of figures. The atmosphere –sacred, much like that of certain representations of the *Assumption*– is entirely devoid of human presence [11] and remains suspended in an unreal space. The central sphere is the only source of light and is conceived as both 'one and multiple' at the same time: it could be "the sun, the moon, a torch, or a pyre" [Lequeu 1777–1825, pl. 2], influencing, depending on its dimension, the shadows of five solids arranged around the edges of the composition. In the marginal note, it is specified that all the shadows in the work are generated "by a ray of light falling at 45 degrees on their horizontal or vertical faces" [Lequeu, *ibidem*].
On paper, therefore, the author appears to follow a coherent and methodical approach, combined with an extraordinary ability to graphically render the density of the atmosphere and the materiality of surfaces.

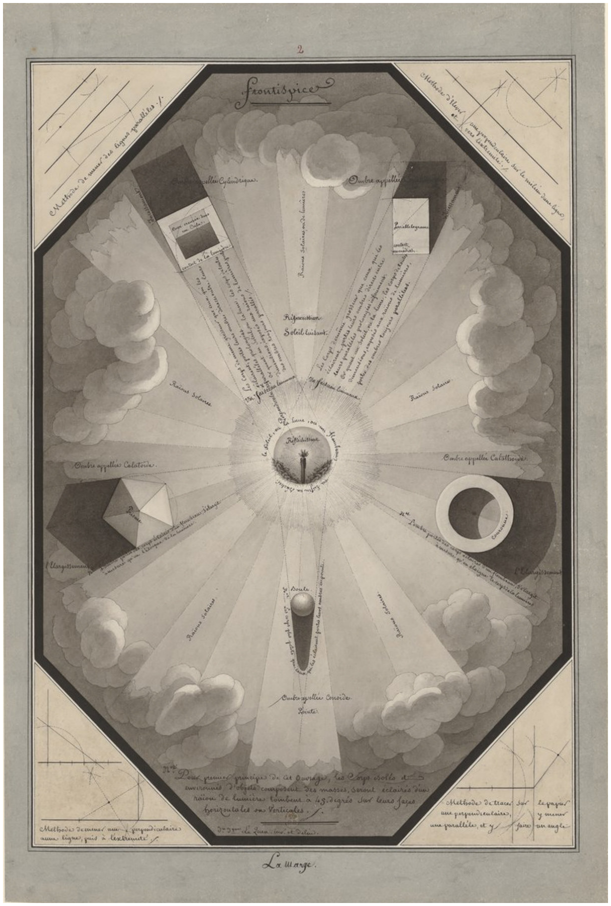


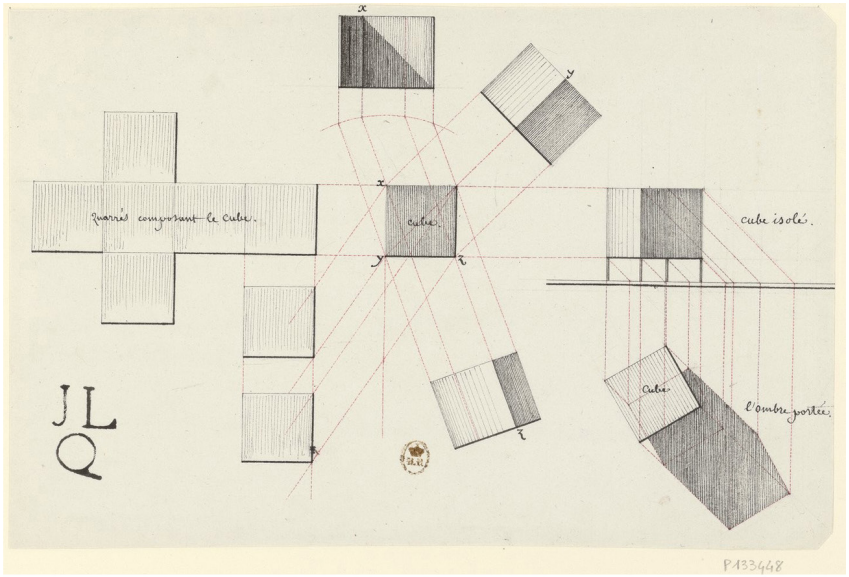
Fig. 7. J.-J. Lequeu, Frontispiece of the Architecture Civile [Lequeu 1777-1825, pl. 2], undated. Pencil, pen, monochromatic ink wash, and watercolor, 51.5 × 34.5 cm (BnF, Est Réserve FOL-HA-80 (2)).

