



Agnieszka Mańkowska*, Artur Zagula**

Temporary architecture in the 21st century as an expression of changes taking place in contemporary society

Introduction

In 1985, Stefan Morawski [1] defined contemporaneity also as *being “here and now”*. Starting from the year 2022, despite the passage of time, for the vast majority of society, regardless of scientific definitions, contemporaneity is indeed the reality of an individual who builds contemporary society. This society, according to the diagnosis of Zygmunt Bauman, defined as postmodern society, has completely new features in relation to traditional and modern society. Let us list a few of them that best define this kind of society and will be useful in the analysis of contemporary architecture of a temporary nature.

First of all, it is a society of individualists who pursue not common, but individual, goals, caring not too much about what is happening around them. As Bauman said: *What we do and see is called “individualization”. And we would need to try really hard to spot a gardener who contemplates a pre-designed harmony beyond the fence of his private garden and then goes out to bring it about* [2, p. 113].

The second feature is consumerism, it is a society of fashion, fast changing trends and ever new skills. Contemporary society is shaping not self-aware citizens, but consumers who will fulfil their intended role perfectly. According to Bauman, even culture is no longer a place of value creation, but becomes a part of the market game: *Culture is now turning into one of the departments in the “all you need and dream of” department store into which the world inhabited by consumers has turned. As in other*

departments of that store, the shelves are tightly packed with daily restocked commodities, while the counters are adorned with the advertisement of latest offers destined to disappear soon together with the attractions they advertise. [...] Liquid-modern culture has no “people” to “cultivate”. It has instead clients to seduce. And unlike its “solid modern” predecessor, it no longer wishes to work itself. Its job is now to render its own survival permanent through temporalizing all aspects of life of its former wards, now reborn as clients [2, p. 125].

The next characteristic is flexibility, it is a society that changes quickly and always starts over when needed: *The postmodern life strategy tells you to avoid everything what is forever and ever, until death do us apart* [3, p. 277]. For this reason one should avoid permanent declarations and long-term commitments. In the words of Bauman, we are living in a “liquid modernity”. *“Liquid modern” is a society in which the conditions under which its members act change faster than it takes the ways of acting to consolidate into habits and routines. [...] Liquid life, just like liquid modern society, cannot keep its shape or stay on course for long* [4, p. 1]. Summarizing, the main new and important features of contemporary society are as follows: individualism, consumerism, constant change and movement, short-term experiences based especially on emotions. This society lives quickly, usually alone, rejects restrictions and permanent declarations and long-term commitments.

Postmodern society created, in the 21st century, a new form of temporary architecture which, unlike the previous examples of non-permanent architecture, is mainly to shock, surprise, provoke, fuel consumerism, and above all, to be short-lived, to appear in a different, new form the next time. Current observations and research show that, in the 21st century, interest in temporary architecture has increased, both in terms of use and design. This is also

* ORCID: 0000-0002-8934-8630. Institute of Architecture and Town Planning, Lodz University of Technology, Poland, e-mail: agnieszka.mankowska@dokt.p.lodz.pl

** ORCID: 0000-0002-5617-9041. Institute of Architecture and Town Planning, Lodz University of Technology, Poland.

confirmed by the words of internationally known art, architecture and design critic and writer Aaron Betsky, who in 2016 noticed: *Architecture is going pop. It is finally sloughing off its ridiculous obsession with eternity, and learning to live in and for the moment. Pop-up architecture, temporary structures, and other ephemeral frameworks for equally evanescent events have become all the rage, especially in Europe* [5]. In addition, the words of writer and historian of architecture and design Tom Dyckhoff, from 2018 also accurately reflect contemporary reality: *In the twentieth century, [...] architecture became just another form of media, the building “a mechanism of representation”¹. The postmodern battle of architectural styles has been won by the architecture best able to communicate in this age of instantaneous global communication, the one that is the most visible, the most thrilling, the most profitable. Welcome to the Wowhaus* [6]. These words can be an introduction to further research. On a few examples of temporary architectural structures, the contemporary temporary architecture will be verified in terms of the possibility of responding to (postmodern) social needs.

Methodology

For the purpose of this article, the authors adopted multiple case studies as the main research method. Scientific works assume the recognition of contemporary temporary architecture in relation to the liquid modernity diagnosed by Bauman and then an attempt to organize and systematize the selected types of objects in order to collect them into a typology of postmodern temporary architecture in terms of the aforementioned philosophy. Hence, in the conducted research, the term “postmodern” in “postmodern temporary architecture” refers to postmodernity as a fluid modernity, not “postmodernism” as an architectural style.

While the topic of temporary architecture is still a new and not fully explored issue, there have been attempts to catalog temporary architecture and the like. It took place, inter alia, in Rebecca Roke’s book *Nanotecture. Tiny Built Things* [7], where the smallest architectural forms have been divided into the micro, mini, midi, macro and maxi structures. On the other hand, *The New Pavilions* [8] by Philip Jodidio divides different kinds of pavilions into objects for gathering, d’art, learning, displaying, seeing / listening, living / working / play or shelter. Other works usually come down to the presentation of selected temporary objects, which we can see, for instance, in *Temporary Architecture* [9] by Lisa Baker or *Temporary Architecture Now!* [10] by Philip Jodidio. As it was mentioned, this article’s aim is to formulate a sketch of typology of all contemporary objects of temporary architecture and distinguish among them a new category of postmodern temporary architecture. Due to editorial limitations, the considerations and conclusions presented in this article constitute only a fragment of the conducted research. Work on this topic will be continued in further scientific studies.

