Tomasz Głowacki*

The architecture of absence.
The phenomenon that became a standard

Absence, the highest form of presence.
James Joyce [1, p. 96]

Introduction

Absence, defined lexically as "the absence of a person from a place", is a broad concept that also largely means "disappearance", "non-existence" or "invisibility". The title term "Architecture of Absence" refers to the visual phenomenon of the absence of architecture in the cultural and natural landscape, and is understood as an intentional design procedure resulting in a slight visual interference of the planned object or its complete absence from the existing environment. In the literature, this type of architecture is often referred to by the terms *invisible* or *disappearing*, which, in the opinion of the author of this publication, do not fully capture the essence of things due to the wider range of connotations and the diverse manner of design creation (see: [2]).

The phenomenon of the architecture of absence reflects not only a different perception of architecture and its impact on the environment, but also a perception of reality itself, in which the category of "absence" is becoming more and more pronounced in our time. Researchers and philosophers have long engaged in a discourse concerning existence and non-existence, presence and absence. Interestingly and importantly for the topic under study, this discourse received a particular boost in the 2nd half of the 20th century in the deliberations of postmodern thinkers [3], which also influenced late 20th century architectural

theory and practice itself. The Parmenides understanding of "absence" as a simple and absolute negation of all presence, complements and completes the Heideggerian "non-being", i.e. a character devoid of "being", or the Derridean notion of non-presence, resulting from its semiotic "différance" (different) [4]. As Alicja Kuczyńska rightly summarizes Heidegger's considerations, absence is understood as an undisclosed and unperceived reality. She states, among others, that […] *the mental category of absence does not pronounce the absence /as it happens in everyday language/, but speaking about something that – for various reasons – now remains beyond the reach of our perception, in fact it indirectly confirms the phenomenon of some being* [3, p. 50].

The various (at least two) forms of viewing absence described by philosophy are reflected in the perception of architecture, its understanding and definition. They are also reflected in the perception of the architecture of absence itself.

The architecture of absence is not a new phenomenon and dates back to the dawn of our civilization. Apart from the phenomenon of the underground cities of Cappadocia, dating back as far as 3000 B.C., objects hidden from undesirable view, such as shelters, tunnels, military bases and treasure houses, have been built for a long time. A common solution was and still is to "hide" them in an unusual environment, mainly underground or under water. Key to the analysis of the phenomenon is the change in the reason for the "translocation" of a building. In the past, these were mainly military and protective reasons, while today this decision is very often a result of the "need to

* ORCID: 0000-0002-2520-6035. Faculty of Architecture, Wrocław University of Science and Technology, Poland, e-mail: tomasz.andrzej.glowacki@pwr.edu.pl

breathe" in a world heavily urbanized and full of artefacts of civilization, as well as out of respect for the specificity or beauty of a given location and recognition of the value of neighboring buildings, e.g. historical ones.

Development of the phenomenon

For over a quarter of a century the phenomenon of the architecture of absence has been gaining momentum, although the first spectacular realizations of invisible buildings began in the 1970s. The phenomenon of "invisible architecture" can be found in the conceptual art of Yves Klein [5], the land art of e.g. Nancy Holt and May'i Lin [6], as well as in the work of the artist duo Christo and Jeanne-Claude, who in 1973–1974 wrapped the walls of Rome, Via Veneto and Villa Borghese, and later the Berlin Reichstag (1975–1995). Despite the dominance of postmodernism, deconstruction and high-tech in that period, it is worth recalling some famous architectural "absentees". 1971 saw the beginning of work on a land art housing project in Breitenbrunn, Austria, called *The Pit*, designed by Peter Noever [7]; 1973 saw the construction of the Olivetti landscape housing project in Ivrea near Turin, designed by Aimaro Isola and Roberto Gabetti, hidden in the escarpment; in 1975 an office building was built in Ipswich, designed by Norman Foster, reflecting the surroundings with a glass curtain wall [8], in 1980 the *Crystal Cathedral* in Garden Grove in California, covered with a Venetian mirror and designed by Philip Johnson appeared [9], and in 1989 a glass pyramid designed by Ieoh Ming Pei crowned the underground extension of the Louvre museum in Paris.

The 1990s saw the realization of Emilio Ambasz's buildings covered with green roofs (e.g. the prefecture headquarters in Fukuoka 1990), the transparent Cartier Foundation on Paris's Boulevard Raspail (1991–1994), or the velodrome and Olympic stadium by Dominique Perrault

Fig. 1. Städel Museum in Frankfurt am Main,
proj. Schneider+Schumacher (photo by Norbert Miguletz,
source: https://archello.com/project/stadel-museum)

Il. 1. Städel Museum we Frankfurcie nad Menem,
proj. Schneider+Schumacher (fot. Norbert Miguletz,
źródło: https://archello.com/project/stadel-museum)

(1992–1999), hidden in Berlin in earthen embankments [10]. One can, of course, argue whether the above objects are the result of the need to disappear from the horizon, but undoubtedly there has been a thinking about the search for balance and the need not to be dominated by the architectural "ego".

A very interesting example of such a change in architectural consciousness is Stefan Müller's 1973 ideological project called TERRA X [11], which points to a radical way to balance our planet's ecosystem. It presents a vision of an exodus of humanity more than 2.0–2.5 km above the Earth's surface to a geodesic urban structure encircling our globe. Importantly, at the planned distance it would be invisible from land. Thus, freed from constructional interference, the planet has a chance for the rebirth of nature, remaining a zone of recreation, leisure and culture (with its monuments of civilization).