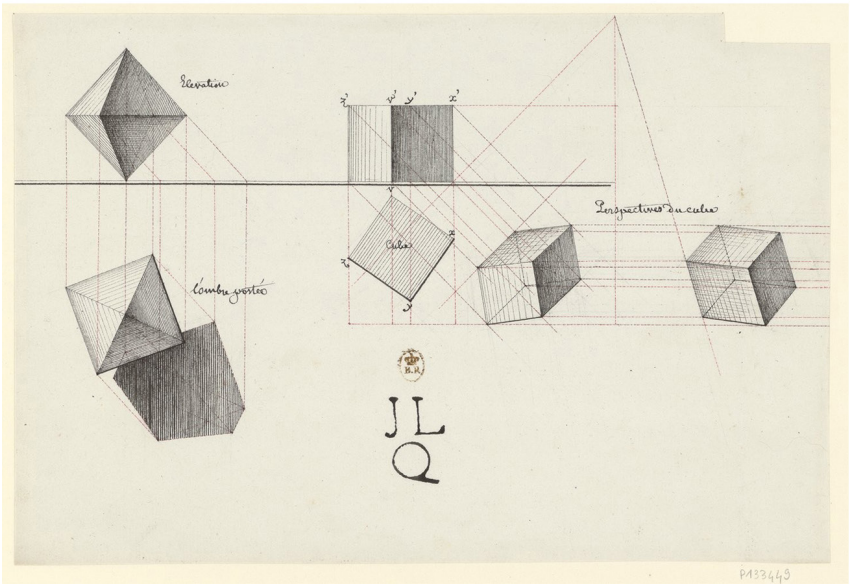
Yet, upon closer observation, the image reveals itself to be full of geometric inconsistencies.
It is precisely in this tension between theoretical rigor and practical errors –between didactic clarity and potential interpretative misunderstandings– that the communicative strength of Lequeu's drawing resides.
The skillful use of *lavis* and the compositional balance mask, even to the attentive eye, every construction defect, highlighting how drawing, as a language, is never completely univocal.
Unlike his more famous colleague Étienne-Louis Boullée, who experimented with colossal architectures dramatized by stark contrasts of black and white to explore the behavior of light at different times of day, Lequeu's light remains unchanging.
However, it always appears surreal, with colour serving as a "carrier of the range of sensations that architecture aims to express" [Boeri 2018, p. 86], and where the different consistencies of materials and the atmospheric mass concentration are always perceptible.
Much like an inverted compass rose, from the center of the illuminated sphere propagate "solar rays or rays of light, reflections of the shining sun" [Lequeu 1777-1825, pl. 2], which, refracting through the density of the surrounding air –represented by clouds shaded according to their orientation– divide the interior of the octagon into twenty-two irregular sections, filled with alternating washes of the same gray-brown tone. Lequeu continuously draws from a vast repertoire of calembours, numerical and symbolic references, embedding an elaborate metaphorical apparatus into his plates. Many studies have explored these aspects [12], highlighting how the architect from Rouen often alludes to mystical and philosophical conceptions, ranging from Gnosticism to the Kabbalah.
In particular, the number twenty-two –the irregular segmentation of the luminous rays– recalls the forces responsible for the creation of the universe in various religious and philosophical traditions; twenty-two is a palindromic number, and its square (484) retains this same property. The presence of five solids also refers to the 'number of individuality and human will' [Trinajstić 1993, p. 228.], while the central octagon, a symbol of cosmic balance, serves as a conceptual container for these multiple allegories.
Similarly, in other plates by Lequeu –such as the *Hall of States of the Palais National* or plate 33 of *Architecture Civile*– numerical-linguistic references intertwine with