Typology of contemporary temporary architecture

Contemporary temporary architecture is a collection of objects of different nature, function and structure. As they are architectural objects, they include buildings, structures and small architecture objects. Their temporary nature is evidenced by the materials used with, for instance, a limited lifespan; the mobility of elements or the entire structure; as well as the creator’s conscious assumptions related to, for instance, obtaining a specific temporary effect. From a legal point of view, a [...] *temporary building structure is a structure intended for temporary use in a period shorter than its technical durability, intended to be moved to another place or demolished, as well as a building structure not permanently connected to the ground, such as shooting ranges, street kiosks, pavilions street and exhibition sales, tent covers and pneumatic coatings, entertainment devices, barracks, container facilities, portable free-standing antenna masts*² [11, p. 3]. On the other hand, we could even divide temporality in relation to temporal use, following the work of Ali Cheshmehzangi, who, based on his own considerations also supported by the research of Tom Mels, William J.V. Neill, Florian Hayden and Robert Temel, formulated four main types, including ephemeral, provisional (or interim), temporary and regular (or regular temporary) [12]. The research of the authors of this article focused on an attempt to systematize contemporary temporary objects due to the function introduced into them or what function they perform. For this reason, among all objects of contemporary temporary architecture, we can find examples of objects in the following types: objects with a residential function, objects with educational function, exhibition pavilions, service and/or commercial facilities, objects and/or treatments to organize the space, artistic objects and finally other temporary cubatures. Each group will be briefly presented and discussed on the basis of selected examples.

The first of the above-mentioned types will be the group of “objects with a residential function” which is a diverse group, represented both by spontaneously created objects and well-thought-out constructions, and sometimes even prototypes. All of the examples show the variety of described type, in which we can distinguish, for instance, objects from unsustainable architecture, structures which we can define as “first aid architecture”, objects built from sea containers, mobile houses (which, despite possible controversies, the authors of the article would like to include as an example of mobile architecture) or assistance in the field of social housing.

Starting with favela (favela), as an example of unsustainable architecture, it is a name for Brazilian slums located generally in Rio de Janeiro and Sao Paulo, as well as within or outside the country’s other major cities. This type of development usually arises when wild tenants occupy empty land on the outskirts of large cities, building

¹ Colomina B., *Privacy and publicity: modern architecture as mass media*, MIT Press, Cambridge 1996 [footnote by T. Dyckhoff].

² The authors emphasize that the quoted record refers to the Polish Construction Law, in other countries these regulations may appear differently or may be unregulated at all.

houses from stolen or recovered materials. These are usually makeshift structures, reinforced over time with more durable materials, such as brick or sheet metal. A feature of this type of development is the lack of technical infrastructure, instead they are equipped with improvised plumbing and electrical installations, and the waste disposal methods used pose a health risk. Unhygienic living conditions, poor nutrition and pollution, among other things, are the main causes of the spread of many diseases [13].

The “first aid architecture”, as another type of the discussed group, is the architecture that reduces the effects of natural disasters or the effects of wars, pandemics and others. *Better Shelter* is the structure designed and produced by the IKEA Foundation. The IKEA Foundation gave rise to the Housing for All Foundation, a non-profit organization that started a social enterprise called Better Shelter, from which this temporary facility was named. *Better Shelter* is a temporary shelter for basic needs, equipped with a solar panel and a lamp to provide light in the dark. No special tools or additional equipment are required for its assembly. The object is delivered in flat packages, which is the result of a project taking into account in particular its basic parameters, including volume, weight, price, safety for health and ease of transport. Thanks to the cooperation of the IKEA Foundation and UNHCR (The UN Refugee Agency), *Better Shelter* can ensure the safety and dignity of life for millions of refugees who have found themselves in exceptional circumstances while fleeing violence, armed conflicts or natural disasters [14].

When cities around the world are facing an enormous pressure on available and affordable housing, *Urban Rigger* seems to be an answer by building mobile communities on water. It is a unique, floating, flexible, mobile property improving the environmental footprint of our way of living in the city. The *Urban Rigger*, designed by Bjarke Ingels, was built based on the principles of building with LEGO bricks. This facility, depending on the needs, can be easily recreated in any size, located in any place with access to water and used for various purposes. This is evidenced by the already commenced projects in Cork, Rotterdam and San Francisco. In Copenhagen, the current design community includes 12 apartments ranging from 23 to 30 m², and each housing unit can accommodate approximately 100 students. In addition to the residential part, which takes up approximately 300 m², twice as much is intended, among others, on the green courtyard located in the central part for recreation, bicycles, a bathing pier and a canoe marina. Additionally, approximately 220 m² is occupied by a basement with a large lounge, kitchen, laundry room, technical and storage rooms. On the roof there is an observation deck, a green roof and a place for solar panels. *In the summer of 2019 an additional 5 Riggers joined the first one in Copenhagen, and we now have a fully functional floating village, consisting of 72 apartments* [15] (Fig. 1).

