

PRZEMYSŁAW BIGAJ

ORCID: 0000-0003-0808-6286

Cracow University of Technology, Poland

EXPRESSION OF FORM ENHANCED BY THE CONTEXT OF PLACE: ON THE PHENOMENON OF CONTRAST BETWEEN NEW ARCHITECTURE AND HISTORICAL STRUCTURES

EKSPRESJA FORMY WZMOCNIONA KONTEKSTEM MIEJSCA: O ZJAWISKU KONTRASTU NOWEJ ARCHITEKTURY Z HISTORYCZNYMI STRUKTURAMI

Abstract

The subject of the research is the issue of the expression of contemporary form, enhanced by the context of place. The text discusses the phenomenon of employing the effect of contrast that emerges between newly constructed architecture and the historical structures of its surroundings. The aim of the study is to demonstrate, through selected examples, how expressively designed contemporary architectural forms may acquire spatial significance within the context of a specific *genius loci*. The intensification of a new building's form shifts the compositional balance of the existing context, emphasising its originality – often at the expense of established structures. This phenomenon occurs both in the realm of urban space and within the architecture of a transformed building, where not only the originality of the form but also the material and technology contribute to the emotions evoked by the interplay of old and new. The results of the research indicate the potential benefits that may arise from interventions in historically grounded urban or architectural structures through the distinctiveness and iconicity of newly created architecture. The originality of such structures typically has a revitalising effect, ensuring the continuity of development and evolution of the existing urban fabric.

Keywords: expression of form, new form in the historical context of place, phenomenon of contrast in architecture, sculptural buildings, architectural icons

Streszczenie

Tematem badań jest zagadnienie ekspresji współczesnej formy wzmocnionej kontekstem miejsca. Tekst opisuje zjawisko wykorzystania efektu kontrastu, jaki powstaje pomiędzy nowo realizowaną architekturą a historycznymi strukturami otoczenia. Celem badań jest wykazanie na wybranych przykładach, jak współcześnie projektowane ekspresyjne formy architektoniczne mogą zyskiwać na znaczeniu przestrzennym w kontekście określonego *genius loci*. Wzmocnienie wyrazu nowej formy budynku przesuwa ciężar kompozycyjny zastanego kontekstu, akcentując jej oryginalność często kosztem zastanych struktur. Zjawisko to zarówno występuje na polu przestrzeni miejskich, jak i może zaistnieć w obrębie architektury przekształcanego budynku, gdzie nie tylko oryginalność formy, ale i materiał oraz technologia tworzą emocje wynikające z oglądania efektu łączenia starych i nowych form. Rezultaty i wyniki badań wskazują na korzyści, jakie mogą płynąć z ingerencji w historycznie ugruntowaną strukturę budynku bądź przestrzeń miejską za sprawą wyrazistości i ikoniczności nowotworzonej architektury. Oryginalność struktur ma tu zazwyczaj ożywczy charakter, który gwarantuje ciągłość rozwoju i ewolucji istniejącej tkanki miejskiej.

Słowa kluczowe: ekspresja formy, nowa forma w historycznym kontekście miejsca, zjawisko kontrastu w architekturze, budynki-rzeźby, ikony architektury