Fig.8, J.-J. Lequeu, Ordre sîmbolique [sic], du Temple de Mémoire d'un Palais National, Paris 1789. Pencil, pen, monochromatic ink wash, and watercolor, 46,8 x 31 cm (BnF, Est Réserve HA-80 (B, 6)).

deliberately ambiguous representations: for instance, the Ionic order transformed into a 'courtier's wig' (fig. 8) or the figure 100 ('*cent-sang-sangue*') alluding to the Passion of Christ and the author's own personal biography [13]. Within this conceptualization of 'unlimited semiosis', it appears that no choice manifests randomly. The luminous rays strike five solids (the number of individuality and human will), enclosed within the octagonal space (cosmic balance), leading to further reflections. As Franca Trubiano [1995] has emphasized in her study on the 'orthography' of the Rouen draughtsman, the Latin derivation of the term *fasceau*, from *fascis*, perfectly fits this symbolic framework. Among others: the bundles of twigs, wood, and straw traditionally carried by the Virgin; or the *fasces lictoriæ* of Ancient Rome –a bundle of rods tied around an axe, carried by lictors as a symbol of authority over life and death– which, as it is well known, was later adopted by the French Revolution as a "proper symbol of aspiration to national unity and freedom" [De Turris 2006, p. 17].

The connection is, in fact, not implausible. The fasces motif appears in Lequeu's *Ornements d'Italie* plates –of unmistakable Piranesian inspiration– held outside the donation to the Bibliothèque Nationale, and also within *Architecture Civile*: as an ornament surmounting "one of the two monuments to be erected at the center of the Star of the astonishing Royal Road"; in the dedicatory epigraph –in a language that seems unknown– placed atop the grand "triumphal arch erected in honor of the brave patriots"; and again as a decoration flanking the staircase of the "tribune for speeches in the round hall of the marronniers" [Lequeu 1777-1825, p. 80], highlighting the uncompromising attitude toward those harboring hostile sentiments toward the republic. To avoid falling into enthusiastic and misleading associations between the traits and the shape of certain elements drawn in the form of bundles, George Hersey's reflections prove particularly useful. In his study on the language of classical architecture [Hersey 1998], he links the symbolic-practical meaning of these decorative elements to the shadows cast by architectural orders. Specifically, to the *rabdoi* (ῥάβδος), the *striae* (flutings), whose etymology refers to magic rods, spear shafts, Hermes' caduceus, or the vertical folds of a Greek chiton, but whose practical purpose was to cast shadow along the columns. Similarly, the lateral frames of doorways or windows, also called '*fascia*', serve to frame openings by defining the shadow





Figs. 9-10.J.-J. Lequeu; Quarrès composant le cube, L'ombre portée (in alto),Perspectives du cube (in basso), s.d., Bibliothèque Nationale de France FOL-IA-36.