An example of a mobile home, designed by The People’s Industrial Design and People’s Architecture Office in Beijing, for the 2012 Get It Louder Exhibition, is *Tricycle House*. This structure was created for people who cannot afford their own home. By choosing the presented

solution, they can count on a universal interior equipped with a bed that transforms into a dining table or bench, a bathtub, a stove and an integrated water tank. The house is mounted on the frame of a tricycle, its housing is made of translucent material transmitting both sunlight and city lighting, the modular structure of which allows for expansion and connection between additional units of the facility [16]. *Reducing private living to the smallest footprint, the nomadic system promotes sustainable living by taking advantage of public resources. Public parks replace personal gardens, public toilets replace private toilets, parking places replace land ownership [...]* [17, p. 52].

Speaking of objects with residential function, we cannot ignore social housing support structures. Solutions of this type, more and more willingly introduced, especially in highly developed countries, are aimed at helping the homeless. An example can be the solution from the city of Ulm, where the sleeping rooms were created as part of the Ulmer Nest program, which can accommodate up to two people in need and provide warmth and safety, especially during winter. The facilities were also designed not as an alternative to regular housing, but as a refuge in special cases [18]. *The project originated from a proposal of the municipality of Ulm, Germany, within the temporary problem-solving initiative “Wilhelmsbüro” of the two Ulm-based start-up companies Bootschaft and Widerstand und Söhne, and the computer scientist Florian Geiselhart* [19].

Another type, from the temporary structures classification, is “educational objects”. Among the presented examples illustrating this type of temporary architecture, we can find objects created during educational workshops, prototypes and eco-structures. Such facilities, thanks to their characteristics of temporary objects, contribute to the development of science, setting its new directions and boundaries.

Hello Wood will be the first to be discussed as an international, independent learning platform that teaches through experience. Hello Wood began its educational activities in 2010, turning into an art camp and festival covering 20 universities and 30 countries in the following

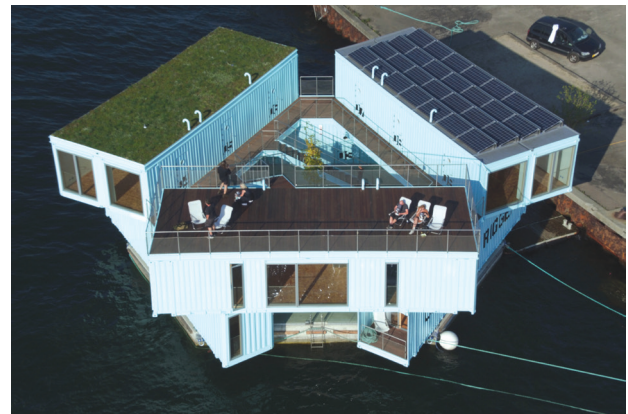


Fig. 1. *Urban Rigger*, BIG (Bjarke Ingels Group), Copenhagen (image courtesy Bjarke Ingels Group)

Il. 1. *Urban Rigger*, BIG (Bjarke Ingels Group), Kopenhaga (zdjęcie dzięki uprzejmości Bjarke Ingels Group)



Fig. 2. *Fabrik*, MOOMOO (Łukasz Pastuszka), Hungary (image courtesy Ł. Pastuszka)

Il. 2. *Fabrik*, MOOMOO (Łukasz Pastuszka), Węgry (zdjęcie dzięki uprzejmości Ł. Pastuszki)

years. Every year, students participating in the workshops have a week to make wooden architectural installations on a given topic and under the guidance of previously selected tutors. In 2014, the leitmotif was “playing with balance”. One of the ideas that has been implemented, next to e.g. facilities such as *Cornwalk*, *Playground*, *SPACEship*, *Spikefort* and *Force*, was the one called *Fabrik*, designed by MOOMOO Architects from Łódź. The resulting facility was created using only waste material produced by other teams participating in the event. In this way, *Fabrik* was the result of balance of wasted material ordered for the workshop. The project assumed the creation of two walls with a clearly marked contrast between the sharp edges and the smooth surface of the walls inside the structure [20], [21] (Fig. 2).



Fig. 3. *Hy-Fi*, The Living, Young Architects Program 2014, MoMA PS1, June 27th–September 6th (photo by K. Graves, image courtesy MoMA PS1)

Il. 3. *Hy-Fi*, The Living, Young Architects Program 2014, MoMA PS1, 27 czerwca–6 września (fot. K. Graves, zdjęcie dzięki uprzejmości MoMA PS1)

On the other hand, Mediated Matter scientists from the MIT Media Lab created a project to investigate the possibility of combining digital and biological techniques for producing architectural structures. As part of the research, a dome of silk fibers woven by a programmed robotic arm was created. This arm has been programmed to mimic the way the silkworm is depositing silk. The arm then placed a kilometer long silk fibers on flat polygonal and metal frames, thus forming 26 panels which were arranged in a dome and suspended from the ceiling. The last stage of the project was to place, on the structure prepared in this way, 6,500 live silkworms, which, crawling on the dome, supplemented the structure with the missing silk fibers. This is how *The Silk Pavilion* was created [22].

