Magdalena Wąsowicz*

Strategy of the Void by the Office for Metropolitan Architecture in the light of Gestalt psychology

Introduction

Architects working in the Office for Metropolitan Architecture (OMA) in the Netherlands, established by Rem Koolhaas, Elia Zenghelis, Madelon Vriesendorp, and Zoe Zenghelis, search for design strategies dedicated to the modern society of mass consumption and fast communication [1, p. 812]. Michael Speaks describes the OMA designs as transforming cities using urban forces and flows rather than as visually illustrating or imitating them [2, p. 27]. Therefore, projects are perceived as the results of programming [3, p. 178]. It is also possible to demonstrate that postmodern formal tools play an important role in the design work of OMA studio founder Rem Koolhaas.

The architecture of OMA in the 1990s embodied the idea of postmodernism. David Harvey described postmodern architecture as follows: [it is] *fiction, fragmentation, collage, and eclecticism infused with a sense of ephemerality and chaos* [4, p. 117]. French philosopher Jacques Derrida, in turn, pointed out that collage is the basic form of postmodern discourse. He stated that cultural creators produce raw materials (fragments and elements), leaving it up to consumers to recombine these elements in any way they wish [4, p. 117].

A representation of the postmodern approach taken by Rem Koolhaas in his work in the 1990s is the publication *Content* [5]. It is a hybrid of a book and a magazine. The cover of this publication is flashy, covered with sensational slogans, and a collage composed of grotesque figures. The publication includes presentations of built and unbuilt OMA projects. The description and illustration of the buildings are the opposite of the established format of an architectural monograph. The projects are presented in the form of index cards called "Patents of Universal Modernization". The patents are formulated in such a way so that they can be processed and applied by other architects in a new form. They are intended as "raw material" that can be applied to different spatial contexts, referring to Derrida's thought of postmodern collage. This formula points to Koolhaas' perspective, viewing architectural design as a process of developing functional programs.

This article will examine one of the design procedures described in *Content* [5] – Strategy of the Void. This strategy is the basis of the 1987 design of the new city of Melun-Sénart, and on an architectural scale the 1989 competition design for the Très Grande Bibliothèque Nationale (TGB) in Paris is presented. A conceptual apparatus borrowed from Gestalt psychology in architecture[1] (in particular, the works of Rudolf Arnheim[2] [7], Edgar Rubin [8] and Juliusz Żórawski[3]) was used to analyze the Strategy of the Void.

---

[1] The issue of image interpretation, related to the perceptual perspective of the viewer, is explained by the theories of classical psychology. According to one of them, Gestalt psychology, impressions are the result of perceptual organization. The perceiver reacts through the senses to the stimuli provided and has the ability to organize them into structures, known as gestalts. Gestalt is German for figure, shape or form. This term gave its name to Gestaltpsychologie, a school of psychology created in the 2nd half of the 20th century in Germany. Its main representatives were Max Wertheimer, Kurt Koffka and Wolfgang Kohler. In architecture, character psychology found adherents among researchers such as Juliusz Żórawski, Sven Hesselgren, Rudolf Arnheim and Christian Norberg-Schulz [6, pp. 370, 371].

[2] In 1954, Arnheim noted the direct relationship between human psychology and the physical parameters of an architectural object in his publication *Art and visual perception: A psychology of the creative eye* [7].

[3] Inspired by Paul Guillaume's book entitled *La psychologie de la forme* [9], Żórawski developed, and in 1943 presented, his theory of the formalization of architectural thought. His doctoral dissertation, defended during the war, is today considered a pioneering work in psychological

---

* ORCID: 0000-0001-6831-2746. Faculty of Architecture, Wrocław University of Science and Technology, Poland, e-mail: magdalena.wasowicz@pwr.edu.pl

The purpose of this article is to analyze the usefulness and universality of the Strategy of the Void and its application in the broader context of architectural and urban design. The study of this topic was carried out using the qualitative analytical method and the bibliographic research method. The contribution of the author of the article consisted of the analysis and synthesis of the literature on the subject related to the Strategy of the Void, mainly monographs edited by Rem Koolhaas [1], [5]. Subsequently, this article presents the author's analysis of the graphic tools that Koolhaas used to illustrate his procedure.

There have been many publications on the work of Koolhaas and the OMA office. The research in this article is based on monographs edited by Roberto Gargiani [14], [15], publications by Lara Schrijver focusing on the search for teachers' influences on this architect's work [16], [17], and publications on architectural theory [1]–[3].

The influence of Gestalt psychology on the work of Rem Koolhaas

Since the 1970s, Rem Koolhaas' work has been most influenced by his time in the United States. Koolhaas studied from 1972 with Oswald Mathias Ungers at Cornell University in Ithaca, New York, and later at the Institute for Architecture and Urban Studies in New York. Lara Schrijver acknowledges that Ungers' approach, characterized by a deep interest in the formal language of architecture, influenced the early designs of Rem Koolhaas [16, pp. 235–261]. Later projects by this architect indicate that his collaboration with Collin Rowe had a significant influence on him. Koolhaas himself signaled the influence of the graphic techniques used in Rowe and Koetter's studio in depicting the concept of a Culture of Congestion [14]. At the core of the typologies developed by Ungers and Rowe was an attempt to methodically capture the laws of Gestalt psychology in urban planning. On the basis of his experience at the two studios, Koolhaas developed his own graphic language borrowed from Gestalt theory, and applied it to the Strategy of the Void [15].