profile between solids and voids, as does the flat fascia managing the length of the architrave –and analogously for other moldings such as the scotia– the symbolic apparatus of individual elements thus leads back to the alternation of light and shadow, intrinsic to the very etymology of the term *fasceau*.
On the margins of the plate, outside the octagonal space, Lequeu illustrates the 'indispensable constructions' for creating shadows: systems for drawing parallel lines, perpendiculars, and angles. This attempt to confer a scientific and methodological aura, typical of an era when geometry was imposing itself as the principal discipline, nevertheless clashes with the numerous inconsistencies that emerge when analyzing the central composition.
Using traditional drawing tools –or even through simple close observation– one discovers that the hollow solids (the cube and the cylindrical crown) show poorly proportioned shadows, as if the light source were simultaneously shifting within the same volume. Even more glaring are the errors in the projection of the spheres and the pyramid's shadows, where the basic rules of projective geometry are not respected.
These inaccuracies are not due to a lack of knowledge: elsewhere, Lequeu demonstrates his ability to correctly construct the shadows of simple solids; see, for example, certain geometric exercises from the Lequeu bequest (figs. 9-10). Thus, the presence of such evident flaws, precisely in the frontispiece of a work that is intended, at least in part, as a didactic text on light behavior, appears even more striking.
Lequeu's geometric inconsistencies can be contextualized within the Parisian society of the late eighteenth century, a society brimming with ferment and controversy: interest in the 'new science of geometry' coexisted with revolutionary aspirations, the symbolic legacy of Antiquity, and Enlightenment experimentation on perception and sensitivity. In his attempts to gain recognition, Lequeu draws from various bibliographic and figurative sources: from *Ornements d'Italie* to the plates of Troili, to Alain Manesson Mallet's *La Géométrie* [14] (fig. 11), and, more distantly, to Leonardo da Vinci.
In the frontispiece, the Rouen architect seems to intend to condense both the scientific dimension of shadow (the marginal constructions and Euclidean-derived perspective) and its symbolic and mystical dimension (the luminous sphere, the numerical references, the meticulous chiaroscuro). The result is a drawing in perfect

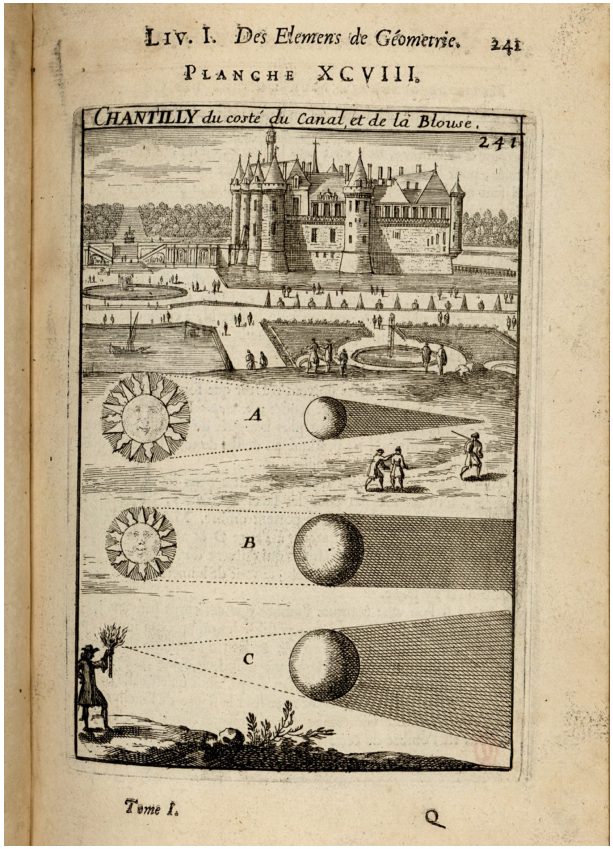


Fig. 11. A. Manesson Mallet, Des Elemens du Géométrie, Chantilly du costé du Canal et de la Blouse [Manesson Mallet 1702, La Géométrie pratique, tomo 1, p. 241, pl. 98].