Typology of absence architecture

Analyzing the architecture of absence one can notice several ways of creating/designing the effect of its visual disappearance or disappearing from the environment. The author's typology will be presented below, which distinguishes the following categories [12].

Translocation

Translocation consists in locating a new volume in an unusual environment, i.e. underground, under water or very high above the ground, as was the case in the TERRA X project. Translocation architecture does not take away or obstruct the panoramic view, because its volume is located in a place which is not visible to us, under the ground or water. Underwater architecture is often part of the infrastructure of oceanariums, where visitors can use glass tunnels to go under the surface of bodies of water with marine flora and fauna. There are occasional appearances of underwater hotels and restaurants, e.g. *Ithaa* from 2005 on the island of Rangali in the Maldives (by M.J. Murphy Ltd) or Under off the coast of Lindesnes in Norway, designed by Snøhetta from 2019, in which the main character connecting users with the underwater world are acrylic glass partitions.

Examples of underground architecture abound, from the numerous car parks, warehouses, underground and railway stations connected to the underground levels of shopping centers (such as in Toronto), to museum expansions. Excellent examples of museum expansions are the award-winning Joanneum Museum in Graz by Nieto Sobejano Arquitectos (2006–2011) and the Städel Museum in Frankfurt am Main (2008–2012) by Schneider+Schumacher (Fig. 1). Both projects place the underground volume in close connection and correlation with the existing buildings.

In the case of the extension of the Joanneum Museum, the three historic buildings are linked by a common courtyard, under which a reception area with the main entrance hall, a reading room, a conference room on level –1 and storerooms and archives on level –2 are located. The underground is illuminated by a series of glazed patios

recessed into the ground, in the form of inverted cones. The project not only introduces a substantial additional volume in an unobtrusive way, but also achieves a positive urban transformation of the site. This is a beautiful example of how the "architecture of absence" of a new courtyard can integrate and organize the existing buildings.

The intervention in the Frankfurt Museum is different. Constructed in 1878, the Neo-Renaissance building was extended with additional wings in 1920 and 1990, resulting in an underground exhibition hall with an area of 3,000 m^2 in place of the historic garden, which is enclosed to the south by the existing Städel Academy of Art building. The most characteristic feature of the extension is the green roof with its central bulge, perforated by 195 round skylights. Their regular arrangement and size (diameter 1.5–2.5 m) give a unique appearance to the museum garden, creating an intriguing composition of glass dots (skylights) against the turf as if from the works of Japanese artist Yayoi Kusama.

In both cases, instead of a spectacular, visible extension, we are dealing with an invisible intervention that improves the functioning of the existing facilities both in architectural and urban planning terms.

Artificial topography

Artificial topography architecture occurs when the outer shell of a building (generally the roof and walls) become a fragment of the natural or artificial terrain and landscape. This is an intermediate stage in the emergence of an object of translocal architecture from the ground or water with visible fragments of entrances, openings and glazing. An important role in artificial topography is played by the function of the roof as a dominant land-use element whether in the form of a green meadow, a sheet of water or a pitch or square (cf. [13], [14]).

On a smaller scale, it is represented by the 2012 Sancaklar Mosque in Büyükçekmece, Istanbul, Turkey by architect Emre Arolat [15]. It creates a stone, concrete and earthen setting in which an amphitheatrical basin leads to a modern cave – a horizontal hall of the mosque, sunk in the terrain. Also of interest is the 2019 Dune Art Museum in Qinhuangdao, China, by OPEN Architecture, where a sand-covered sequence of concrete caverns merges with a landscape of beach and dunes.

Much larger in volume, examples of artificial topography include the Antinori winery in Tuscany from the 2012 Archea Associati project (Fig. 2). Its numerous and extensive functions, from wine production, bottling and storage, to parking, offices, tasting and exhibition areas, a restaurant and a guest house, have been covered with green roofs for the cultivation of vines with great mastery. Despite its vastness, the building disappears from the horizon, continuing the beauty of the Chianti hill. Only two horizontal intersections, illuminating the rooms, inform about the existence of the winery in the natural landscape.

Different in the formation of artificial topography is the landmark architectural realization of the marine terminal in Yokohama (Fig. 3) by Foreign Office Architects (1995–2002) [16]. The 430-meter-long structure forms a new land

Fig. 2. Antinori winery, Toscany, proj. Archea Associati (photo by Pietro Savorelli, courtesy of Archea Associati)
Il. 2. Winiarnia Antinori w Toskanii, proj. Archea Associati (fot. Pietro Savorelli, dzięki uprzejmości Archea Associati)

Fig. 3. Yokohama International Passenger Terminal,
proj. Foreign Office Architects (photo by Satoru Mishima,
source: https://divisare.com/projects/314352-foa-azpml-farshid-moussa-
vi-architecture-valerie-bennett-yokohama-international-port-terminal)

Il. 3. Terminal morski w Jokohamie, proj. Foreign Office Architects
(fot. Satoru Mishima, źródło: https://divisare.com/projects/
314352-foa-azpml-farshid-moussavi-architecture-valerie-bennett-
yokohama-international-port-terminal)

– a promontory and a pier in one, connected to the Tokyo Bay waterfront. Using the principle of *folding*[1] the architects have transformed the building into an artificial landscape of dunes formed by a continuum of broken planes, mostly clad in wood. The three levels of the terminal – filled from the car park, through the terminal proper, to the offices and shops – are connected by ramps in accordance with the organization of the functions and communication within the facility. Their flowing course, like the structure, continues the "looped" continuity of the space, while lacking linearity and unambiguous directionality. The entire upper level/roof of the terminal has been designed as an extensive public viewing terrace, which is an extension of the recreational axis of the neighboring Yamashita and Akaranega parks. It is worth noting that the formation of external public spaces within the building footprint is one of several advantages of absence architecture.