The basis of Gestalt psychology was the assumption that the sense of sight tends to organize the shapes into two opposing groups: figures and ground[4]. The Gestalt school influenced the work of many architects active in the United States starting in the 1940s. The principles postulated by Gestalt psychology, initially described in relation to graphic representations, were well transferable to the field of architectural theory. In his 1944 book *Language of vision* [18], György Kepes included Gestalt psychology and used it to discuss the spatial conception of images in painting and graphics. The literary works of American architect Robert Venturi were also created under the influence of Gestalt psychology. Venturi et al. analyzed the importance of the mutual position and form of objects in shaping urban compositions in their landmark book *Complexity and contradiction in architecture* [19], using figure-ground plans[5]. And in the publication *Learning from Las Vegas* [21], he used figure-ground plans as a graphic tool.

The use of the figure-ground drawing, a tool borrowed from Gestalt perception theory, was popularized in the 1960s by Rowe and Koetter in their book *Collage City*, to interpret urban and architectural form. Nolli's plan[6] has become the main paradigm for contextual design. The contextualist method constituted the proposal to resolve any fragmentary urban condition in a continuous homogeneous urban fabric marked by high building density. In this context, the architect's work served as a recovery of the quality of the historic edified fabric. In *Collage City*, the authors argue that the urban structure can be interpreted as a composition of figures and it is possible to perform alternative readings of Gestalt diagrams where the *fluctuations of the figure-ground phenomenon* occur [22, p. 117].

The influence of Rowe and Ungers on Koolhaas can be seen, among other things, in the graphics of urban projects such as the design of the new city of Melun-Sénart. In terms of the use of the figure-ground plan tool, there are fundamental differences in the approaches of Koolhaas and the contextualists. Koolhaas stated that it was not possible to reproduce the quality of historical buildings with a single creative gesture, since their qualities are the result of a long-term process of shaping the urban structure [15, pp. 59–65]. However, this objection did not exclude the possibility of using figure-ground plans and poché[7], as discussed later in the article. A common feature of the approach of the contextualists and Koolhaas was the understanding that in architecture the figure and ground cannot be reduced to mere perception in a two-dimensional picture plane. Gestalt is the play of articulation of the building and its surroundings in the visual field. And the approach based on the rules of Gestalt psychology is to

---

aesthetics. In 1962 Żórawski's theory was published in the form of book *O budowie formy architektonicznej* [Theory of build of architectural form] [10]. In it, the author presented the basis for analyzing and creating an architectural work that responds to the needs of the observer's visual perception [11]. The timeliness of the topic of designing modern architecture in light of the psychology of vision is indicated by the publications issued in the last five years dealing with this topic in terms of Żórawski's theory [11]–[13].

[4] This division is considered one of the basic features of perception. Groups of elements between which topological relations have been created can be read as figures. The structure of a system of elements taking a certain shape is subject to the principles of grouping, good continuity, proximity, similarity, and contour closure [6, p. 130].

[5] A graphic tool called a figure-ground plan in the literature is a simplified development scheme that illustrates the relationship between buildings and spaces in an established area. Through it, potentials for modification, unification, and continuation of the existing urban fabric are identified by adding or capturing spatial elements. The graphic technique called the figure-ground plan is based on the assumption that urban layouts can be interpreted as a composition of figures against a background, in which the role of figures is assumed by buildings and building complexes, and the role of background is assumed by the spaces between them [20].

[6] Nolli's map depicted Rome as an arrangement of black fields corresponding to the location of buildings and urban quarters and white fields in between, representing public spaces and the interiors of public buildings.

[7] The term poché (French for pocket) refers to infill between the cross-sectional lines of solid elements, such as walls or terrain in the case of buildings sunk into the ground. The infill is usually used in the form of a solid field in black. Building elements are thus clearly marked and easily distinguishable on architectural drawings [20, p. 164].

envision both buildings and urban interiors as figures by means of a drawing, model, or photograph [23, p. 118].

Strategy of the Void

Content, a book Koolhaas edited, collects the performative principles of architecture that create a design framework rather than a specific formal style. The framework concentrates on identifying non-architectural space-making processes in the built environment as well as its rules. The authors could see their more extensive and universal application; thus, they were called *Patents of universal modernization*. In the publication, patent definitions were supplemented with monochromatic generative diagrams. At the same time, these were simplified formal representations of OMA projects [24, pp. 28–30].

Among them, the authors included the patents *Strategy of the Void I* and *Strategy of the Void II*. They present design strategies for urban planning and buildings of the type of megastructure, whose main component, labeled the void, is defined by discontinuity or cutting out of other designed functional parts. Those patents referred to concepts of the projects of the new town Melun-Sénart and of the National Library in Paris.

Patents were shown as two graphics that corresponded to one another as positive and negative do (Figs. 1, 2). The applied filling was meant to distinguish the void form, the main component of the program with a precisely defined shape and the dominant role of the figure in the layout. The aesthetic means used refer to the figure-ground interplay.

Strategy of the Void I

The first application of the patent, named Strategy of the Void I relating to urban planning, was the design of the new town of Melun-Sénart in France. This patent was first applied by OMA in their project submitted to the competition for projects of the town of Melun-Sénart, France, held in 1987. It was a scheme of open spaces, infrastructure, and public institutions in the form of a general diagram for the city.