In 2014, the New York studio The Living, with its own structure called *Hy-Fi*, won the annual Young Architects Program (YAP), competition organized by MoMA PS1. In this competition, young architects propose their vision of a temporary structure, which then becomes, in a way, the host of the museum’s summer events. *Hy-Fi* was a structure made entirely of biodegradable materials. It was a set of circular towers made of bioblocks grown using a combination of agricultural byproducts and mushroom mycelium, which in this case acts as a natural digestive glue. Some of them, ultimately placed in the upper part of the structure, have been covered with a light-refracting coating, thanks to which the light reflects inside. The gaps in the brick layers additionally help ventilate the entire structure, using gravity [23]. The estimated lifetime of the installation was 60 days [24] (Fig. 3).

Next type of temporary architecture are objects classified as “exhibition pavilions” and among them are pavilions for World Exhibitions (EXPO) or other exhibition facilities which are one of the most visible and therefore well-known representatives of temporary architecture objects, with the following examples.

World’s fair [as a first example is a] *large international exhibition of a wide variety of industrial, scientific, and cultural items that are on display at a specific site for*

a period of time, ranging usually from three to six months [...]. Since the mid-19th century more than 100 world's fairs have been held in more than 20 countries throughout the world. Generally speaking, these events are called world's fairs in the United States, international (or universal) expositions in continental Europe and Asia, and exhibitions in Great Britain. The term expo has also been applied to many expositions in various locations [25].

An example of other exhibition facilities was the *Nomadic Museum* designed by Shigeru Ban Architects. It was a mobile traveling photo gallery by Gregory Colbert entitled *Ashes and Snow*, built of sea containers and so characteristic of this designer paper tubes. Despite the different configuration, depending on the location, the basic elements of the structure remained unchanged. Its main element was a checkered stack of shipping containers, grids of metal and paper pipes, and two rows of paper columns. The building was complemented by sloping sections of white PVC filling the spaces between the containers, the roof made of PVC membranes and the natural floor cut by the main communication route, made of recycled wooden boards from construction scaffolding [26].

Then, among the objects presented to a wider part of the society, we can certainly find service and/or commercial facilities, for instance store interior pop-ups, freestanding pop-up structures, mobile stands, food trucks or objects built from sea containers, that have already permanently anchored in commercial public space, which just like the previous group of temporary objects, provides not only commercial but also architectural variability and diversity. First group, store interior pop-ups, usually with commercial function introduced for a specific period of time in the interior, are focused on unusual aesthetic solutions aimed at attracting and surprising the customer.

Pop-up structures have a similar effect. In 2015, the *Nike's Shoe Box Pop-Up* space was opened to celebrate the world-famous sneaker on Air Max Day in Shanghai. This space was closed in a large, steel Nike box created by the London agency Rosie Lee with transparent walls, in

which the display element were plastic air bubbles filled with rare copies of the legendary sneakers. This structure, combined with interactive events presenting the history of Air Max's heritage, was an informative experience for the customer taken quite literally into the world of the popular brand [27] (Fig. 4).

Another example of the same type are all kinds of mobile and food truck stands, which like previously mentioned mobile houses are treated by the authors as examples of mobile architecture. In 2011, as part of the rejuvenation of the market for Lower Marsh in Waterloo, London, a tiny mobile performance venue designed by the Aberrant Architecture studio was presented. This unusual structure, based on 16th-century stalls, called *Roaming Market*, was made of steel and mounted on the trailer's chassis. At the two-story stand, steel stairs lead to the platform on the roof intended for the event space and the viewing terrace. Below is a covered seating area with a built-in chessboard [28].

One of the examples of the use of sea containers for commercial purposes is *PUMA-CITY*, built from 24 modernized sea containers. This portable building, assembled and disassembled countless times in international ports, has been designed as a three-level structure, containing commercial spaces, offices, a bar and an event space with a large terrace. The facility was designed in 2008 by the LOT-EK design studio [29].

An object with a service function, often combining a sea container with an inflatable, pneumatic coating in its form and structure, is an object designed and created in the time of the COVID-19 pandemic, namely a part of a temporary hospital erected in Turin on April 19, 2020. The *CURA* building, designed by Carlo Ratti Associati together with Italo Rota, was created in cooperation with and thanks to the involvement of many people, from medical, scientific, technical to graphic and logistic consultations. This project which is [...] *the first prototype of an open-source project to create plug-in intensive care units (ICU) from shipping containers has been built and installed at a hospital in*

Fig. 4. *Nike's Shoe Box Pop-Up*,
Rosie Lee, Shanghai
(image courtesy Rosie Lee)

Il. 4. *Nike's Shoe Box Pop-Up*,
Rosie Lee, Szanghaj
(zdjęcie dzięki
uprzejmości Rosie Lee)





Fig. 5. *Noma Mexico*, Tulum
(photo by E. Sung,
image courtesy E. Sung)

Il. 5. *Noma Mexico*, Tulum
(fot. E. Sung, zdjęcie dzięki
uprzejmości E. Sung)

Italy. *CURA* (acronym for “connected units for respiratory ailments” and also “cure” in Latin) proposes a quick-to-deploy solution to expand emergency facilities and ease the pressure on healthcare systems treating patients infected by coronavirus [30]. The above example demonstrates the invaluable potential of temporary architecture as a “first aid architecture” as well.

“Objects and/or treatments to organize the space”, temporary insertion of a function into the existing volume and temporary way of organizing space or landscape architecture represent the next type of temporary architecture examples.