Camouflage and illusion

For the categories of camouflage and illusion, the effect of absence can be achieved in many ways. They all involve creating an optical illusion that makes the building invisible at first sight.

One of the simplest and oldest procedures is **masking a building** with vegetation which covers (overgrows) its façades and roofs. The buildings of the fishing village of Houtouwan on Shengshan Island in China, abandoned in 1990, are a notable example of this. When, over time, they became overgrown with dense ivy and blended into the green landscape of the mountains, the perception of architecture changed completely. The relationship between cultural and natural landscapes was fundamentally transformed. In a rural or small-town setting, the natural landscape, as a rule, forms the backdrop to the strongly exposed building fabric. In this case, nature covers the existing typical architecture with a green carpet, which balances the relationship between the two.

Another way of making a building invisible is the **mirror effect**. The building or a significant part of its façade is covered with mirrors (glass, metal or plastic) in which the surroundings are reflected. A famous example is the Tree Hotel (Fig. 4) by Tham & Videgård Arkitekter from 2010 in Harads, northern Sweden. Suspended 4 m above the ground around tree trunks, the two-person accommodation capsules, in the form of a 4 m plywood cube, have been clad entirely in mirror. By laminating translucent lines of reflective UV light into the glass, the cubes become visible to birds and invisible to humans.

Another example in the same category is the horizontal, narrow skyscraper of the BNL-BNP Paribas headquarters in Rome by Alfonso Femia and Gianluca Peluffo (Fig. 5) in 2016. Its façade, covered almost entirely in Venetian glass, has been deliberately laid out at different angles. The building has Janus different faces: on the west side of the Roma Tiburtina train station, the glass façade in triangular, projecting, broken bands is dynamic and reflects the sky; on the west and the 21st Pietralata district, it takes on a calmed expression, with simple glazing politely facing the residential buildings. Prestigious and monumental, due to its financial importance and dimensions, the edifice loses its distinctive identity and disappears in the cityscape. By manipulating the arrangement of the mirror panes at the right angle, we can consciously reflect selected fragments of the surroundings (sky, greenery, monuments, etc.), causing the object to dissolve in space.

The effect of absence in the category of camouflage and illusion can also be achieved by **superimposing or projecting appropriate images onto the façade**. A trivially simple method is represented by the Murman architects' summer house in Katthammarsvik, Sweden (Fig. 6) from 2007. The one-story building, set between juniper trees, is surrounded by a screen of mesh vinyl fabric printed with reworked photographs of existing juniper trees. Only the windows and glass doors do hint at the existence of the house, blending it with the trees on the plot from a distance.

A much more costly and technically complex creation of architectural invisibility has been heralded since 2008 by GDS Architects' design of the Infinity Tower skyscraper (current name Crystal Top Tower) near Incheon Airport on the outskirts of Seoul. The illusion of invisibility is to be provided by LED screens on the façades, displaying actual images of views obscured by the building, obtained from cameras. The tower, invisible from the city's vital

---

[1] Folding – a trend in architecture and a way of designing described for the first time in: [17].

Fig. 4. Tree Hotel in Harads, proj. Tham & Videgård Arkitekter (photo by Åke E:son Lindman,
source: https://www.thamvidegard.se/work/public/treehotel/)

Il. 4. Tree Hotel w Harads, proj. Tham & Videgård Arkitekter (fot. Åke E:son Lindman, źródło: https://www.thamvidegard.se/work/public/treehotel/)

landscape perspectives, is to be visible to aircraft and birds. Completion of the 450-meter tower (which only began in 2020) is expected in 2024. Will the high-rise actually become invisible – time will tell?

Super-transparency

The category of super-transparency means the elimination of the optical barrier between the architecture and the surroundings and, at the same time, between the inside and the outside thanks to the possibility of making an object out of a very transparent building material, which is inorganic or organic glass. This creation of absence is due to technological progress in the production, quality and size of glass panels and their bonding and application of functional nano-, micro- and millimeter-sized layers [18], [19]. Transparent panes nowadays can be the only material for erecting a building. They not only play the role of a transparent partition providing adequate lighting and visual contact with the surroundings, but thanks to specialized low-emission coatings they also create a comfortable thermal barrier. The latest solutions using photovoltaic quantum dots or transparent perovskite films enable increasingly efficient electricity production [20]. In addition, glass can now serve a structural function as columns, beams, ceilings and roofs, eliminating traditional

materials. Not yet fully explored is the potential of acrylic glass, which is used to create giant walls in oceanariums, such as the giant one in the Dubai Mail aquarium, 32.8 m wide, 8.3 m high and 75 cm thick.

We no longer need concrete or steel to set glass walls and ceilings, all we need is the right silicone adhesives to create the effect of a completely transparent building. But is it really? The problem with standard glass solutions, in terms of absence, remains their slight tinting and reflectivity due to their oxide content and thermal properties. By resigning from thermal glazing sets with low-emission coatings and using discolored glass of the OptiWhite type, we increase their transparency and are able to get rid of the mirror effect.

