ZASOBY A CELOWOŚĆ JAKO WYZNACZNIK ARCHITEKTONICZNEGO PROJEKTOWANIA MUZEUM

RESOURCE VERSUS AIM-ORIENTED ARCHITECTURAL DESIGN OF A MUSEUM

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STRESZCZENIE

Artykuł konfrontuje zróżnicowane sposoby podejścia do kwestii projektowania muzeum. Analizowane przypadki ukazują proces projektowy jako intelektualne wyzwanie wymagające wysokiego stopnia organizacji. Manifestacja formy, nawet najbardziej wyrafinowanej, jest tylko końcowym produktem złożonego działania, planowania, programowania, stanowienia kryteriów integrowanych następnie łącznie z projektowymi poszukiwaniami. Badanie porównawcze prowadzić ma do zdiagnozowania podobieństw, różnic i generalnych wniosków ukazujących perspektywę determinowania rozwiązań architektury kluczowych obiektów kultury.
Słowa kluczowe: proces projektowania architektonicznego, architektura muzeum, metody projektowania, programowanie architektury

ABSTRACT

The paper confronts different approaches to museum design. Case studies display design process as intellectual challenge calling for high level of organization. The manifestation of form, even the most sophisticated one, is merely an end product of complex actions, planning, programming, establishing of criteria, then unified jointly with design research. Comparative analysis leads to diagnose of similarities, differences, and general conclusions showing the perspective of determining architectural solutions for crucial cultural buildings.
Keywords: architectural design process, museum architecture, design methods, architectural programming

1. MUSEUM – MORE THAN A MACHINE

The image of a museum – interpreted as an institution, but located in particular place – is strongly interconnected with the environment, cultural, social and spatial. There is a significant complexity behind those various aspects, while visitors are expected to gain the experience of a museum by joint experience of exhibits, idea or concept, possible interaction and interpretation, and last but not least space of a museum. It clearly depicts the evolution of Kosuth's observations on the unity of content and image [12, p. 522]. The origin of contemporary museum (not necessarily dedicated to art) was simultaneously shaped by the evolving concepts of the object or piece of art and its content with exposition as well as architectural outcome of spatial debate between modernist paradigms as defined by Mies van der Rohe and those that opposed the idea of building as a background, like Wright and his successors. As Newhouse put it, Wright introduced the theme of a building or more widely a space dedicated to the presentation of exhibits, but at the same time he brought the building of a museum to the forefront of architectural thinking, making it an integral part of value transmitted to visitors [17, p. 594-595].

Definitely the turn of 20th century brought an ambiguous conclusion to the discussion whether museum should follow the pattern of *forum* or the pattern of *temple*, which only temporarily succeeded in redirecting late 70s tendency to make museum more open and replace it with restored and redefined temple of common memory [11. p. 10-12], however did not result in establishing a stable template for contemporary museum. The image of contemporary museum requires to be shaped on multiple layers, and is expected to be evoked by the concept. The image is defined by clear distinction of leading and integrated motives, narration or mission, derived from the collection of objects. But at the same time there is a story connecting those objects in singular or multiple storylines. There is this constant merging of social memory, social consciousness and sensibility with distilled, artificial, stagemaking-like arrangement of space which contributes to the power of what's exhibited. One could call it a refined Malraux concept of a sophisticated idea [10. p. 62] (Cf. [14. p. 36-39] and the idea of imaginary museum), manifested and embodied indirectly by the interaction between exhibited object, spatial frame or environment, and content-context emanation of the place.

As von Naredi-Rainer says the mission of a museum is not only to acquire objects, preserve, and exhibit, but it is expected to allow for studies, to popularize. What's more, since the process of commercialization of museums started in the 70's consolidated, and at the same time the concept of immersion as the driving force to attract the visitor became the predominant tendency in shaping space of a museum, it became even more clear that the mission is pointed towards the future [20, p. 17-18]. Regardless of the profile museum has been recognized as something more than mere cultural institution, people understood its role as socially active, educating, ideas and exchange of information spreading place, saturated with media to facilitate contemporary (and future) communication between the content and users and/or visitors.