Nocny Market is an initiative that gives a second life to the abandoned platforms of the Warszawa Główna Osobowa railway station and a space created by a project that combines food, music and promoting a new lifestyle. Opened in 2016, it was the first initiative of this type in Poland, and thanks to its activities in the first season, it won many awards, among them: Best of Warsaw, Nocne Marki, Wdech 2016 or The Architectural Award of The President of The Capital City of Warsaw. In one place, the organizers gathered the most interesting street food and food truck exhibitors as well as music and art creators. Over the years, *Nocny Market* has become one of the most attractive places on the capital’s map, conducive to gatherings and relaxation in the atmosphere of the fair in summer evenings [31].

Noma Mexico is the third-ever full-size pop-up of this famous restaurant. The first took place in Tokyo in 2015, the following year in Sydney, and in 2017 *Noma*, led by René Redzepi, reached Mexico, where it opened its doors in exceptional circumstances for a period of seven weeks. The new, temporary headquarters of *Noma* was located between the jungle and the Caribbean Sea and was completely open to its nature and climate. The aim of this activity was to introduce new fresh local ingredients and culinary styles, which is what this world-famous Danish

restaurant is famous for as an attraction for new and regular customers [32] (Fig. 5).

Landscape architecture, which is an inseparable element of every architectural and urban design, has a special place in contemporary society. Parklets and other elements of urban furnishing, which are gaining in popularity, encourage city residents to use public spaces and build interpersonal relationships. Apart from “temporary insertion of a function into an existing volume” and “temporary way to organize the space”, it is also one of the best ways to activate abandoned or yet unexplored places.

The following type distinguished from the collection of contemporary temporary architecture is “artistic objects”. Presented examples of this type include: Serpentine Galleries (Serpentine Pavilions), artistic installations, scenography and other festival facilities which usually deal with a deeper topic, a contemporary problem and provoke reflection although sometimes they are only an aesthetic form accompanying the viewer for a moment.

Serpentine has been presenting pioneering exhibitions of emerging practitioners to the work of recognized artists around the world since 1970, that is for half a century. In London’s Kensington Gardens you can see a year-round program from exhibitions, live events, education to architecture itself. The Serpentine Pavilion is an annual temporary structure designed by well-known and respected architects selected by an architectural commission. The temporary pavilion is open every year throughout the summer and is a venue for organized events [33].

Installations just as scenography facilities are a combination of elements of an architectural function with the artistic vision of the designer. The former are often independent compositions, while the scenery is usually the background for the organized event.

The Burning Man Festival is an annual festival held in the Black Rock Desert of northern Nevada. The organized event lasts 7 days during which the gathered community



Fig. 6. *Uchronia*, Arne Quinze, Black Rock Desert, Nevada (image courtesy A. Quinze)

Il. 6. *Uchronia*, Arne Quinze, Black Rock Desert, Nevada (zdjęcie dzięki uprzejmości A. Quinze)

builds Black Rock City from scratch as an artistic form of self-expression. After a week, everyone leaves the desert, leaving it in its original state. In 2006, contemporary artist Arne Quinze built a structure called *Uchronia* for this festival. 150 km of wooden beams were used to build this pavilion, and the resulting sculpture gave people a sense of security. The final act of the building's life was its grand finale, so the author himself set fire to his work of art, thus fulfilling the main assumption of the festival [34] (Fig. 6).

In 2017, at the Dutch Design Week festival in Eindhoven, the MVRDV studio and think thank The Why Factory created a multicolored hotel in the tetris convention, as one of the festival facilities. The main theme of the fes-

tival was to answer the following question: what should the city of the future look like in the face of diminishing natural resources, climate change and an ever-growing population? According to MVRDV, the answer is architectural flexibility. The facility presented at the festival was composed of nine apartments in one of many possible configurations. Each unit that builds it has a different character, referring to the personality of its user, including for instance a lime-colored space with a hammock and ladders or a lemon-yellow privatized penthouse. Entering this world, one should remember that when deciding about one's own desires, one must come to terms with the spatial needs of others [35] (Fig. 7).



Fig. 7. *Tetris Hotel*, MVRDV, The Why Factory, Eindhoven (photo by OSSIP, image courtesy MVRDV)

Il. 7. *Tetris Hotel*, MVRDV, The Why Factory, Eindhoven (fot. OSSIP, zdjęcie dzięki uprzejmości MVRDV)



Fig. 8. *Ridley's*, The Decorators, Atelier Chan Chan, London (photo by Dosfotos, image courtesy The Decorators)

Il. 8. *Ridley's*, The Decorators, Atelier Chan Chan, Londyn (fot. Dosfotos, zdjęcie dzięki uprzejmości The Decorators)

The last of the distinguished types of contemporary temporary architecture introduced in this article concerns other temporary facilities and one of the most interesting are, among others, cubature objects.

In London, a group of architects and artists from The Decorators and Atelier Chan Chan launched a temporary dining experience called *Ridley's* in 2011. It was a structure built on an abandoned plot of land at Ridley Road Market that involved marketers at a nearby market in the food preparation process, while encouraging gatherings. By participating in the event, consumers are led upstairs

to a common table, while their selected dishes are prepared on the ground floor, which is also a place to exchange products purchased at the bazaar for a meal. When the order is ready, the mechanical table serves it to the guests upstairs. The temporary structure of the restaurant was designed mainly from metal scaffolding, wood-based panels and corrugated sheet. This summer installation showed a new way of using a deserted space, emphasizing its value and new potentials also in the context of building local communities [36] (Fig. 8).