Such a solution is represented by the façades of the one-story Museum of Glass in Toledo, USA, designed by SANAA in 2006. The architects have dispensed with insulated thermal glass (always reflective to some extent) in favor of thin laminated sheets which not only provide an outer shell, but also internal partitions. The result is a highly transparent structure of separate rooms with glass walls, within a glass cuboid. All the rooms of the museum: exhibition rooms, café, auditorium, service rooms and corridors have taken the form of round, separate transparent "cells" surrounded by a transparent "membrane" of the external façade. Moreover, the space created between the

Fig. 5. BNL-BNP Paribas in Rome, proj. Alfonso Femia and Gianluca Peluffo (fot. Luc Boegly,
source: https://www.archdaily.com/800230/bnl-bnp-paribas-headquarters-5-plus-1aa-alfonso-femia-gianluca-peluffo)

Il. 5. BNL-BNP Paribas w Rzymie, proj. Alfonso Femia i Gianluca Peluffo (fot. Luc Boegly,
źródło: https://www.archdaily.com/800230/bnl-bnp-paribas-headquarters-5-plus-1aa-alfonso-femia-gianluca-peluffo)

Fig. 6. Juniper House in Katthammarsvik, Sweden,
proj. Murman Arkitekter (photo by Åke E:son Lindman,
source: http://www.murman.se/projekt/juniper-house/)

Il. 6. Juniper House w Katthammarsvik, Szwecja,
proj. Murman Arkitekter (fot. Åke E:son Lindman,
źródło: http://www.murman.se/projekt/juniper-house/)

"cells" and the "membrane" acts as a thermal buffer, additionally supported by the operation of the ceiling and floor heating and cooling system [21].

The atypical nature of the solutions and the high cost of implementation are the reason for the small number of buildings made entirely of glass so far. One of these is the entrance pavilion to the Apple shop on Fifth Avenue in New York from 2011, designed by Bohlin Cywinski Jackson (Fig. 7). Its cube form consists of twelve glass wall panels and three roof panels measuring 3×9.7 m, supported by four glass frames. Even skeptics may be persuaded by the impression that the interior and exterior blend into each other while the object melts into the space.

Temporariness and mobility

Temporary and mobile objects constitute another category of the creation of absence architecture, which consists in the impermanent connection of the building with its surroundings. A temporary or mobile building does not create a permanent relationship with the place on which it temporarily stands[2]. Therefore, its perception changes – in our consciousness an object is not assigned to the environment, it does not become its element, because in a moment it will leave it. We may compare viewing the environment with mobile architecture to observing e.g. a natural landscape with a road running along it, on which a single car rarely and silently passes. When describing this hypothet-

_____

[2] More on this topic in: [22].

ical landscape, the car may not be taken into account at all as not belonging to it as a separate entity. Of course, when the dirt road turns into a constantly busy urban artery, the string of cars on this road will be perceived as an essential attribute of such a space. A similar phenomenon therefore occurs in the relationship of architecture to its surroundings. Mobile and temporary architecture does not interfere with a specific area, becoming absent from it.

Examples include the reference to a house on wheels, e.g. the historical carriage of Michał Drzymała from 1904. A Polish peasant fighting against Germanization, who was not allowed by the Prussian authorities to build a house on his own land, used the trick of living in a circus wagon. This was because a mobile home was not subject to building regulations. In the past and at present, many people forced to follow work for economic and climatic reasons have lived in tents or in the vehicles they used to move around. However, there has always been and continues to be in society a certain group living on the move by choice [23]. Today such a category includes campers – a milieu particularly strong in the United States, which predates the generations living in the legendary silver camper trailers, the so-called Airstreams (the first models of the 1930s) or the less luxurious "Cucumbers" – the multi-colored Volkswagen T1s repainted by hippies from the Flower Power era.

Due to their temporary nature, structures that appear on a short-term basis at a location and are not residential vehicles have a lightweight and easily assembled form. Container and tent structures predominate, but pneumatic structures represent a particularly interesting solution in the context of absence. In these structures, made of a sealed outer shell, the load-bearing structure is taken over by compressed air. What is interesting in terms of the subject matter is that their specificity requires the use of a minimum of textile covering, reducing the unnecessary weight and surface area of the matter used. At the end of the 1960s there was an explosion of inflatable objects, from military, sports and exhibition halls to artistic and philosophical projects and installations [24]. Here it is worth mentioning the visions spun by Buckminster Fuller and Frei Otto, as well as the manifestos of the young, angry architectural offices of the time: the German Haus-Rucker-Co., the Viennese Coop Himmelb(l)au, the British Archigram, the Italian Archizoom or the American Ant Farm.

RAUMLABOR, a Berlin-based collective of experimental architectural practice, is now successfully implementing alternative ideas of the 1970s with the use of pneumatic structures. Their inflatable transparent "balloons" (e.g. Spacebuster in the USA in 2009 and 2011 or Kitchen Monument[3] in European cities in 2006), appearing occasionally in various cities and places around the world, assume, depending on the location and needs, various functions activating and integrating communities – from conference, cinema and banquet hall, through ballroom and concert hall, to boxing ring and steam bath.

Similar fascinating pneumatic spaces are also currently being realized by the Berlin group Plastique Fantastique

---

³ Joint project with Plastique Fantastique.

Fig. 7. Apple Store entrance pavilion, New York,
by Bohlin Cywinski Jackson (photo by E. Łużyniecka)

Il. 7. Pawilon wejściowy do sklepu Apple, Nowy Jork,
proj. Bohlin Cywinski Jackson (fot. E. Łużyniecka)

as *Loud Shadows* (Fig. 8) 2017 in the Netherlands or *Whether Weather* in Seoul in 2021.