1. INTRODUCTION

In contemporary architecture, one can observe a certain aesthetic phenomenon consisting of introducing of new forms with original, expressive, and often deconstructed shapes into the historical spatial structures of cities, thereby gaining visual dominance over the existing context of place. This is architecture oriented towards confrontation, where the existing historical fabric becomes a backdrop for the new volume, which – by departing from historical formal connotations – emerges as the visually dominant element of the space. In such cases, one may speak of the expression of contemporary architecture further enhanced by the existing context of place. This contrast is usually manifested on two levels. The first derives from the existing urban fabric. In this case, a new form of distinctive shape is introduced into a densely built, strictly defined urban space, or it serves as an addition or complement to its undeveloped fragments. Thanks to the aesthetically coherent context of place, the new and attention-drawing form gains greater spatial significance, becoming a visually dominant landmark. The second level concerns interventions in the architecture of a specific building or a historical complex of structures, where transformations of the existing form take place through reconstructions, extensions, superstructures, or annexes. As a result, a kind of aesthetic hybrid is created, combining the old structure with the new one while simultaneously preserving the aesthetic distinctiveness of each. This is architecture that is most often highly mediatic and bold in its formal solutions, oriented towards confrontation and unafraid of criticism – frequently attaining the status of an icon. Such architecture cannot be passed by indifferently, as it arouses emotions and controversies in the viewer, often initiating a discussion on the ways of addressing the architectural heritage of the past. This type of architecture is distinguished by the sculptural quality of its forms, thereby confirming one of the developmental directions of contemporary architecture noted by Sigfried Giedion in his publication *Space, Time and Architecture*, where he wrote about the increasingly frequent phenomenon indicating that “architecture is approaching sculpture, and sculpture is approaching architecture”¹. Here, the sculptural quality gains visual significance, drawing its expressiveness from the contrast provided by the existing context of traditional and historical architectural forms. The realisation of an aesthetically bold form within the demanding environment of historical fabric is usually entrusted to leading architects whose experience and creative achievements ensure that the chosen design solution will constitute an added value to the existing place. Among them, not without reason, there are names such as Frank Gehry, Daniel Libeskind, Norman Foster, Peter Cook, Zaha Hadid, Steven Holl, and other architects and leaders of renowned design teams, well known from media coverage and recognised for their architectural achievements on the international stage. Regardless of the method adopted – whether it follows the principle of harmoniously blending into the existing fabric or of employing means of expression that create contrast with the surroundings – there remains a need to aesthetically distinguish the new architectural structure from the historically grounded and valuable built environment, in accordance with contemporary conservation doctrines. This distinction may manifest itself not only through the originality of form, but also through the technologies employed, which make use of contemporary materials as carriers of new aesthetics. At other times, this may manifest itself in the use

¹ S. Giedion, *Przestrzeń, czas i architektura. Narodziny nowej tradycji*, Państwowe Wydawnictwo Naukowe, Warszawa 1968, p. 17.

of traditional materials in an innovative technological manner, creating continuity while avoiding the replication of historical solutions, and reinterpreting form anew in reference to the existing context. This constitutes one of the effects that reinforces the aesthetic distinctiveness of the added elements, which reveals its impact most strongly when juxtaposed with the old structures.

2. THE EXPRESSION OF NEW ARCHITECTURAL FORMS ENHANCED BY THE HISTORICAL CONTEXT OF PLACE

The phenomenon of expressing new architectural forms reinforced by the historical context of place can be observed as a recurring tendency emerging within the clearly defined space of European cities. Its aim is to revitalise existing structures by adding new, usually strongly accentuated forms that stand out from their surroundings through their unusual shape. In this way, buildings often take on the character of sculptures, gaining the status of architectural icons that attract the attention of visitors and tourists not only through their appealing function but also by becoming points of reference within the urban space. The context here typically provides a culturally valuable backdrop or stage for the originality of the work's form, through which the new shape gains greater attention from the viewer as a result of the contrast created by the contemporary volume within the historical built structure, stemming from the differences in the aesthetic expression of its usually unconventional form. The clearly discernible principle is that the more original the new form is – departing from the compositional rules of urban continuity – the more its expression appears to be accentuated and aesthetically reinforced by the existing spatial rules of the historical background. In her publication *Architektura najnowsza w historycznym środowisku miast europejskich* (*The Latest Architecture within the Historical Fabric of European Cities*), Ewa Węclawowicz-Gyurkovich describes this type of sculpturally articulated architecture, most often carrying deconstructivist connotations, in the following way:

What becomes essential in architecture are emotions, feeling, and the atmosphere of the structure. The previously unquestioned axioms of construction, such as the vertical, the horizontal, and the right angle, have been challenged. Astonishing, vibrating forms, always supported by the philosophy and ideas of the creators belonging to this highly elite group of designers, begin to verge on sculpture. Interpretations have often been almost arbitrary, subordinated to the need to evoke impressions and emotions. The volumes lose their stability, detach from the ground, and soar into space. Distortions, dislocations, fractures, ruptures or compressions, fragmentation, explosions, collisions, and displacements evoke shock and astonishment. The provocative entanglements and clashes of forms – emerging, after all, from fragments of geometric volumes that are rotated and transformed within a framework of deliberately planned disorder and apparent randomness – do not repeat the compositions familiar from the past; instead, they are fresh, dramatic, and surprising. Here, not only has the element of movement been introduced, represented by kinetic art, but also the element of time, present in Futurism, proclaiming the ‘beauty of speed’².