The mission of the museum as the institution remains superior to that of the architecture, but the architecture remains an extremely strong medium to convey the message. Such a strong influence makes a museum an element in a powerplay between decisive parties, thus making an architecture a field to express the intention of the powers. Putting aside the social and cultural problems related to political background of foundation of a museum, it is worth mentioning that architecture is, or at least may be, regardless of the importance of role architect is attributed with, recognized as one of primary forces determining the interpretation of resources. The architectural mission therefore becomes a risky enterprise, while it balances between that of creating a cultural trigger and creating a socio-political tool. Thus, regardless of how architect's duties are formulated, the effect of their work is so significant that their involvement in the process of planning, designing and construction until proto-occupancy period is seen as compulsory element of any appropriate museum design [13, p. 131-132].

The intricacies of architectural design related to museum buildings offer seemingly ambiguous approaches, particularly at the early, crucial stages of design, when an architect seeks for the conceptualization of the project regarding their understanding or interpretation of the mission or the content of the institution. There are several approaches to how museum can be spatially determined, both on the inside and on the outside, to deliver an appropriate volume, expression, and spaces of containment, but in this paper I will focus on the two – the first being related to the technology of the building, which is resource oriented, and the second being related to narration, which is aim-oriented. The reason for this selection stems from the position underlining the idea that the role of architecture is, after all, subservient. Architecture is the reflection of more complex reality and it offers simplified entities, rich with meanings, but quite often living their independent lives, incoherent with the content of the museum. In selected two approaches there is an opportunity for an architect to remain true to the theme, true to exhibited items or story, and at the same time to explore the context. They both ensure that at the architectural solution goes beyond self-indulgence and isolated, culturally detached circulation of induction-based research through design, on the one hand random, on the other dictated by predetermined routines or aesthetic preferences. At the same time these two approaches are different in a subtle way, highlighting significant variance to the hierarchy of what constitutes the principles for the design.

2. INVESTIGATING MUSEUMS

Architectural design is never about how to build and what to build only – it is always a question of why to build. This significant question "why" often refers to philosophy, to link generated between the society, the environment, and the architect. However, certainly questions "what" and "how" are essential to determine the visual manifestation of architectural object. "Why" is broad, ambiguous, loosely linked to physical reality, but at the same time it is imperative to make built object or arranged space an architectural one. Wide spectrum of considered problems makes it particularly challenging task – to find an appropriate response for unique configuration of problems, to provide valid and resonating setting filled by local community, or other members of society. It would be misleading, however, to assume that these three questions are simply hierarchized, e.g. from the most general one to the most interpretive and the one that determines the shape of space. There is constant connection and mutual feedback between any two of these fundamental dilemmas. Every question must ultimately rely on something that provides an anchor to the process, something solid, something causal which indeterministically points towards some suggested result, a soil for the project and its future execution. This may be provided by architectural programming.

Edith Cherry sees architectural programming as a process which provides the designer with clear definition of the expected scope of a project, and it also sets preliminary criteria to determine the quality of the project, its ability to fulfill assumptions [6, p. 3]. Thus, programming becomes preparatory process for designing, an integral element of understanding, processing, and transposing ideas into solid space or spaces. It also provides the background for ideological deliberations affecting the architecture – as a reference. This reality of thinking on architecture calls for the rejection of purist inductionist understanding of the design process which however random it may be must be submerged in intellectual, disciplined effort. Architectural process is not purely visual, as Robert Barelkowski argues pointing out that ideation is rooted in verbalization, in connection to abstract ideas defined by notions, words, by ordering the concepts [4. p. 129].