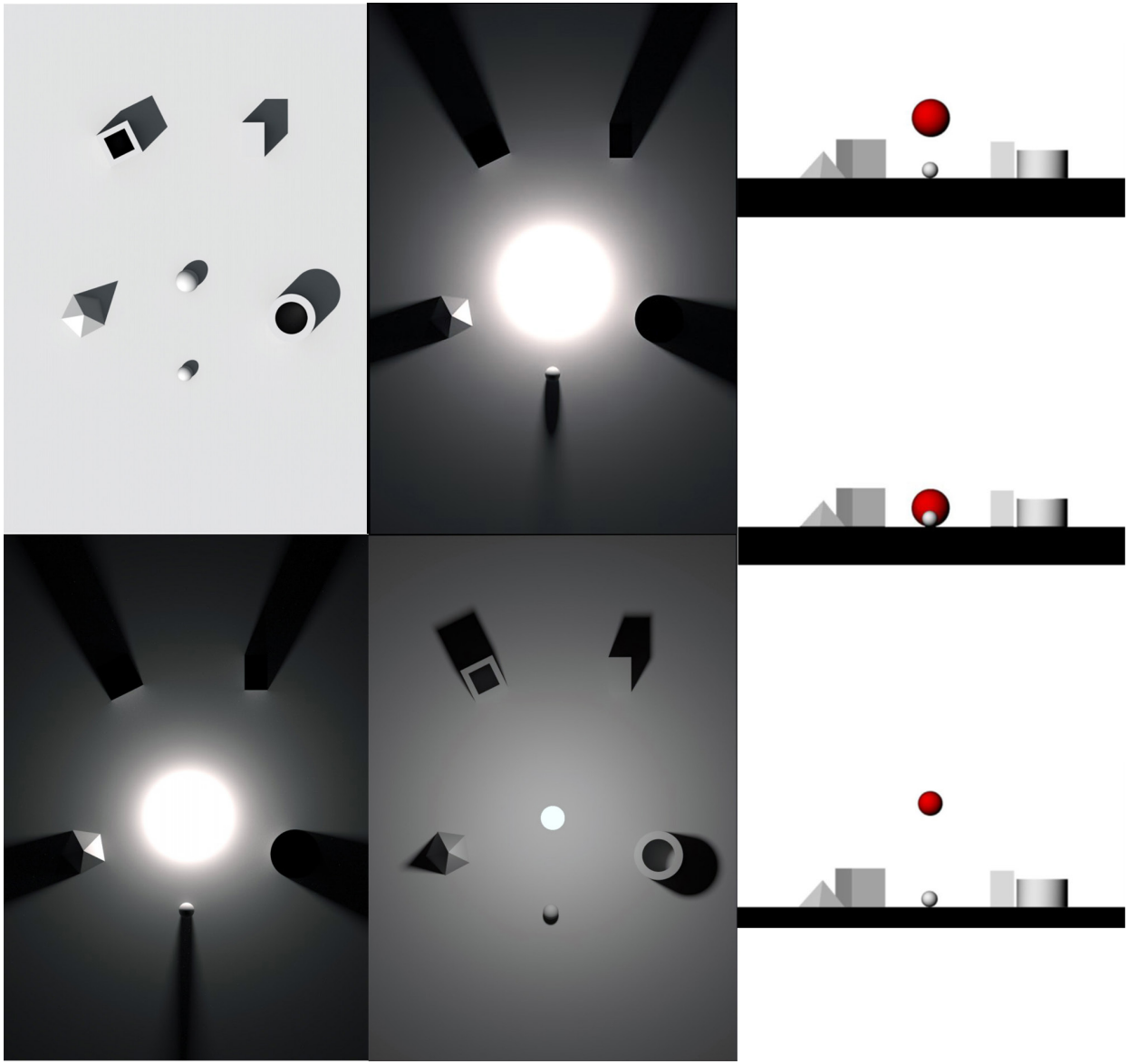


Fig. 12. Redrawing of the Frontispiece and lighting tests in a virtual environment, illuminated, from left to right, respectively: (1) by sunlight positioned at 45°, (2) by artificial light placed on the plane, (3) by artificial light positioned at a height equal to twice the sphere's diameter, and at a height equal to five times the sphere's diameter (elab. by Felice Romano).