The patent was identified as a method of planning a city by manipulating two types of area: unbuilt and left out of design supervision. The patent suggests reversing the order of urban plan development, by assigning generative attributes to the void and treating built areas as boundless and negative space [5]. This is how the "bands" ("linear voids") (Fig. 3) were determined: as division lines that created closed longitudinal areas, protected against designers' interventions outside of the areas they created. Zones of controlled urban planning interventions along the main communications pivots, "bands" aimed at providing access between built and recreational areas, in order to improve the quality of development. The division of the arrangement by the "bands" resulted in the emergence of

Fig. 1. Universal Modernization Patent. Strategy of the Void I (Planning) (1987) (elaborated by M. Wąsowicz based on [5, p. 74])

Il. 1. Patent uniwersalnej modernizacji. Strategia pustki I (planowanie przestrzenne) (1987) (oprac. M. Wąsowicz na podstawie [5, s. 74])
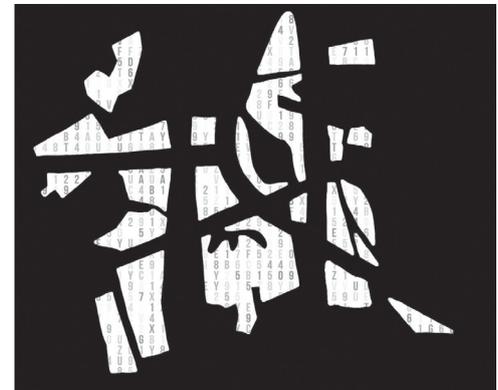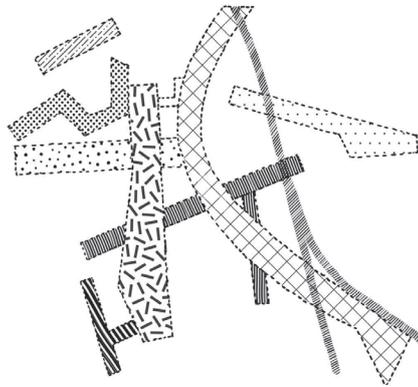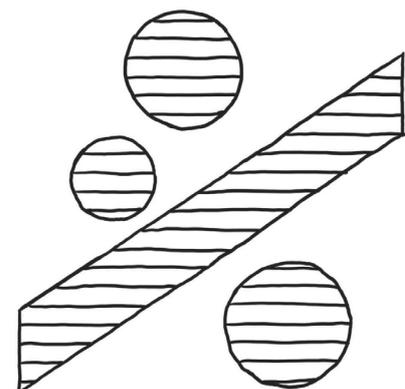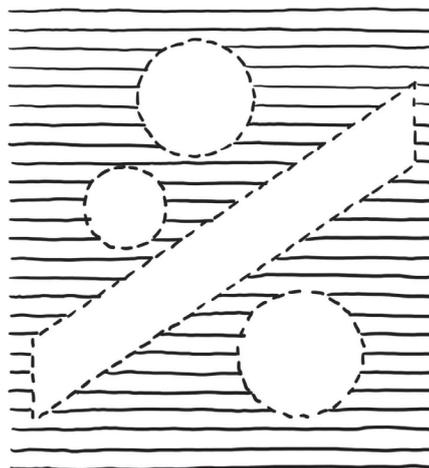

Fig. 2. Universal Modernization Patent. Strategy of the Void II (Building) (1989) (elaborated by M. Wąsowicz based on [5, p. 77])

Il. 2. Patent uniwersalnej modernizacji. Strategia pustki II (projektowanie architektoniczne) (1989) (oprac. M. Wąsowicz na podstawie [5, s. 77])

10 M

Fig. 3. Rem Koolhaas/OMA, Melun-Sénart/France, 1987,
scheme of Bands projected onto the map of Paris
(elaborated by M. Wąsowicz based on [25, p. 114])

Il. 3. Rem Koolhaas/OMA, Melun-Sénart we Francji, 1987,
schemat pasm na tle mapy Paryża
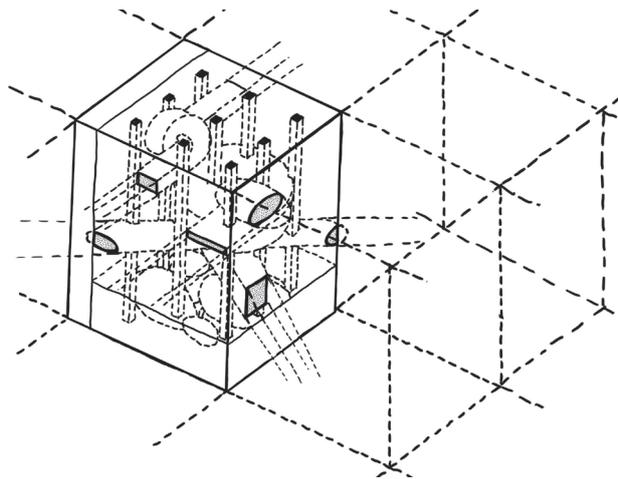(oprac. M. Wąsowicz na podstawie [25, s. 114])

Fig. 4. Très Grande Bibliothèque:
depiction of the distinction between regular and irregular forms
(elaborated by M. Wąsowicz based on [30, p. 75])

Il. 4. Très Grande Bibliothèque:
zobrazowanie podziału na formy regularne i nieregularne
(oprac. M. Wąsowicz na podstawie [30, s. 75])

areas labeled as "islands", developed according to an independent system. For the "islands", only a general diagram of the communication system and the recreation buildings was defined. The zoning was to distinguish the degree of control of the designer: the development of "strips" was precisely defined, and for "islands" no detailed guidelines were specified [26, p. 39].