A marketing offer of inflatable domes, aimed at individual users, was proposed by French designer Pierre-Stephane Dumas. He created the *Crystal Bubbles* collection – seven types of leisure and residential domes differing in size and transparency. The most total is the first model (a single dome with a vestibule/slider) also called *Casa Bubble* – made of a completely transparent waterproof and fireproof membrane, inflated with air by a silent wind turbine. Its super-transparency and flexibility makes the boundary between architecture and surroundings disappear almost literally.

Dematerialization

Dematerialization means replacing standard building matter with subtle matter, i.e. light, steam, water or streams of warm or cold air. The intention is to erect buildings out of immaterial partitions and electromagnetic shells whether in the form of fields, waves or/and radiation. Of course, nowadays even if we define space and shape architecture by means of infrared (thermal) or visible radiation (visible light) – which we will discuss below – visions of non-material barriers or capsules straight from science fiction and fantasy remain so far in the sphere of the future. Huge technological advances may soon change this situation, given how quickly radio and Wi-Fi networks have replaced thousands of kilometers of data cabling, and air

Fig. 8. *Loud Shadows*, proj. Plastique Fantastique (photo by Jelte Keur, source: https://plastique-fantastique.de/LOUD-SHADOWS)

Il. 8. *Loud Shadows*, proj. Plastique Fantastique (fot. Jelte Keur, źródło: https://plastique-fantastique.de/LOUD-SHADOWS)

curtains at the entrances to buildings have replaced traditional windbreaks.

Examples of dematerialization in architecture are an avant-garde and peculiar phenomenon. Except in the case of the unique role of the electromagnetic wave, which is visible light, which has always accompanied architecture. From time immemorial, chiaroscuro has emphasized and defined depth and perspective; light brought to the fore what was important, while shadow concealed secrets or unimportant fragments. Especially in darkness, light becomes sufficient to completely define space. Its demiurgic character, known during theatrical performances and concerts, reveals the created reality to the audience, delineates and articulates the scene and all its characters. For the time being, the light wave allows us to function in spite of the darkness, but it does not yet protect us from the rain or carry furnishings and users. Nevertheless, the replacement of standard building elements by subtle matter is taking place.

A noteworthy exemplum of a certain attempt to dematerialize architecture is the Bangkok Art Museum project from 2002. *Dusty Relief* (Fig. 9) [25], by the French office R&Sie(n), whose façade is ultimately shaped by dust. The museum's cuboid blocks (white cubes) were covered amorphously with an aluminium mesh under electrostatic tension, attracting dust particles. The designed shielding is not only to ensure the appropriate dispersion of natural light inherent in the exhibitions, but also, and this is important, to purify the air of one of the world's most smog-polluted metropolises. It is a great pity that the coup d'état in Thailand halted the realization of this highly interesting and post-ecological project.

Another example concerns the inconspicuousness of the partitions of the *Digital Water Pavilion*, a pavilion for Expo 2008 in Zaragoza designed by Carlo Ratti Associatti in collaboration with scientists from MIT. All four façades of the building are formed by digitally controlled water droplets coming from nozzles placed along the edge of the roof. As well as delineating space, they generate two-dimensional pixelated lettering, patterns and images. Whenever a visitor intends to enter and exit the pavilion, the interactive system locally switches off the nozzles, allowing passers-by to cross the water curtains without getting wet.

The impression of the ethereal in architecture or landscape is often achieved using fog. For example, in 1991 architect Atsushi Kitagawara and artist Fujiko Nakaya, in Tokyo's Showa Kinen Park, designed a cloud-covered hilly area with a 32-meter steel pipe that emits artificial fog every 15 minutes.

The architects Diller Scofidio + Renfro did the same when designing the temporary pavilion *Blur Building* for the Swiss EXPO 2002. With an "artificial cloud" they covered the light steel structure of the viewing platform at the foot of Lake Neuchâtel in Yverdon-les-Bains, Switzerland. The de facto platform was a machine for producing a fine mist from lake water pumped and filtered through 31,500 high-pressure jets. Stepping into the white mist

Fig. 9. Bangkok Art Museum, proj. R&Sie(n) (source: https://www.new-territories.com/roche2002bis.htm)

Il. 9. Muzeum Sztuki w Bangkoku, proj. R&Sie(n) (źródło: https://www.new-territories.com/roche2002bis.htm)

and experiencing its physical aspects, i.e., droplets and lack of visibility, involved in a way touching the absence of architecture, landscape and space.

Pioneering realizations of the physical dematerialization of architecture as such, and not only its elements, are represented by installations and para-objects by Swiss architect Philippe Rahm [23]. They prove that the classical definition of architecture as an interdependent triad of function, structure and form can be replaced by the interdependence of immaterial elements: temperature (T), light intensity (lux) and relative humidity (HR). In his works he consistently applies his formula in the installation *Interior Weather*, among others: T*lux*HR = form and function, defining space only from amaterial shells.