² E. Węclawowicz-Gyurkovich, *Architektura najnowsza w historycznym środowisku miast europejskich*, Politechnika Krakowska, Kraków 2013, p. 169.

The contrast resulting from the expression of contemporary forms – most often set in opposition to historical rhythms and compositional directions based on vertical and horizontal lines – derives its impact both from soft, rounded, and twisted shapes with their undulating surfaces, often creating the illusion of chaos, and from sharp, pointed, and folded forms, full of dynamism achieved through deconstructed volumes. Positioned at various angles in relation to the existing context, these forms never leave the emotions of the viewer passing by unaffected. This can be observed in the undulating and rounded shapes of the “Dancing House” (*Ginger and Fred*, Ill. 1) in Prague (Czech Republic, 1996) by Frank Gehry, where the expression of the dynamic volume is further accentuated by its release from the building line dictated by the existing corner situation. Frank Gehry has made such dynamic compositions his unique and individual expression of creative style. One only needs to look at the *Guggenheim Museum* in Bilbao (Spain, 1997), the *Ex-American Center* building in Paris (France, 1994), or other outstanding works whose form is unequivocally associated with this *starchitect*. Sharp, pointed forms can, in turn, be found in the works of Daniel Libeskind, such as the *Military History Museum* (Ill. 2) in Dresden (Germany, 2011), or the *Royal Ontario Museum* in Toronto (Canada, 2007). Here, the dynamism and expression of the new forms contrast with the existing context of the historical building structures, creating a tension that leaves the viewer in no doubt as to what was original and what was added. These are examples in which the impression that the new structure gains reinforcement of its expressive impact at the expense of the historical form seems to be clearly legible in the creative intent of the design idea. Libeskind also frequently designs original, twisted structures within the urban fabric through lines and folds forming sharp corners, as exemplified by the volume of the *Jewish Museum* building in Berlin (Germany, 1988). A distinctive type of the 21st-century architecture, belonging to the trend known as biomorphism, gains reinforcement of formal expression through its location within the historical fabric of cities. Good examples illustrating this phenomenon are the *Kunsthau Art Museum* in Graz (Austria, 2000–2003), designed by Peter Cook and Colin Fournier, and the *Metropol Parasol* structure at Plaza de la Encarnación in Seville (Spain, 2004–2011), designed by Jürgen H. Mayer. Zaha Hadid also deserves mention among the avant-garde designers whose sculpturally articulated works attract attention against the backdrop of the existing context. An example is the *MAXXI Museum* building in Rome (Italy, 2010), designed in collaboration with Patrik Schumacher. Its aesthetics differ from everything surrounding it, while at the same time inscribing itself into the urban context through its fluid geometry. The entirety of this multi-directional composition leaves no doubt that we are dealing with an exceptional, expressive building embedded within the existing urban fabric. The *Glass Pyramid* in the courtyard of the Louvre, designed by I.M. Pei in Paris (France, 1984–1989), is another example where an element of traditional form, but created with new technologies, gains significance within the context of the historic palace complex. The principle of reinforcing the expression of new forms through the historical context proves effective not only in relation to specific urban spaces but also to the historical volumes of buildings. This is illustrated not only by the previously mentioned works of Daniel Libeskind, but also by such new elements as the dome and daylighting systems of the Reichstag plenary chamber in Berlin (Germany, 1995–1998), designed by Norman Foster’s studio, or the roof reconstruction of a building on Falkestrasse in Vienna (Austria, 1983–1988), designed by Coop Himmelb(l)au.