equilibrium between a 'pure vision' of the world and the desire to elevate the tools of representation as indispensable means to solve the dilemmas of modernity. Yet without a close analysis, the gap between the aspiration to exactness and the actual error becomes a source of inevitable misunderstanding.
The image stands as a powerful example of how drawing can serve as a complex language, where the didactic and symbolic dimensions intertwine until they become confused. Far from considering the flagrant construction errors as mere oversights, it is more productive to interpret them as part of an expressive system in which the author 'stages' both the ostentation of geometric competence and his own mystical and allegorical inclination.
Seen from afar, the plate appears as a model of precision and rationality, consistent with eighteenth-century faith in reason and the science of perspective. But, through a 'closer' analysis with the tools of graphic surveying, all the contradictions of an image emerge which, despite the rigid octagonal frame and marginal geometric constructions, reveals itself as deliberately 'shifted', rich in symbolic anachronisms and debatable interpretative choices.
Some tests, carried out with software simulating artificial light sources (fig. 12), further reinforced these initial intuitions. By positioning the light source at different heights, it becomes evident that in some cases –for instance, the crown– it is possible to approximate Lequeu's shadow rendering, whereas for solids like the pyramid and the small sphere, achieving such correspondence is impossible, due to the aforementioned issues regarding the flawed foundational construction.
Considering that the author's intention seems to have been to 'simulate', on a single sheet, all the different lighting conditions, this shortcoming becomes less forgivable.
Thus, architectural drawing reaffirms itself as a language where misunderstanding is always lurking, and where the skill of an author like Lequeu perhaps lies precisely in playing with such ambiguity. The eighteenth-century shadow, ultimately, is not solely a matter of geometric 'exactness', but also a rhetorical instrument of fascination, capable of conveying hidden truths and deliberately blurring the boundaries between science and art, rationality and imagination. It offers a lesson that, even today, invites us to view architectural drawing as an irreducibly complex medium, where analysis and interpretation merge into a practice of continuous shifts in meaning.

Conclusions: the dinosaur is still there

> "When he/she/it woke, the dinosaur was still there".
> [Monterroso 2013, p. 62]

These few words, made famous by Augusto Monterroso, are enough to evoke an entire universe of interpretations. Who is the protagonist? In what context did they fall asleep? Why do they awaken next to a dinosaur? Or perhaps, is it the dinosaur itself that dreamt?
The text does not clarify, leaving us with an extraordinarily brief story that nonetheless has the potential to contain infinite meanings. A kind of 'open text', whose enigmatic character constitutes the foundation of its lasting fascination.
Monterroso's very short sentence emblemizes the theme of interpretative ambiguity: eight words [15] that may allude to a dream, a political parable, a temporal paradox, or an ecological warning.
Similarly, drawing –especially in the architectural and design fields– can never be considered 'definitive' or univocal: every drawing, as we have summarily explored, contains an interpretive component that can both stimulate creativity and foster errors in reading. If, as previously stated, "to interpret is to grasp, to capture, to seize, to penetrate" [Pareyson 1954, p. 180], it becomes essential to cultivate a critical awareness, both for those who produce drawings and for those who interpret them.
In architectural practice, this means that the drafter must provide an explanatory framework (reference scales, notes, design purposes, constraints, stages of definition) to prevent major misunderstandings; conversely, the observer must exercise a minimum of 'critical distance' before drawing hasty conclusions: asking themselves for what purpose and at what project stage the drawing was created, which 'visual alphabet' was adopted, and to what context it belongs.
Architecture, by its very nature, oscillates between idea and concrete construction, and drawing acts as the medium between these two poles. Yet, like every form of translation, it is subject to choices, omissions, and multiple interpretations. Ambiguity is not merely a risk to be avoided but a structural element that can also serve as a bearer of new visions.
In an era dominated by 'automatically generated' images, where artificial intelligence can produce architectural