In the Melun-Sénart project, Koolhaas argued with the ideas of Ungers and Rowe. In publication *Collage City* [22], its authors argued that urban structure can be interpreted as a composition of figures, and Gestalt diagrams, in which *fluctuations of the figure-background phenomenon* occur, can be read in various ways [22, p. 62]. Contextualists operated with diagrams that highlighted the figure-background relationship, which were guidelines for shaping urban layouts. The pictorial tools used by Koolhaas are analogous to those used by Rowe and Koetter's studio.

Kristiaan Borret and Bart Eeckhout point out that the graphic qualities of the design were the focal point of Melun-Sénart's competition proposal. In order to distinguish the layout of the bands, the designers decided to use a shape resembling a logographic type sign [24, p. 242]. Zaera, on the other hand, described the graphic solution of the Melun-Sénart plan as [...] *lines of movement, fragments of various creations, figures indicating density, figures representing actions, logos of companies* [27, p. 38]. Thus, it is the arrangement of figures – "bands" on the background – "islands" that is taken as the essence of the urban design proposed in the project.

Strategy of the Void II

OMA applied the Strategy of the Void II to their 1989 competition project of the National Library of France (Très Grande Bibliothèque – TGB). The building was called the Grand Library because it was meant to house one of the most extensive library collections in the world. In the com-

petition, the OMA studio received honorable mention[8]. The prototype of this cubic building located in the center of a plot was named as one of the most significant projects of the end of the 20th century [28, p. 66]. The division of the program into two additional parts formed the basic establishment of the "Strategy of the Void II": The first part was thematic libraries connected with elevated walkways that serve as circulation, while the second part was warehouse storage capacity and support rooms. The way these components were combined was the essence of the studio's idea [14, p. 165].

The strategy of the void is expressed by attribution of the void characteristics for the central part of the program, so that [...] *most important parts of the building consist of an absence of building* [29, p. 626]. The architects explained the formal distinction between the main and the supplementary programmatic component as follows: *The regular hero is the storage; the irregular, reading rooms, not designed, simply carved out* [29, p. 626]. This formal concept conceives public spaces (as voids) as *forms only have to be left out, not constructed* [29, p. 626] with no constraints of a predetermined form or structure. In this formulation, which refers to sculptural methods of creating an object, in addition to signaling the division into regular and irregular forms (Fig. 4), it primarily indicates the method of structuring the mass of the building, which consists of hollowing out the space of one functional component into another. The described method of shaping the solid can be interpreted through minimal art[9]. The syntheticity of the external form of the TGB building standing in contrast to the hollowed-out

---

[8] The first prize went to Dominique Perrault's design [28, p. 66].
[9] Minimal art is a style in painting and sculpture that developed in the 1960s largely in reaction to Abstract Expressionism. Artists abandoned decorativeness and emotional subjectivity in favor of impersonality and simplification of form. Massive forms and industrially produced materials were often used in sculpture [31, p. 7].

internal structure was characterized by Robert Somol as *a minimalist frame for a monumental void* [32, p. 74].

The spatial distribution of voids in the interior of the TGB aims to shape the experience of the user traveling a path inside a complex circulation system. Spiral ramps lead the user from one library to the next; as one walks, he or she observes frames of the interior's multifaceted layout and can look outward. Michael Fried, in an essay included in his book *Art and Objecthood* [31, p. 42], describes minimal art as literal art. For Fried, the shape in minimal art critically depends on the "effect of presence", since it implies both a particular environment and an observer moving within it. When one perceives an object in its spatial context, in the "expanded field" of architectural conditions, it significantly increases the awareness of physical "presence", and thus [...] *theatricalizes the* [viewer's] *body and places it on stage* [31, p. 42].

The cutouts in the mass of the building, moreover, are a reference to the art installations made by Gordon Matta-Clark (1943–1978) during the construction of the Pompidou Center. The artist cut holes framing views through the body of the building that was to be demolished. The architects of the OMA office used this idea. To show the composition of the voids, the project included a negative model. In a statue-like depiction of the voids, one can observe both the path a user might take along the spiral ramps and the library spaces, some of them in contact with the plane of the building's exterior wall in such a way that it is possible to observe the surrounding landscape.

Plans, sections, and elevations are envisioned as a square tomographic series and are disposed on the knots of a grid (Fig. 5). In these depictions the mass of the books is represented as poché. The Poché plan is useful for expressing both the spatial continuity of the interior voids and the spatial hierarchies.

In addition, symbolic meaning was assigned to the forms. Depending on the specificity of the book collection, each void assumes its characteristic shapes in an illustrative way. Auditoriums and projection booths were designed in the form of "Pebbles" and randomly placed on the lower levels. The current events library was called "the Cross" because it contained two interpenetrating parts: a horizontal one with reading rooms and a vertical one with sound and television rooms. "The Spiral", in the shape of a triple helix, connects five levels of storehouses, the reading room,

and the cabins for individual work. "The Shell" was a catalog room. Due to its shape based on the Möbius strip, the research library was called "the Loop" [15, p. 165].

Antonio Negri compared the building to a human body, with an information-filled brain invested in the organs of the lower torso. Libraries in their forms chosen by the designers, apparently without reference to functional factors and because of their organic shapes, may indeed resemble biological parts more than library rooms (Fig. 6) [15, p. 61].