Another cubature project called *AEROPOLIS* appeared in 2013 at the Metropolis Festival in Copenhagen. It was designed by the Plastique Fantastique group in collaboration with Københavns Internationale Teater. This temporary space enclosed in a pneumatic shell, with an area of 100 m², has been designed with two optional surfaces allowing for even greater adaptation of the facility to its function. Thanks to its structure, *AEROPOLIS* changes its shape, being an independent form or squeezing between elements of the urban or natural environment. As part of the festival, the mobile space, prepared in this way, offered 13 different urban activities, from kindergarten, through yoga, martial arts, to silent disco, each in a different setting. This temporary form changes the perception of space, showing its new possibilities and encouraging communication with others by active participation in planned activities [37] (Fig. 9).

In this type we can also find traditional or more modern versions of yurts, tipis, wigwams, igloos and all kinds of temporary huts, as well as markets, circuses or portable restrooms. All known for ages and still just as needed.

As mentioned at the beginning of the article, the presented examples, which give the basis for an attempt to classify contemporary temporary architecture, are only a small part of them. The current press, popular science and scientific architectural literature are full of more examples [38]–[40].



Fig. 9. *AEROPOLIS*, Plastique Fantastique, Copenhagen (photo by M. Canevacci, C. Mantovani, image courtesy Plastique Fantastique)

Il. 9. *AEROPOLIS*, Plastique Fantastique, Kopenhaga (fot. M. Canevacci, C. Mantovani, zdjęcie dzięki uprzejmości Plastique Fantastique)

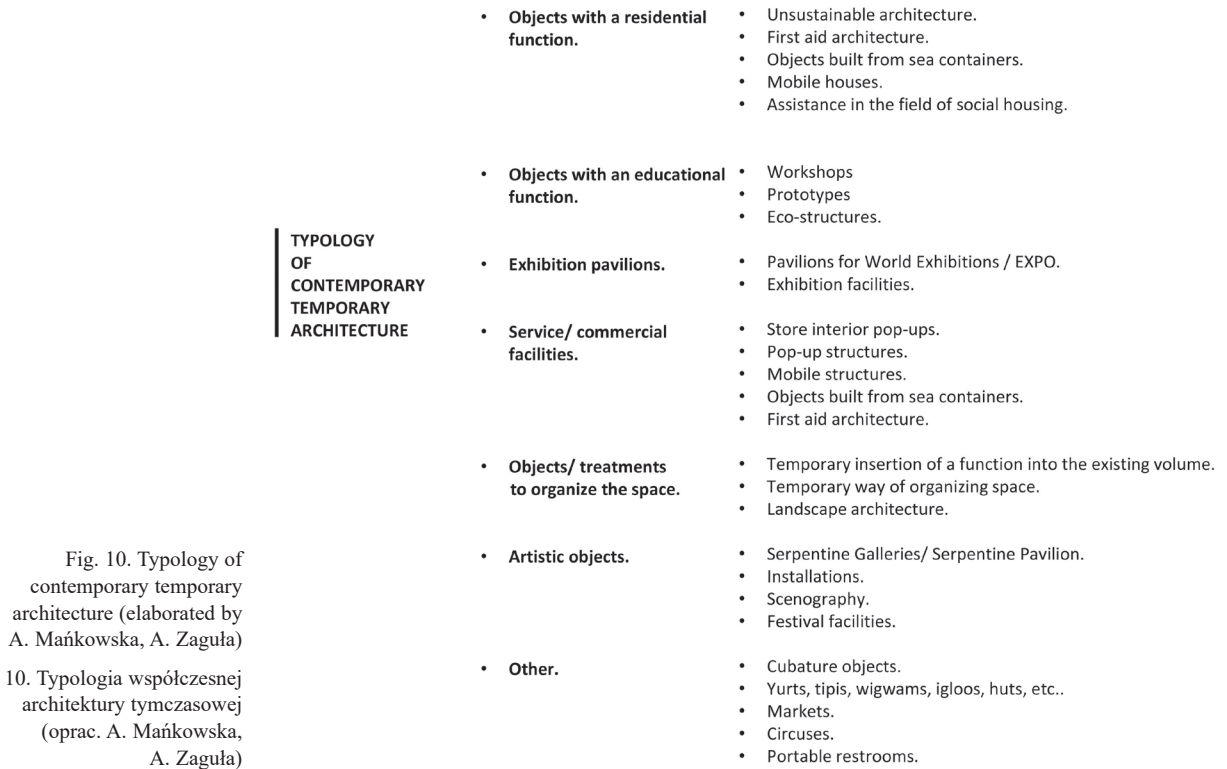


Fig. 10. Typology of contemporary temporary architecture (elaborated by A. Mańkowska, A. Zaguła)

Il. 10. Typologia współczesnej architektury tymczasowej (oprac. A. Mańkowska, A. Zaguła)

Conclusion

The above examples, from the collection of contemporary objects of temporary architecture, are just some of the projects that appeared in our reality and already show the enormous variety of both their forms and functions, as shown in Figure 10.