visualizations in mere moments from simple textual prompts, the role of the interpreter (architect, designer, critic, user) becomes even more crucial. Synthetic outputs are not free from conventions and schemes; rather, they may accumulate additional biases, generating new potential misunderstandings.
As demonstrated by the story of the chess players arrested for their 'coded messages' and the events surrounding Wright's Venetian project, visual and textual languages can generate unpredictable meanings. Cultural and social context exerts a decisive pressure on interpretation, which can either 'arrest' meaning or open it toward new ideas.
The metaphorical 'dinosaur' of misunderstanding is always present. The power of representation –surviving from hand-drawn sketches to digital elaborations– demands to be understood, discussed, and, if necessary, challenged. It is an endless game, where every sign may acquire, lose, or shift its meaning depending on who traces it and who reads it.
Thus, interpretation becomes a matter of 'continuing the game', with the awareness that every project drawing, every sketch, every render harbors within itself both a creative power and a potentially explosive force. And it is precisely this dialectic –between understanding and misunderstanding– that makes drawing (and architecture itself) a living, open, and generative process, in which error –or ambiguity– becomes a n opportunity to push the boundaries of knowledge even further.

Notes

[1] Masters' Tournament.

[2] Transcribed in Kasparov 2003, p. 427.

[3] For further details, see Kasparov 2003; Gillam 2014.

[4] Or rather, '*formatività*' (formative character), as conceived by the Piedmontese philosopher Luigi Pareyson in his Aesthetics. Theory of Formativity (1954): that "certain doing which, while doing, invents the way of doing" [Pareyson 1954, p. 181].

[5] This is how the building's intended use changed after the car accident of June 28, 1952, in which Angelo Masieri tragically lost his life. Masieri's widow proposed that the American master design a residence for the student community, to be donated by the family in his memory. See: Ainsworth 2005; Diéz Medina 2004; Sdegno 2011.

[6] The quoted caption is found in Guareschi, Minardi 1953, no. 50, p. 3.

[7] See the digital reconstructions in Sdegno 2011.

[8] These terms are a reference to the 'Prospect Theory', which was developed by Israeli psychologists Daniel Kahneman and Amos Tversky in 1979.

[9] See: Gregory 1997; Gombrich 1964.

[10] As close as the virtual rooms of the Gallica database may seem, where most of Lequeu's legacy is digitized in high resolution.

[11] It is worth noting that no 'living beings' are depicted in the plates of *Architecture Civile*, except for a couple of lovers portrayed in the act of sexual intercourse at the entrance of the *Garden of Delights*, Lequeu, A.C. Plate 72, fig. 172.

[12] For a comprehensive bibliography, see Romano 2021.

[13] On these aspects, see Duboÿ 1986.

[14] Found in Lequeu's library [Szambien 1990], but also clearly erroneous [Mallet 1702, p. 241].

[15] Seven words in its original version: "*Cuando despertó, el dinosaurio todavía estaba allí*".

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Reference List

Ainswort, T.M. (2005). *Modernism contested: Frank Lloyd Wright in Venice and the Masieri memorial debate*. PhD dissertation in Land–use Planning, Mangement and Design. Lubbock: Texas Tech University.

Arnheim, R. (2009). *Arte e percezione visiva*. Milano: Feltrinelli Editore. [First ed. *Art and visual perception. A psycohology of the creative eye*, Oakland 1954].

Benjamin, W. (2007). Il compito del traduttore. In *aut aut*, vol. 334, pp. 7-20. [Prima ed. Die Aufgabe des Übersetzers. In *Gesammelte Schriften*, vol. IV, Frankfurt 1921, pp. 9-21].

Boeri, E. (2018). *Jean-Jacques Lequeu. Un atlas de mémoires*. Paris: Édition des Cendres.

De Turris, G. (2006). *Esoterismo e fascismo. Storia, interpretazioni, documenti*. Roma: Edizioni Mediterranee.

Diéz Medina, C. (2004). El memorial Masieri en el Canal Grande. Cronica del proyecto/The Masieri memorial on the grand canal. Story of the project. In R. Moneo (a cura di). *Frank Lloyd Wright Memorial Masieri. Venecia 1953*, pp. 19-43. Madrid: Editorial Rueda.