In paraphrasing Michael Fried's aforementioned concept of the objectivity of minimal art, Pier Vittorio Aureli stated that architecture by Koolhaas is focused solely on its own content. For Aureli [...] *the superficiality of the shape is nothing but a juxtaposition of excess content, metaphors, meanings, and symbols without meaning... Shapes can be interpreted as hieroglyphs; incomprehensible, yet their stubbornly figurative and symbolic nature wants to be deciphered* [33, p. 30]. One suspects that the various shapes of the libraries do not directly refer to their functions; they are not a symbolic representation of the contents of these spaces; they are only a pretext for creating theatricality of the interior, complex, multi-plane frames, and surprising openings leading the eye towards the surroundings of the Great Library.

Strategy of the Void in the light of Gestalt psychology

In the light of Gestalt psychology, it can be observed that the Strategy of the Void created at the OMA studio is characterized by three key features:

1) the use of strong forms,

2) control of the relationship between forms and ground in two-dimensional representations,

3) emphasis on the meaning of the forms and the emotional experience associated with them.

In Żórawski's view, shaping architectural objects is the pursuit of: molding (seeing everything through forms), geometrization, finite number, and strong and consistent form. According to such assumptions, the most appropriate form from the viewer's point of view should be expressive, unambiguous, understandable, simple and easy to grasp [10, p. 23]. The graphic means used by Koolhaas to illustrate the Strategy of the Void can be simplified to basic elements such as boxes or lines. The diagrams shown in Figures 7–9 indicate Koolhaas' use of the criterion of strong and consistent form.
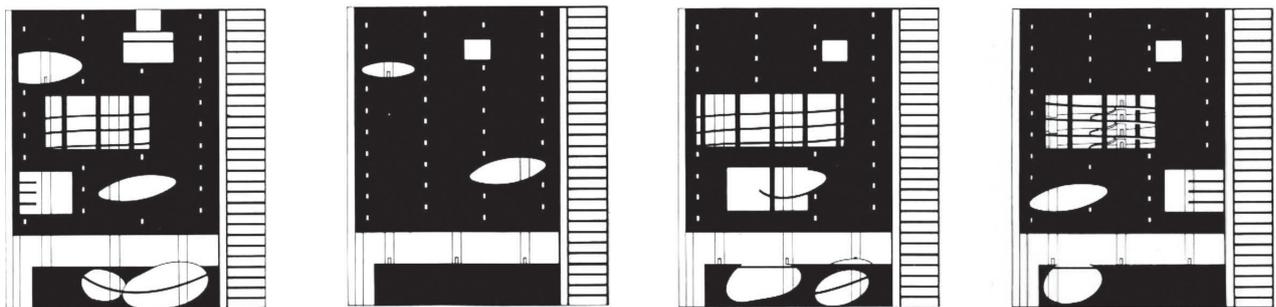

Fig. 5. Très Grande Bibliothèque: sections (elaborated by M. Wąsowicz based on [30, p. 74])

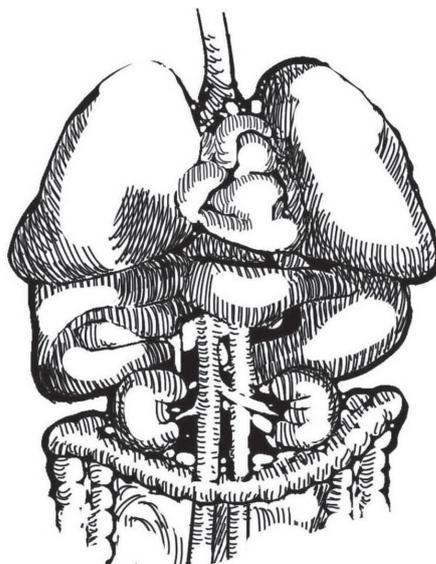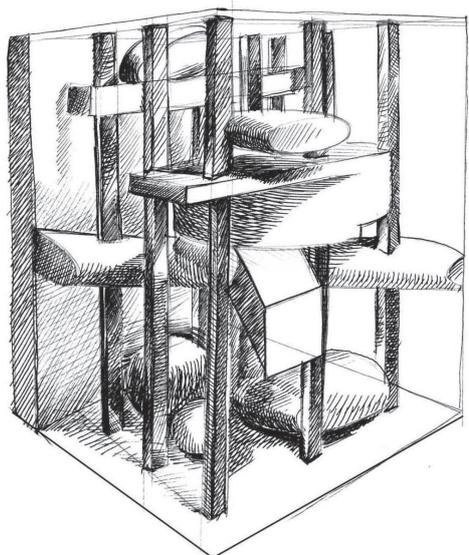Il. 5. Très Grande Bibliothèque: przekroje (oprac. M. Wąsowicz na podstawie [30, s. 74])

Fig. 6. Très Grande Bibliothèque: interior organisation of forms and its association as bodily organs (elaborated by M. Wąsowicz based on [30, p. 76])

Il. 6. Très Grande Bibliothèque: organizacja form we wnętrzu i ich podobieństwo do organów wewnętrznych (oprac. M. Wąsowicz na podstawie [30, s. 76])

In Koolhaas' approach, the form against the ground is important. In addition, pairs of diagrams illustrating the Strategy of the Void constitute each other's positive and negative. Operating the negative allows better control over the contour of the forms and the spaces surrounding them. As Rubin noted: *When the inversion of figure and background occurs, it can be seen that the area giving shape through contour simultaneously acquires a characteristic similar to that which makes us call objects "things". The shape experienced is defining for the object, and the contour is the edge of that object* [8, p. 197]. What the laws of Gestalt have determined for two-dimensional representations can be similarly applied to the perception of three-dimensional architectural spaces: by interpreting observed structures in the built environment, the visual system seeks to distinguish gestalt – solids and interiors.