One of his most spectacular projects, co-authored by Mosbach paysagistes and Ricky Liu & Associates, is the 2011 competition to transform a former airport site into the 70-hectare *Jade Eco Park* in Taichung, Taiwan (Fig. 10). Using computational simulations, the dynamics and distribution of heat, humidity and air quality were determined throughout the revitalized area. The aim was to create a recreational and leisure open space that clearly mitigates the nuisance of the humid subtropical climate and reduces the pollution of the agglomeration. In addition to appropriately selected and designed greenery, it was decided to introduce innovative climatic devices to achieve the desired objective. Among the numerous trees, paths, hills and traffic tunnels, various types of installations have been installed to improve the air quality. These include cooling devices releasing clouds of water vapor and underground heat exchangers with cool air blowing. In addition, drying devices use silica gel to absorb water from the air, while air filters remove pollutants from vehicle emissions, among other things. Mosquito repellent devices that emit ultrasonic sounds were also used. Instead of confining users to glass and air-conditioned pavilions in the park, the same comfort was offered without walls and architectural restrictions – in the open and "fresh" air. *Jade Eco Park* is a project of architecture absent on a large scale, realized successfully and with concern for man and nature.

Fig. 10. Jade Eco Park in Taichung, Taiwan, with cooling isolation, proj. Philippe Rahm Architects and Mosbach paysagistes and Ricky Liu & Associates (photo by Philippe Rahm Architects, source: https://www.archdaily.com/903925/touch-it-smell-it-feel-it-architecture-for-the-senses/5bc4664af197cc1712000285-touch-it-smell-it-feel-it-architecture-for-the-senses-image)

Il. 10. Jade Eco Park w Taichung na Tajwanie z instalacjami chłodzącymi, proj. Philippe Rahm Architects oraz Mosbach paysagistes i Ricky Liu & Associates (fot. Philippe Rahm Architects, źródło: https://www.archdaily.com/903925/touch-it-smell-it-feel-it-architecture-for-the-senses/5bc4664af197cc1712000285-touch-it-smell-it-feel-it-architecture-for-the-senses-image)

Conclusion

The typology of absence architecture presented above, based on the selected projects, shows various ways of influencing the perception and awareness of the recipient so that the object is considered invisible. It is crucial for architectural practice that the presented typology of absence architecture defines at the same time a range of design methods (ways of architectural creation) for achieving the effect of an object's disappearance from its surroundings, which are:

– translocation,
– temporariness and mobility,
– artificial topography,
– super-transparency,
– camouflage and illusion,
– dematerialization.

The categories of translocation, artificial topography, camouflage and illusion are concerned with concealing a solid or falsifying its appearance in the environment. The categories of temporality, super-transparency and dematerialization are related to the realization of objects from lighter, clearer and more subtle materials, up to the use of invisible electromagnetic radiation.

The illusory, imaginary character of achieving the disappearance of architecture brings to mind the Derridean notion of the "appearance of presence" [3, p. 52] or, in this case, the "appearance of absence". The physical drive towards dematerialization, on the other hand, reveals to us the reductivist need to rid ourselves of the ballast of structure and matter itself, to the point of its ultimate disappearance, and moves towards a Parmenidean non-being.

The distinguished typological bipartition resulting from different means of creation is also due, as we can see, to the bipartite semiotic understanding and perception of "absence" that Patrick Fuery [27] sees, and which coincides with a dual understanding of the architecture of absence. The categories: temporality, super-transparency and dematerialization are related to the understanding and design of absence itself – defined by Fuery as *primary absence* [27, pp. 1, 2], referring, as it were, to Parmenides' non-being. Architecture disappears directly and literally – it flees from a given place or becomes physically/materially invisible in that place. On the other hand, the categories of translocation, artificial topography, camouflage and illusion correspond to the perception of secondary absence, which appears only in relation to presence, in this case the necessary presence of the context of a given site and surroundings. The building continues to physically exist, although it is hidden in the terrain completely or partially, or it pretends not to be there by applying an illusory layer of mirrors, greenery or camouflage masking.

The architecture of absence, realized all over the world in a variety of places and environments, usually appears in three specific situations:

1) when there is a lack of space in the location – the surrounding area is heavily built-up,

2) when the neighborhood concerns historic or socially important buildings,

3) when the location concerns open natural areas with great scenic qualities.

Characteristic locations make us aware of the important role played by the context in forming the architecture of absence, which paradoxically is brought out by the disappearance of architecture. The architecture of absence withdraws its ego to exist without form, highlighting the context. It emphasizes the presence of the place it annexes. Although it cannot be seen, it makes the "context" notice itself and gain weight. A poem by Miron Białoszewski aptly and succinctly defines this particular characteristic of the influence of absence on the surroundings, and on

reality as a whole: *always / the world is in the doorway of non-being* [28, p. 181].

The realizations of the architecture of absence cited in the article, describing individual categories of its typology, apart from the case of physical dematerialization, are not an unusual and unique phenomenon. Looking at contemporary buildings, one can risk a thesis of constantly growing number of "invisible" objects.

In a sense, the architecture of absence is becoming a sign of our times, evolving into a global design trend that applies to economically weak, medium and highly developed countries alike. It is possible that – following Jean Baudrillard's reflections – it represents a process of *systematic vanishing of a reality* [29, p. 32], the tendency for real reality to disappear in favor of the illusion of hyper-reality, which will eventually be dominated by the "art of disappearing"[4].

This sad and destructive, for Baudrillard, path to absence is interpreted quite differently by Zen philosophy. It is in absence that it sees the way to awakening and cognition of truth. It is similar in the case of the architecture of absence, in which the disappearance of an architectural form becomes an expression of its identity. Referring to the well-known statement of the author of the philosophy of nothingness Nishida Kitaro[5], paradoxically, one can say that the architecture of absence affirms itself through its own negation of itself. Its invisibility, which makes it impossible to read its form, appearance, dimensions and character, leads us to the metaphysics of "absolutely contradictory self-identity"[6]. From this perspective, the architecture of disappearance – shapeless and undefined – is perfect, abstract and transcendent like the Absolute.