Duboÿ, P. (1986). *Lequeu. An architectural enigma*. London: Thames and Hudson.

Eco, U. (1975). *Trattato di semiotica generale*. Milano: Bompiani.

Gay, F. (2020). *A ragion Veduta. Immaginazione progettuale, rappresentazione e morfologia degli artefatti*. Alghero: Publica.

Gillam, A.J. (2014). *Mannheim 1914 and the Interned Russians*. Nottingham: The Chess Player.

Goodman, N. (2017). *I linguaggi dell'arte*. Milano: Il saggiatore [First ed. *Languages of Art: An Approach to a Theory of Symbols*, Indianapolis 1968].
Gombrich, E.H. (1964). *Arte e Illusione*. Torino: Einaudi.

Gregory, R.L. (2000). Ambiguity of 'ambiguity'. In *Perception*, vol. 29, no. 10, pp. 1139-1142.

Guareschi, G.; Minardi, A. (13 December 1953). *Candido*, no. 50. Milano: Rizzoli.

Hersey, G. (1998). *The Lost Meaning of Architecture. Speculations on Ornament from Vitruvius to Venturi*. Cambridge: Mit press.

Kahneman, D., Tversky, A. (1979). Prospect Theory: An Analysis of Decision Under Risk. In *Econometrica*, vol. 47, no. 2, pp. 263-291.

Kasparov, G. (2003). *I miei grandi predecessori. Da Steinitz ad Alekhine*, vol. 1. Verona: Edizioni Ediscere.

Kircher, A. (1664-1678). *Mundus subterraneus, quo universae denique naturae divitiae*. Amsterdam: Jansson & Weyerstraet.

Lequeu, J.-J. (1777-1825). *Architecture civile de Jean Jacques Le Queu contenant nombre d'édifices de diférents peuples disséminés sur la terre, et au vu desquels sont les élémens des ombres, leurs éfets diférents produits par la lumière solaire ou de corps enflammés sur leurs plans, élévations et profils. On y a joint des notes et l'explication des termes consacrés à cet art. Tome 1er Donné par lui-même à l'honneur de la Bibliothèque Royale*. BNF RESERVE FOL-HA-80 (1)-(2).

Mallet, A.M. (1702). *La geometrie pratique divisée en quatre livres*. Paris: Anisson.

Monterroso, A. (2013). *Opere complete (e altri racconti)*. Roma: Omero.

Pareyson, L. (1954). *Estetica. Teoria della formatività*. Torino: Edizioni di filosofia.

Ricoeur, P. (1981). *Hermeneutics and the Human Sciences - Essays on Language, Action and Interpretation*. Edited, translated and introduced by J.B. Thompson. Cambridge: Cambridge University Press.

Romano, F. (2021). *Nouvelle Méthode di Jean-Jacques Lequeu. Ridisegno, analisi grafica e rilettura critica*. Milano: FrancoAngeli.

Sdegno, A. (2011). Il Masieri Memorial di F. Ll. Wright, 1953-54. In C. Mezzetti, M. Unali (a cura di). *Acqua e Architettura. Rappresentazioni*, pp. 391-399. Roma: Edizioni Kappa.

Summers, D. (2003). *Real Spaces: World Art History and the Rise of Western Modernism*. New York: Phaidon Press.

Trinajstić, N. (1993). The Magic of the Number Five. In *Croatica Chemica Acta*, Vol. 66, N. 1, pp. 227-254.

Trubiano, F. (1995). *Jean-Jacques Lequeu, Orthograph(i)e and the ritual drawing of l'Architecture Civile*. McGill School of Architecture, master's thesis in History and Theory Program, supervisor Prof. A. Perez-Gomez. Montreal: McGill University Libraries.

Szambien, W. (1990). L'inventaire après décès de Jean-Jacques Lequeu. In *Revue de l'art*, no. 90, pp. 104-107.