Rem Koolhaas used the aforementioned properties of visual perception to define the role of form. As the main programmatic component, a void was presented, privileged in the visual field. To achieve the effect of the form being surrounded by the ground, Koolhaas resorted to the hollowing procedure. The reversal of the design technique from additive to subtractive draws attention to how space is created and defined [34, p. 230], [35, p. 238]. It is possible to analyze both the Melun-Sénart urban design and the TGB from this angle. The graphic representation of the Parisian project is an attempt to capture […] *a portrait of all libraries in a way they will never be seen: as shapes, as objects* [29, p. 638]. If libraries were surrounded by void, their form would be perceivable. However, since these rooms are surrounded by warehouses, their shape is impossible to observe in an actual building, neither from the outside nor from the inside [36, p. 61]. The libraries seem to be hollowed out in the cuboidal mass of the TGB building, just as the "bands" in Melun-Sénart's design are corridors that cut through the structure of the "islands".

For Koolhaas, the linear urban structure of Melun-Sénart resembled the sign of the logographic alphabet [4], also each library in the TGB building had its own symbolic meaning. The reasons why the authors of this project chose to invoke figural connotations (Fig. 6) can be explained in several ways. One is the desire to evoke the viewer's feelings of affection or of an aesthetic character attached to the figure. Rubin states that […] *these feelings are an aspect of the relation implied in the statement that the figure dominates in consciousness* [8, p. 202]. The reaction may also be dis-attached from the implications of the figure. In […] *experiments with nonsense-figures subjects often "read into" the figures. This can involve known objects, but sometimes also more – abstract forces, tendencies, directions, and movements* [8, p. 201]. Figure may suggest several interpretations, the observer does not need to set on any specific one: *Even when the figure does not look like any known thing, it can still have this thing-character. By "thing-character" we mean a similarity to what is common in all experienced objects to which can legitimately be attached the predicate, "a thing"* [8, p. 197]. As Żórawski noted, […] *in architecture, content and form cannot exist separately, content always has a form, and form has a content* [10, p. 62], and it must correspond to the perceptual capabilities of man. The architect is able to make the viewer understand his work in accordance with his intentions, and also induce him to experience feelings as he sees fit.

Summary

In the 1990s, OMA architects focused on formal solutions much like the American avant-garde of the time, including Peter Eisenmann and Greg Lynn. Although contemporary pragmatic functionalism is seen in the designs of the OMA studio, in the case of the Strategy of the Void, the importance of formal operations is paramount. It can be stated, moreover, that this strategy has a universal character. It is a common and transversal method of composition building in the world of art and architecture. In broad terms, the strategy of operating on the traditional division between the "void" component, architectural space, and the "mass" component, building matter, has been present in one way or another (since antiquity) in the creative and

Fig. 7. Melun-Sénart: depiction of coherent forms of "bands" (elaborated by M. Wąsowicz based on [5, p. 74])

Il. 7. Melun-Sénart: zobrazowanie pasm jako form silnych (oprac. M. Wąsowicz na podstawie [5, s. 74])
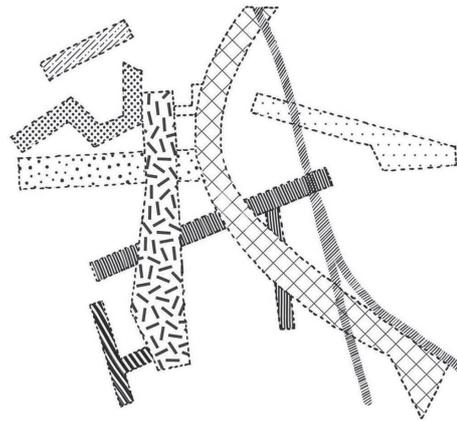

Fig. 8. Melun-Sénart: depiction of coherent forms of "islands" (elaborated by M. Wąsowicz based on [5, p. 74])