These examples illustrate only a fragment of the much broader phenomenon of the need to revitalise existing urban structures with new development that is original and iconic



Ill. 1. Vlado Milunić and Frank Gehry, *Dancing House (Ginger and Fred)*, Prague, Czech Republic, 1994–1996, photo: P. Bigaj



Ill. 2. Daniel Libeskind, *Bundeswehr Military History Museum*, Dresden, Germany, 2011, photo: P. Bigaj



III. 3. Norman Foster + Partners, *Glass Dome of the Reichstag Building*, New German Parliament, Berlin, Germany, 1995–1998, photo: P. Bigaj

in form. This does not occur without controversy. The shocking aesthetics of novelty, however, over time bring tangible benefits, turning such expressive architecture into a kind of magnet attracting viewers and tourists, whose need for an emotional experience of architecture demands the creation of ever-new spatial stimuli that cannot be passed by indifferently. This type of architecture is also created by individual designers and small studios, with varying results. For this reason, key projects of large-scale impact are usually entrusted to outstanding creators of international renown, which ensures not only local success but also global recognition of the place.

Numerous architectural realisations illustrating the phenomenon of the expression of new form in a historical context show that they are almost always subject to social criticism. The use of nonchalant shapes usually destabilizes the existing, time-established spatial order, shifting the visual weight onto the new form and thereby relegating the existing context to the role of a backdrop for the new spatial actor on the urban stage of the city. This evokes concerns and apprehension within the local community. Over time, the originality of the form becomes familiar. The impact of the work does not diminish, but rather becomes a revitalising element for the existing context, enhancing visual attractiveness and creating a new identity for the place – one that benefits not only the local community but also visitors, generating tourism and economically activating previously forgotten spaces. The expression of form, reinforced by the existing context of place, creates an added value for the space by introducing iconic recognisability – a sign of place. Thus, the new spatial situation also determines the flourishing of historic architecture, even when it seems to be reduced to the role of a scenography that builds a specific atmosphere of place for the originality of the contemporary form. The issue of the “acceptance of novelty” is discussed, among others, by Tomasz Kozłowski in his publication *Tendencje ekspresjonistyczne w architekturze współczesnej* (*Expressionist Tendencies in Contemporary Architecture*). According to him:

Today, the fear of misunderstanding new architecture has proven unfounded. Extremely original architecture, even if incomprehensible (and it is not entirely clear what 'comprehensible' is supposed to mean – comprehension has been left to connoisseurs and scholars), is now widely accepted. Novelty and originality characterize forms appearing across different directions of architecture, regardless of whether it is modernism in any of its versions, or postmodernism (assuming that all contemporary architectural creation does not already belong to the postmodern era). Minimalist tendencies and what Gianugo Polesello once called 'architecture in a feathered headdress' are accepted equally, as is expressionism in its extreme form of *decon-structivism*³.

The expression of new architectural forms, reinforced by the historical context of place, has become a phenomenon that increasingly gains significance in the consciousness of designers and is treated as a kind of opportunity, as it offers the possibility to design exceptional works, often destined to attain the status of an architectural icon. It may also be regarded as a justification for spatial experiments with form, in which the composition of original shapes takes on a priority role, affirming the supremacy of art over functionality and the structural rationality of the economic paradigm. Through the distinctiveness of its invented form, this extravagant volume is intended to guarantee that revitalising vector for the spatial context. Tomasz Kozłowski discusses the "need for distinctiveness" of form in his publication *Architektura a sztuka (Architecture and Art)*, where he highlights the influence of architecture on the emotional condition of human beings, revolving around the notion of "ecstasy," understood according to its dictionary definition as a state of delight or rapture, particularly associated with aesthetic experience. As Kozłowski emphasizes: "Theorists discern in ecstasy the very condition of contemporary architecture. (...) 'Ecstasy' is understood as a feature of all contemporary human activity and as the drive toward novelty present in all of its manifestations⁴."

Abandoning linearity and the rationality of solutions, the originality of contemporary architecture, favours fluid, twisted, and intricate shapes which, by contrasting with the architecture of past eras, set a new direction and shift the compositional weight of urban space toward new forms, in line with global trends oriented toward media impact, often of a temporary and ephemeral nature. This type of architecture pays homage to the extraordinariness of invented shapes and directions, made possible by advanced material technologies. Their texture and colour constitute an essential component in reinforcing the significance of new forms erected within the historical spatial context.