In order to distinguish a new category of postmodern temporary architecture, we must recall the basic needs of the postmodern society that we have identified along with these that are, in a way, a side effect of liquid modernity. We talked about consumerism, endless changes, living in a constant movement, need for strong emotions and the deep but short-term experiences, as well as the need for closeness and connection. By eliminating, among the above, the kinds and distinguished types that do not meet the criteria of postmodernity, we obtained a new category of temporary architecture, deeply rooted in the times in which we live. Therefore, in the collection of postmodern temporary architecture we can find objects built from sea

containers, mobile houses and mobile structures, store-interior pop-ups, pop-up structures, temporary insertion of a function into existing volume, temporary way of organizing space, landscape architecture, and other cubature objects along with facilities enabling the life of modern nomads. A significant increase in popularity and the development of this type of contemporary temporary architecture can be observed in the 21st century. Architecture as one of the services or products has always been tailored according to the consumer's needs. The observations show that the temporary architecture of the 21st century seems to complement the contemporary world of architecture, filling the gap that has arisen in it. Permanent architecture that fulfills the basic needs of human existence does not take into account the new "whims" and the temporary needs of its user. This role is taken over by postmodern temporary architecture.

*Translated by
Agnieszka Mańkowska, Artur Zaguła*

References

- [1] Morawski S., *Na zakręcie: od sztuki do po-sztuki*, Wydawnictwo Literackie, Kraków 1985.
- [2] Bauman Z., Haugaard M., *Liquid modernity and power: A dialogue with Zygmunt Bauman*, "Journal of Power" 2008, Vol. 1, No. 2, 111–130, doi: 10.1080/17540290802227536.
- [3] Bauman Z., *Ponowoczesność jako źródło cierpień*, Wydawnictwo Sic!, Warszawa 2000.
- [4] Bauman Z., *Liquid Life*, Polity Press, Cambridge–Malden 2006.
- [5] Betsky A., "Let's hear it for temporary architecture", <https://www.dezeen.com/2016/03/29/aaron-betsky-opinion-temporary-pavilions-lessons-for-permanent-architecture/> [accessed: 13.06.2021].
- [6] Dyckhoff T., *The Age of Spectacle: Adventures in Architecture and the 21st-Century City*, Random House Books 2017 [ebook].
- [7] Roke R., *Nanotecture. Tiny Built Things*, Phaidon Press, London–New York 2016.
- [8] Jodidio P., *The New Pavilions*, Thames & Hudson, London 2016.
- [9] Baker L., *Temporary Architecture*, Braun Publishing, Berlin 2014.
- [10] Jodidio P., *Temporary Architecture Now!*, TASCHEN, Cologne 2011.
- [11] *Ustawa z dnia 7 lipca 1994 r., Prawo Budowlane 1994*, <https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU19940890414/U19940414Lj.pdf> [accessed: 11.01.2022].