Il. 8. Melun-Sénart: zobrazowanie wysp jako form silnych (oprac. M. Wąsowicz na podstawie [5, s. 74])
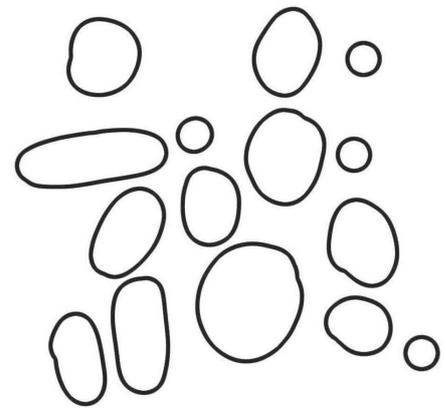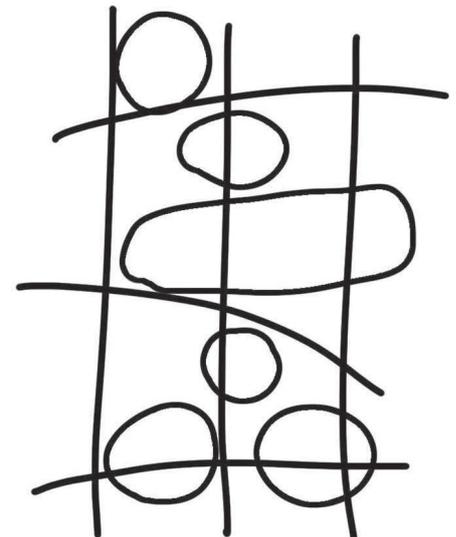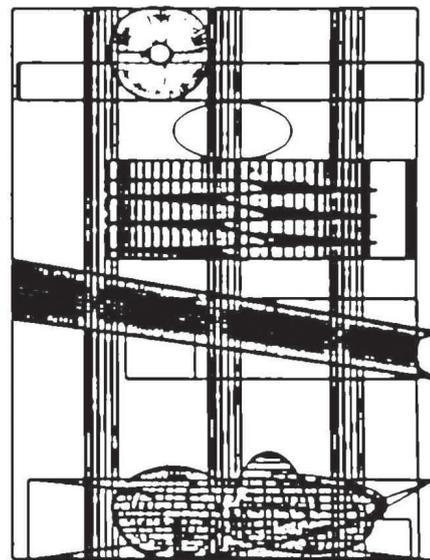

Fig. 9. Très Grande Bibliothèque: depiction of coherent forms of interior organization (elaboration by M. Wąsowicz based on [30, p. 74])

Il. 9. Très Grande Bibliothèque: zobrazowanie form silnych w organizacji form we wnętrzu (oprac. M. Wąsowicz na podstawie [30, s. 74])

design sphere of the architectural discipline. Traditionally, architecture seeks forms against the ground, distinguishes the interior form by hollowing the material, and assigns symbolic meaning to the form. What distinguishes OMA's approach in the strategy of the void is the idea of juxtaposing complementary functional components and presenting them as form and void. Here, Koolhaas explored the potential of *emptiness that is not empty* [1, pp. 156, 157] empha-

sizing that the void can have an overriding role in the selection of programmatic components. The Strategy of the Void is a pretext for building complex formal solutions, which, according to the author of the article, have a potentially wider application in contemporary architecture.

Translated by
Monika Cesarz

References

[1] Evers B., Thoenes C., *Architectural Theory: From the Renaissance to the Present: 89 Essays on 117 Treatises*, Taschen, Köln 2003.

[2] Speaks M., *It's Out There… The Formal Limits of The American Avantgarde*, "Architectural Design" 1998, No. 133, 26–31.

[3] Mallgrave H.F., Goodman D., *Introduction to architectural theory*, Wiley-Blackwell, Malden 2011.

[4] Harvey D., *The condition of postmodernity*, Blackwell Publishers, Cambridge 1994.

[5] *Content*, R. Koolhaas et al. (eds.), Taschen, Cologne 2004.

[6] Lenartowicz J.K., *Słownik psychologii architektury dla studiujących architekturę*, Wydawnictwo PK, Kraków 1997.

[7] Arnheim R., *Art and visual perception: A psychology of the creative eye*, University of California Press, Berkeley 1956.

[8] Rubin E., *Figure and Ground*, [in:] C.D. McClelland (ed.), *Readings in Perception*, Van Nostrand, New York 1958, 194–203.

[9] *La psychologie de la forme*, Flammarion, Paris 1937.

[10] Żórawski J., *O budowie formy architektonicznej*, Arkady, Warszawa 1962.

[11] Borowik A., *Teoria formy architektonicznej Juliusza Żórawskiego i jego uczniów na tle koncepcji psychologii postaci wypracowanych w Bauhausie*, "Sztuka i Dokumentacja" 2020, nr 23, 121–131, doi: 10.32020/ARTandDOC/23/2020/14.

[12] Bocheńska-Skałecka A., *The theory on the construction of an architectural form created Juliusz Żórawski as "tool of architectural communication"*, [in:] M. Saura (ed.), *International Conference Arquitectonics Network: Mind, Land and Society*, GIRAS. Universitat Politècnica de Catalunya, Barcelona 2017.

[13] Trebacz P., *Visual Perception of Architecture According to the Theory of Juliusz Żórawski*, "IOP Conference Series: Materials Science and Engineering" 2019, Vol. 603, No. 4, 1–5, doi: 10.1088/1757-899x/603/4/042006.

[14] Gargiani R., Koolhaas R., *Rem Koolhaas/Oma: The Construction of Merveilles*, Routledge, Oxford 2008.

[15] Gargiani R., *OMA*, EPFL Press, Lausanne 2008.

[16] Schrijver L., *OMA as tribute to OMU: exploring resonances in the work of Koolhaas and Ungers*, "The Journal of Architecture" 2008, No. 13 (3), 235–261, doi: 10.1080/13602360802214927.

[17] Schrijver L., *Oswald Mathias Ungers and Rem Koolhaas: Recalibrating Architecture in the 1970s*, Transcript Verlag, Bielefeld 2021, doi: 10.1515/9783839457597.

[18] Kepes G., *Language of vision*, Courier Corporation, North Chelmsford 1995.

[19] Venturi R., Stierli M., Brownlee D.B., *Complexity and contradiction in architecture*, The Museum of Modern Art, New York 1977.

[20] Porter T., *Archispeak an Illustrated Guide to Architectural Design Terms*, Spon Press, London 2004.