Referring to the motto of this article – James Joyce's phrase that *absence is the highest form of presence* – one can risk a claim that the architecture of absence is the highest form of architectural presence. It is an ideal form, which it does not have to manifest, because it does not exist, which therefore does not have illusory layers of meanings and connotations covering up the real reality. The disappearance of the subjectivity of the architecture of absence, the disappearance of its ego sensitizes the user and the space and architecture itself to the fact of co-existence and co-feeling of the world as a whole.

Summary

The article has a pioneering character, defining and describing the phenomenon of architecture of absence, as well as ways of situating and creating it. At the same time it shows objects already realized, while indicating further possible directions for the development of architecture that minimizes its visual interference with the environment.

---

[4] See: essay, pp. 98–110, cf. his statement: […] *we live in a world of simulation, a world where the highest function of the sign is to make reality disappear and to mask this disappearance at the same time* [30, p. 110].

[5] Sentence of Kitaro Nishidy: *The absolute affirms itself through its own self negation* [31, p. 25].

[6] A characteristic expression of the philosophy of nothingness, see: [32].

What is important for the studied phenomenon of absence architecture is the fact that all categories concern a change in the perception of an object in relation to its surroundings and context. Architecture ceases to be the most important element and the protagonist of design activities, giving way to space and greenery, the historic context or/and the natural environment. Inextricably linked with the history of civilization and buildings representing its development, the need for the building to stand out in space recedes into the background. Dominance and distinctiveness in the landscape, characteristic for architecture, the need to exist and to symbolically spin a tale about the greatness of the investor, architect, god or deity lose their *raison d'être*. The undisturbed context and the freed landscape are becoming the protagonist.

The architecture of absence is a response to the change in the relationship between the built and undeveloped environment that is currently taking place. With the exponential growth of the world's population, urbanization and environmental pollution, our planet is being adversely transformed. From urban centers of civilization amidst vast wilderness and chemical-free fields, we have transformed the Earth into a densely built-up, concreted and degraded landscape with only a few islands of natural greenery. Big industry, agriculture, commerce, urbanization and transport have annexed vast areas of land where nature has been relegated to nature reserves. In such a situation, when there are fewer and fewer places in the world undeveloped and devoid of the crowding artefacts of civilization, the space-releasing architecture of absence, becomes a psychological and physical need or even, to quote John Pawson and Claudio Silvestrin, "an absolutely anthropological necessity" (after: [33, p. 84]).

The architecture of absence emphasizes the role of surroundings and context, its importance and significance in maintaining a cubic balance in the designed environment. It reveals the inseparable relationship between built and undeveloped areas, and thus between man and nature. It shows how by withdrawing one's dominance in space, one can respect the natural and cultural environment. It tries to reduce visual interference in the surroundings and nature to a minimum. It is an answer to the decreasing amount of space in cities and architectural disorder. It represents a new way of bringing balance to the built-up world, in which, as Bolesław Szmidt notes, we have […] *fewer and fewer* […] *such places on earth, when there is a chance to see the horizon undisturbed by man* [34, p. 252].

Translated by
Anna Zadrożna

References

[1] Ellmann R*., James Joyce,* Oxford University Press, New York 1982 [Letter to Lucia Joyce (May 29, 1935)].

[2] *Znikanie. Instrukcja obsługi*, K. Chmielewska, M. Kwaterko, K. Szreder, B. Świątkowska (red.), Fundacja Bęc Zmiana, Warszawa 2009.

[3] Kuczyńska A., *Nieobecność jako forma obecności*, "Sztuka i Filozofia / Art and Philosophy" 1990, t. 2, 45–56.

[4] Derrida J., *Różnia*, J. Skoczylas (przeł.), [in:] M.J. Siemek (red.), *Drogi współczesnej filozofii*, Czytelnik, Warszawa 1978, 374–411.

[5] *Air Architecture. Yves Klein*, P. Noever, F. Perrin (eds.), Hatje Cantz, Los Angeles 2004.

[6] Betsky A., *Landscraper. Building with the Land*, Thames & Hudson, London 2002.

[7] Wines J., *Zielona architektura*, Taschen, Kolonia 2008.

[8] Sudjic D., *Norman Foster, Richard Rogers, James Stirling. New directions in British architecture*, Thames & Hudson, London 1988.

[9] Lewis H., Fox S., *The Architecture of Philip Johnson*, Bulfinch, Boston 2002.

[10] Cecilia F.M., Levene R., *El Croquis 104. Dominique Perrault (1990–2001). The Violence of Neutral*, El Croquis, Madrid 2001.

[11] *Stefan Müller. Wynurzenia, czyli nic*, J. Gromadzka (red.), Muzeum Architektury, Wrocław 2009.

[12] Głowacki T., *Amor vacui. Kilka uwag o architekturze współczesnej*, "Autoportret. Pismo o Dobrej Przestrzeni" 2007, nr 1 (18), 12–15.

[13] *Landform Building: Architecture's New Terrain*, S. Allen, M. McQuade (eds.), Lars Müller, Baden 2011.

[14] Ruby I., Ruby A., *Groundscapes*, Gustavo Gili, Barcelona 2006.