- [12] Cheshmehzangi A., *Identity of Cities and City of Identities*, Springer Nature Singapore, Singapore 2020, doi: 10.1007/978-981-15-3963-3.
- [13] Wallenfeldt J., *Favela. Brazilian shantytown*, <https://www.britannica.com/topic/favela> [accessed: 7.06.2021].
- [14] IKEA Foundation, *UNHCR ready to improve life for thousands of refugee families*, <https://ikeafoundation.org/press-release/better-shelter-ikea-foundation-and-unhcr-ready-to-improve-life-for-thousands-of-refugee-families/> [accessed: 3.06.2021].
- [15] www.urbanrigger.com [accessed: 15.06.2021].
- [16] Tomilinson S., *Rotation, rotation, rotation: The house built on a TRICYCLE for those who can't afford their own place*, <https://www.dailymail.co.uk/news/article-2266434/The-home-built-TRICYCLE-aims-tackle-worlds-housing-crisis.html> [accessed: 20.05.2021].
- [17] *The New Nomads. Temporary Spaces and a Life on the Move*, S. Borges, S. Ehmann, M. Galindo, R. Klanten (eds.), Gestalten, Berlin 2015.
- [18] Balčiauskas M., Grinevičius J., *This City In Germany Has Sleeping Pods To Protect The Homeless From The Cold At Night. Interview*, https://www.boredpanda.com/homeless-capsules-shelter-winter-ulmerness/?utm_source=google&utm_medium=organic&utm_campaign=organic [accessed: 14.01.2022].
- [19] <https://ulmerness.de/> [accessed: 14.01.2022].
- [20] <https://hellowood.eu/education/about> [accessed: 7.06.2021].
- [21] Stott R., *Hello Wood 2014 Invites Student Teams to "Play With Balance"*, <https://www.archdaily.com/534218/hello-wood-2014-invites-student-teams-to-play-with-balance/> [accessed: 7.06.2021].
- [22] Howarth D., *Silkworms and robot work together to weave Silk Pavilion*, <https://www.dezeen.com/2013/06/03/silkworms-and-robot-work-together-to-weave-silk-pavilion/> [accessed: 7.06.2021].
- [23] Frearson A., *Tower of "grown" bio-bricks by The Living opens at MoMA PS1*, <https://www.dezeen.com/2014/07/01/tower-of-grown-bio-bricks-by-the-living-opens-at-moma-ps1-gallery/> [accessed: 20.05.2021].
- [24] St Hill C., *This is Temporary. How Transient Projects are Redefining Architecture*, RIBA, Newcastle upon Tyne 2016.
- [25] Findling J., *World's fair*, <https://www.britannica.com/topic/worlds-fair> [accessed: 15.06.2021].
- [26] Douglass-Jaimes D., *AD Classics: Nomadic Museum / Shigeru Ban Architects*, <https://www.archdaily.com/777307/ad-classics-nomadic-museum-shigeru-ban-architects> [accessed: 8.06.2021].
- [27] [n.a.], *Nike Air Max Day Pop-up Space in Shanghai*, <https://www.urdesignmag.com/design/2015/03/27/nike-air-max-day-pop-up-space-in-shanghai-by-rosie-lee/> [accessed: 20.05.2021].
- [28] Buckle H., *Roaming market by Aberrant Architecture*, <https://www.dezeen.com/2013/05/31/roaming-market-by-aberrant-architecture/> [accessed: 20.05.2021].
- [29] <https://lot-ek.com/puma-city> [accessed: 14.01.2022].
- [30] Stevens P., *CURA shipping container ICUs open in turin to combat COVID-19*, <https://www.designboom.com/architecture/cura-shipping-container-ic-us-turin-covid-19-04-21-2020/> [accessed: 14.01.2022].
- [31] <http://ustamagazyn.pl/2020/06/piaty-sezon-na-nocnym/> [accessed: 20.05.2021].
- [32] Canavan D.H., *Everything You Need to Know About Noma Mexico*, <https://www.eater.com/2017/4/11/15259192/rene-redzepi-noma-mexico-tulum-open> [accessed: 20.05.2021].
- [33] www.serpentinegalleries.org [accessed: 18.06.2021];
- [34] Quinze A., *Public wooden art installation – Nevada Desert, USA. Uchronia, Burning Man Festival*, <https://www.arnequinze.com/art-and-exhibitions/uchronia> [accessed: 9.06.2021].
- [35] Leardi L., *MVRDV Designs Multicolored Tetris Hotel for Dutch Design Week 2017*, https://www.archdaily.com/882300/mvrdv-designs-multicolored-tetris-hotel-for-dutch-design-week-2017?ad_medium=gallery [accessed: 20.05.2021].
- [36] <https://architizer.com/projects/ridleys/> [accessed: 20.05.2021].
- [37] <https://plastique-fantastique.de/AEROPOLIS> [accessed: 17.05.2021].
- [38] Asefi M., Foruzandeh A., *Nature and Kinetic Architecture: The Development of a New Type of Transformable Structure for Temporary Applications*, "Journal of Civil Engineering and Architecture" 2011, Vol. 5, No. 6, 513–526, doi: 10.17265/1934-7359/2011.06.005.
- [39] Liotta S.-J.A., *Temporary Architecture for sharing*, "AGATHÓN. International Journal of Architecture, Art and Design" 2018, Vol. 4, 29–36, doi: 10.19229/2464-9309/442018 [accessed: 14.01.2022].
- [40] Tunçbilek G.Z., *Temporary Architecture*, [in:] *Proceedings of the 2nd ICAUD International Conference in Architecture and Urban Design, Epoka University, Tirana, Albania 08–10 May 2014*, paper No. 114, <http://dSPACE.epoka.edu.al/bitstream/handle/1/939/114.pdf?sequence=1&isAllowed=y> [accessed: 14.01.2022].

Abstract

Temporary architecture in the 21st century as an expression of changes taking place in contemporary society

The subject of the article refers to the condition of contemporary society as a factor shaping our architectural reality. The subject of the considerations is the postmodern society of the highly developed countries of the 21st century, as perceived by Zygmunt Bauman, characterized by individualism, loneliness, life in constant movement and consumerism, recognizing short-termism as a safe form of concluding all kinds of "contracts", and contemporary temporary architecture as a response to this kind of social need. This article, based on a study of selected cases, presents the proposed typology of contemporary temporary architecture, which, together with the analysis of various relations between this phenomenon and the needs of a postmodern society, leads to an attempt to distinguish postmodern temporary architecture.

Key words: temporary architecture, pop-up, postmodernity, liquid modernity, contemporary society

Streszczenie

Architektura tymczasowa XXI w. jako wyraz zmian zachodzących we współczesnym społeczeństwie

Temat artykułu nawiązuje do kondycji współczesnego społeczeństwa jako czynnika kształtującego naszą architektoniczną rzeczywistość. Przedmiotem rozważań jest ponowoczesne społeczeństwo krajów wysokorozwiniętych XXI w. w ujęciu Zygmunta Baumana, nacechowane indywidualizmem, samotnością, życiem w ciągłym ruchu i konsumpcjonizmem, uznające krótkoterminowość za bezpieczną formę zawierania wszelakich „umów”, oraz współczesna architektura tymczasowa jako odpowiedź na tego rodzaju społeczne potrzeby. W niniejszym artykule, na podstawie studium wybranych przypadków, przedstawiona została propozycja typologii współczesnej architektury tymczasowej. Propozycja ta wraz z analizą różnorodnych relacji między tym zjawiskiem a potrzebami społeczeństwa ponowoczesnego prowadzi do próby wyodrębnienia ponowoczesnej architektury tymczasowej.

Słowa kluczowe: architektura tymczasowa, pop-up, ponowoczesność, płynna nowoczesność, współczesne społeczeństwo