[21] Venturi R., Scott Brown D., Izenour S., *Learning from Las Vegas*, MIT Press, Cambrige 1977.

[22] Koetter F., Rowe C., *Collage City*, MIT Press, Cambridge 1978.

[23] Macarthur J., *From the air: Collage City, aerial photography and the picturesque*, [in:] P. Oswald, J.R.J. Moore (eds.), *Re-Framing Architecture: Theory, Science and Myth*, Archadia, Sydney 2000, 113–120.

[24] Stoppani T., *Paradigm Islands: Manhattan and Venice: Discourses on Architecture and the City*, Routledge, Abingdon 2012, doi: 10.4324/9780203720721.

[25] Lucan J., Cohen J.L., Damisch H., *OMA-Rem Koolhaas: Architecture, 1970–1990*, Princeton Architectural Press, New York 1991.

[26] Brighenti A.M., *Urban Interstices: The Aesthetics and the Politics of the In-between*, Routledge, New York 2016, doi: 10.4324/9781315548807.

[27] Zaera A., *The Day After: A Conversation with Rem Koolhaas*, "El Croquis" 1996, No. 53, 8–25.

[28] Damisch H., *Skyline: The Narcissistic City*, Stanford University Press, Stanford 2001.

[29] Koolhaas R., *Imagining the nothingness*, [in:] J. Lucan (ed.), *Rem Koolhaas/OMA*, Princeton Architectural Press, New York 1991, 156–157.

[30] Koolhaas R., *Biblioteque de France*, "El Croquis" 1996, No. 53, 68–79.

[31] Fried M., *Art and Objecthood, Essays and Reviews*, University of Chicago Press, Chicago 1998.

[32] Somol R., Whiting S., *Notes around the Doppler Effect and other Moods of Modernism*, "Perspecta" 2022, Vol. 33, 72–77, doi: 10.2307/1567298.

[33] Aureli P.V., *Architecture and Content: Who's Afraid of the Form-Object?*, "Log" 2004, nr 3, 29–36.

[34] Yantis S., *Visual Perception: Essential Readings*, Psychology Press, Philadelphia 2001.

[35] Borden G.P., *Process: Material and Representation in Architecture*, Routledge, Abingdon 2014, doi: 10.4324/9781315814827.

[36] Krauss R., *Some Rotten Shoots from the seeds of Time*, [in:] T. Smith, O. Enwezor, N. Conde (eds.), *Antinomies of Art and Culture: Modernity, Postmodernity, Contemporaneity*, Duke University Press, London 2008, 60–70, doi: 10.1515/9780822389330-007.

Abstract

Strategy of the Void by the Office for Metropolitan Architecture in the light of Gestalt psychology

The purpose of this paper is to analyze the usefulness and versatility of a design method, called by the authors from the OMA studio The Strategy of the Void, and its application in the broader context of architectural and urban design. The study of this topic was carried out using a qualitative analytical method and a bibliographic research method. In order to analyze the projects and their broad context, conceptual apparatus borrowed from the gestalt psychology in architecture (in particular the works of Arnheim, Rubin and Żórawski) has been applied. It allows us to point out the connections between the formal operations carried out in the The Strategy of the Void and the impact on visual perception assumed by the architects. So far in the literature there has been no detailed analysis of how the graphic tools that Koolhaas used in his OMA projects are related to the gestalt psychology. The conceptual formal-functional scheme called by OMA architects the Strategy of the Void is presented in this paper using two projects as examples. At the urban scale, it is discussed on the basis of the 1987 Melun-Sénart new town project, which established a strategy based on connections between strategic voids in the layout. At the architectural scale, the strategy is developed in a 1989 competition project for the Grand National Library of France in Paris.

Key words: architecture, psychology of vision, Gestalt, architectural space, architectural graphics

Streszczenie

Strategia pustki autorstwa pracowni Office for Metropolitan Architecture w świetle psychologii postaci

W artykule przedstawiono analizę przydatności i uniwersalności metody projektowej nazwanej przez autorów z pracowni OMA strategią pustki oraz jej zastosowania w szerszym kontekście projektowania architektonicznego i urbanistycznego. Studia tego tematu przeprowadzono metodą analityczną jakościową oraz metodą badań bibliograficznych. Do analizy projektów i ich szerokiego kontekstu zastosowany został aparat pojęciowy zapożyczony z psychologii postaci w architekturze (w szczególności prac Arnheima, Rubina i Żórawskiego). Pozwala on wskazać powiązania przeprowadzanych w strategii pustki operacji formalnych z założonym przez architektów oddziaływaniem na percepcję wzrokową. Dotychczas w literaturze przedmiotu nie przeprowadzono szczegółowej analizy pod kątem pokrewieństwa narzędzi graficznych, których Koolhaas używał w projektach OMA, z psychologią widzenia. Konceptualny schemat formalno-funkcjonalny nazwany przez architektów OMA strategią pustki przedstawiono w niniejszym artykule na przykładzie dwóch projektów. W skali urbanistycznej omówiona została ona na podstawie projektu nowego miasta Melun -Sénart z 1987 r., w którym ustanowiono strategię opartą na połączeniach pomiędzy strategicznymi pustkami w układzie. W skali architektonicznej strategia rozwijana jest w projekcie konkursowym z 1989 r. na Très Grande Bibliothèque Nationale w Paryżu.

Słowa kluczowe: architektura, psychologia widzenia, Gestalt, przestrzeń architektoniczna, grafika architektoniczna