3. MATERIAL, TEXTURE, COLOUR – ELEMENTS REINFORCING THE SIGNIFICANCE OF FORM WITHIN THE EXISTING SPATIAL CONTEXT

An additional element reinforcing the contrast and originality of new architecture is not only the sculptural, dynamic form but also the appropriately employed material, whose aesthetic specificity contributes to the creation of a building with an intentionally plastic character.

³ T. Kozłowski, *Tendencje ekspresjonistyczne w architekturze współczesnej*, Politechnika Krakowska, Kraków 2013, p. 186.

⁴ T. Kozłowski, *Architektura a sztuka*, Politechnika Krakowska, Kraków 2018, p. 129.

The dominance of contemporary technologies based on concrete, steel, glass, plastics, and other industrially manufactured materials enables one to achieve the effect of aesthetic distinctiveness of a new volume realised with modern material technologies, in contrast to the existing forms, which are usually rooted in traditional methods and techniques of construction and in the aesthetics of local materials. The choice of material enhancing the impact of new architecture must stem from the designer's creative awareness of aesthetic goals and the properties of the building medium. In his publication *Experiencing Architecture*, Steen Eiler Rasmussen warns designers against ignorance of the nature of the materials they employ, writing: "Even the noblest materials lose their character when used without talent and understanding⁵." Among the aesthetic differences discernible between traditional and modern technologies and materials, those that occur less frequently in the existing context usually gain greater significance. The distinctiveness and importance of a single historical form, rich in detail and ornamentation, will grow within a space composed of contemporary forms maintained in a minimalist or modernist convention. Conversely, a modern structure, based on contemporary materials and aesthetics, will attract attention in spaces dominated by historical development. The relationship between newly built architecture and its historical surroundings is therefore not played out solely at the level of overall spatial composition or the scale of the structure. Equally important in this phenomenon are the properties of the architectural medium – material and the related issues of texture and colour – which can weaken or intensify the tension between new and old structures in either a more subtle or a more pronounced way.

The effect of contrast resulting from the skilful use of textures and colours in new material technologies becomes significant, as these can amplify the importance of a new form located within an old structure. Texture and colour are inseparable parts of the architectural form of a building. This is emphasised by Juliusz Żórawski in his publication *O budowie formy architektonicznej* (*On the Construction of Architectural Form*), where he explains: "Form is something three-dimensional, based on texture and colour, and composed of lines, planes, and curved surfaces⁶." Rasmussen, in turn, draws attention to a general principle concerning the effects resulting from the use of textures, writing: "Materials with weak textural effects are enhanced by sculpting the surface, whereas materials of high quality can withstand smooth surfaces, and in fact often look best without relief or ornament⁷." These rules are readily employed by designers in order to achieve the effect of contrast between the new and the old structure. This principle proves effective in original architecture reinforced by context, where historical, traditional architecture typically contrasts with new forms realised through highly advanced technologies, thereby amplifying the significance of precisely executed elements against the backdrop of artisanal techniques. A similar effect is produced by colour, which today is the product of industrial processes and can be freely designed, rather than resulting from the heterogeneous natural colouration of materials. Rasmussen aptly observes that: "When the colour of building materials began to depend on human choice rather than on nature, a new step was made in architectural design⁸."

⁵ S.E. Rasmussen, *Odczuwanie architektury*, Wydawnictwo Murator, Warszawa 1999, p. 165.

⁶ J. Żórawski, *O budowie formy architektonicznej*, Arkady, Warszawa 1962, p. 15.

⁷ S.E. Rasmussen, *op. cit.*, pp. 169–170.

⁸ *Ibidem*, p. 216.

Material, and the texture and colour that derive from it, are factors that typically intensify the expression of form and its dialogue with the context of place. Their conscious use enables the designer to balance between contrast and continuity, between the legibility of modern intervention and respect for historical values. The final aesthetic effect therefore does not result solely from the geometry of the volume, but to a large extent from the quality and character of the material employed, which becomes a carrier of contemporaneity and of the plastic interpretation of the existing space. The expression of form can be reinforced not only by the context of place itself, but also by aesthetic differences in materials and technologies, creating a distinct contrast between new architecture and historical structures.