[15] Blasi I., *European Union Prize for Contemporary Architecture: Mies van der Rohe Award 2015*, Fundació Mies van der Rohe, Barcelona 2015.

[16] Cecilia F.M., Levene R., *El Croquis 115/116. Foreign Office Architects (1996–2003). Complexity and Consistency*, El Croquis, Madrid 2003.

[17] *Folding in Architecture*, G. Lynn (ed.), "Ad Profile 102" 1993, Vol. 63, No. 3–4.

[18] Głowacki T., *Szkło w architekturze*, „Architektura-Murator" 2014, nr 02, 94–98.

[19] *Translucent Materials. Glass, Plastic, Metals*, F. Kaltenbach (ed.), DETAIL, Munich 2004.

[20] Sarniewicz M., *Quantum Glass, czyli szyby produkujące prąd. Polska firma uruchomiła ich produkcję*, "MuratorPlus" 2021, December 20, https://www.muratorplus.pl/technika/instalacje-elektryczne/quantum-glass-czyli-szyby-produkujace-prad-od-polskiej-firmy-ml-system-aa-mdSG-iXA7-Fxwp.html [accessed: 22.06.2022].

[21] Bell M., Kim J., *Engineered Transparency – The Technical, Visual, and Spatial Effects of Glass*, Princeton Architectural Press, New York 2009.

[22] Buck P., *Pojęcie zmienności w architekturze*, PhD Thesis, Wydział Architektury, Politechnika Wrocławska, Wrocław 2011.

[23] Galindo M., Klanten R., Ehmann S., *The New Nomads: Temporary Spaces and a Life on the Move*, Die Gestalten Verlag, EU 2015.

[24] Topham S., *Blowup. Inflantable Art, Architecture and Design*, Prestel, London 2002.

[25] Ruby A., *Dusty Relief*, [in:] I. Hwang (ed.), *Verb Natures*, ACTAR, Barcelona 2006, 148–153.

[26] Rahm P., *Philippe Rahm Architectes: Architectural Climates*, Lars Müller, Baden 2019.

[27] Fuery P., *The Theory of Absence: Subjectivity, Signification, and Desire*, Greenwood Press, Westport 1995.

[28] Białoszewski M., *Rozkurz*, PIW, Warszawa 1980.

[29] Baudrillard J., *Why Hasn't Everything Already Disappeared?*, Seagul Books, London 2009.

[30] Baudrillard J., *Towards the Vanishing Point of Art*, [in:] S. Lotringer (ed.), *The Conspiracy of Art. Jean Baudrillard, Manifestos, Interviews, Essays*, Semiotexte, New York 2005, 98–110.

[31] Kitaro N., *Last Writings: Nothingness and the Religious Worldview*, University of Hawaii Press, Honolulu 1993.

[32] Kozyra A., *Filozofia nicości Nishidy Kitaro*, NOZOMI, Warszawa 2007.

[33] Boyarsky N., *Metropolis: Institute of Contemporary Arts, London; 4 August–1 October 1988*, "AA Files" 1989, No. 18, 80–87.

[34] Szmidt B., *Ład przestrzeni*, PIW, Warszawa 1981.

Abstract

The architecture of absence. The phenomenon that became a standard

The phenomenon of the architecture of absence refers to a growing trend in designing buildings/objects/space, involving minimal visual interference with the surroundings or even its complete absence. Based on the analysis of examples mainly from the contemporary realizations, the work distinguishes and describes various ways (categories) of creating the architecture of absence, which ultimately define its typology. It includes the following categories: 1) translocation, 2) artificial topography, 3) camouflage and illusion, 4) temporariness and mobility, 5) super-transparency, 6) dematerialization.

The architecture of absence is a way of seeking balance in an increasingly overcrowded and built-up world, in which green and artifact-free areas are radically shrinking. With its withdrawal and disappearance, it pays respect to nature and heritage, the natural and cultural environment in which it is created. By freeing the horizon, it is a visually non-invasive response to the declining urban space and architectural disorder.

Key words: architecture, absence, disappearance, invisibility, dematerialization

Streszczenie

Architektura nieobecności – fenomen, który staje się standardem

Fenomen architektury nieobecności dotyczy coraz powszechniejszej tendencji w projektowaniu budynków/obiektów/przestrzeni, polegającej na minimalnej ingerencji wizualnej w otoczenie czy nawet całkowitej jej nieobecności. W oparciu o analizę przykładów, głównie z realizacji współczesnych, w pracy wyróżniono i opisano różnorodne sposoby (kategorie) kreacji architektury nieobecności, które ostatecznie określają jej typologię. Obejmuje ona następujące kategorie: 1) translokację, 2) sztuczną topografię, 3) kamuflaż i iluzję, 4) tymczasowość i mobilność, 5) supertransparentność, 6) dematerializację.

Artykuł ma charakter pionierski – opisuje i definiuje fenomen architektury nieobecności. Ukazuje, iż jest ona sposobem szukania równowagi w świecie coraz bardziej przepełnionym i zabudowanym, w którym radykalnemu skurczeniu ulegają obszary zielone i wolne od artefaktów. Swoim wycofaniem i zniknięciem oddaje szacunek przyrodzie i dziedzictwu, środowisku naturalnemu i kulturowemu, w którym powstaje. Uwalniając horyzont, jest nieinwazyjną wizualnie odpowiedzią na zmniejszającą się ilość przestrzeni w miastach i architektoniczny nieład.

Słowa klucze: architektura, nieobecność, zanikanie, niewidoczność, dematerializacja