4. CONCLUSIONS

When analysing the original achievements of contemporary architects working within the built environments of previous eras, one can conclude that the expression of new forms is often reinforced by the historical context of place. This reflects the aesthetic phenomenon of contrast between new architecture and the existing structures, manifested not only in the formation of architectural form – its composition or deconstruction – but also in the application of contemporary material technologies characterised by a different aesthetic language. The expression of contemporary forms, often lacking rational justification, arises from the need to create something new and original. The iconic examples discussed – those that have gained wide recognition within the creative community – demonstrate that original architecture can still be successfully realised within a historical spatial context, becoming a revitalizing element for the existing urban structures. New buildings, shaped by the ideological and technological transformations of twentieth-century architecture and following the evolution of the visual arts and avant-garde movements, show that an evolutionary continuity of urban structures can exist – one enriched by ever newer and more expressive elements developed in accordance with current design trends. Despite numerous doctrines aimed at protecting the established urban context, it is still possible to create modern architecture with original and unconventional shapes that stand out through their distinctiveness from the existing built structure. In such cases, we can say that the expression of the new form gains spatial significance through the historically consolidated context. Through its unconventional character, it becomes an immediately noticeable form, effectively pushing the existing context into the background. By capturing the viewer's attention, it strives to be the one remembered, while the surroundings – although equally attractive and rich in detail, and possessing their own visual identity – remain less memorable and more anonymous. This type of architecture seeks global media acclaim regardless of its scale or degree of complexity. The avant-garde character of such architecture derives its impact from the sculptural quality and diversity of its volumes, the high degree of decomposition, the dynamism of curved and flowing lines, or of sharp and pointed elements, as well as from the sensory impression of movement in a form seemingly freed from the laws of gravity. A form that can destabilise the existing spatial order while simultaneously introducing a new quality to the established context of place appears to be the fundamental recipe for architectural and aesthetic success – one capable of achieving the status of a local icon in an increasingly globalised world. This is an architecture that evokes emotion, attracts the viewer with its shapes, and builds a sense of new visual identity for the local community. For this reason, such projects and realisations are usually entrusted to leading international architects, whose global recognition

adds further value and prestige to the place. The examples presented in this text show that, contrary to prevailing doctrines, attention should not always be directed exclusively towards the existing context, nor should what is created today necessarily fade into the background or remain neutral in relation to the inherited heritage. Contemporary achievements should equally participate in the continuity of shaping urban structures, regardless of their historical connotations. Through appropriate form and composition, ambitious contemporary works of architecture can successfully contrast with the existing context and even enhance their expressive impact at its expense when this contributes to creating new spatial values for the present day.

References

- [1] Giedion S., *Przestrzeń, czas i architektura. Narodziny nowej tradycji*, Państwowe Wydawnictwo Naukowe, Warszawa 1968.
- [1] Kozłowski T., *Architektura a sztuka*, Wydawnictwo PK, Kraków 2018.
- [2] Kozłowski T., *Tendencje ekspresjonistyczne w architekturze współczesnej*, Wydawnictwo PK, Kraków 2013.
- [3] Rasmussen S.E., *Odczuwanie architektury*, Murator, Warszawa 1999.
- [4] Węclawowicz-Gyurkovich E., *Architektura najnowsza w historycznym środowisku miast europejskich*, Politechnika Krakowska, Kraków 2013.
- [5] Żórawski J., *O budowie formy architektonicznej*, Arkady, Warszawa 1962.

Author's Note

Przemysław Bigaj, BEng, PhD, Architect

A research and didactic assistant professor at the Faculty of Architecture at Cracow University of Technology (CUT). The main area of the author's scientific interest focuses on the possibility of using the aesthetic properties of fair-faced concrete in residential architecture with particular emphasis on monolithic technology. The study of relations between form and the matter that creates it is central to the author's quest for the essence of architecture, especially where the poetics of an idea are expressed through a specific building material, defining the originality of the artistic expression of the architectural work. Games and plays with concrete forms and their aesthetics have also become a pretext for the author's theoretical and practical experiments, conducted as part of the teaching process with students at the Faculty of Architecture, CUT.

przemyslaw.bigaj@pk.edu.pl