The recognition of specific distinctions which separate resource-oriented design process from the one that is aim-oriented was examined in several ways. First of all, literature review has been made as outlined in the introduction and herein, in the second chapter. The interpretive method was used in combination with case studies and related comparative analysis in which the subject were Quai Branly Museum in Paris and Yad Vashem

Holocaust Museum in Jerusalem. Also, authors own approach to museum design, prize awarded project for Digital Arts Museum in Madrid, was used as simulation/immersive referential case.
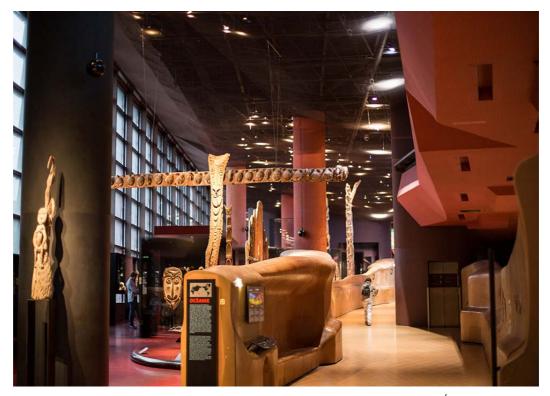
3. DESIGN THROUGH PROGRAMMING

Programming of a museum differs from many other architectural objects. Fundamental difference may be found in more generic role museum is to fulfill – it connects with whole society, goes beyond local, beyond particular, beyond usual spatial context. This element, so often intuitively unveiled in architectural practice, is the main reason the oddities of museum architecture may be so easily approved and accommodated. It is because these oddities are reflections of cultural construct, of what constitutes the museum and its mission. Herein we find the origins of architectural thinking – instead of thinking on architecture as self-sustaining discipline we may find its true source which is social. As a consequence of this assumption, we may see either the content of a museum or the mission of a museum as a basic reference for the design process. Programming should be also understood as an integral part of meta-design procedures within design process [2, 3, p. 75, 79]. It seems relevant to quote once again Cherry, who proposes the areas of programmatic definition of an architectural object. She clearly responds to the connection between "what" and "how" when showing her four main case studies – program is to be correlated to form and function, but also for economy and time, which goes far beyond usual modernist canon, and reflects the complexity issue of design (*Op. cit.* Cherry, 1999: 113-115).

Rys. 1. Muzeum Jacquesa Chiraca na Quai Branly w Paryżu, Jean Nouvel, 2006, Źródło: [16]
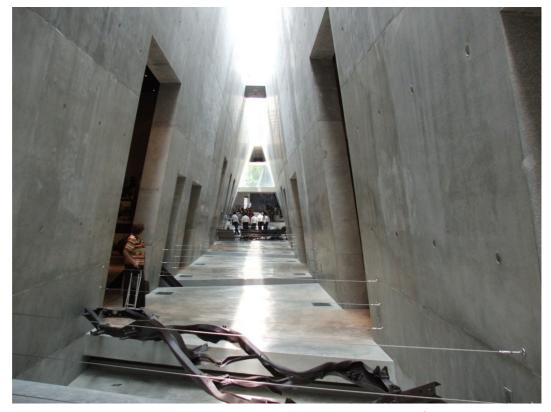Fig. 1. Musee du Quai Branly Jacques Chirac in Paris, Jean Nouvel, 2006, Source: [16]

Resource-oriented design process of a museum relies on tangible contents, exhibits held by the institution. It drives the process towards technological understanding of how exhibit is held, maintained, contained, protected, exposed, and how its accessibility for public or restricted access is to be organized. It starts from the understanding of the subject – how exhibits are ordered, how they relate to each other, how they are systematized and what kind of conditions they require to be preserved, exhibited, and apprehended. This approach is particularly useful in large institutions, where it is quite hard to find common field, denominator to express the entire collection under one concept or one abstract idea. Although it is still possible to impose a unifying vision of exhibition space, the heterogeneity of material, of items or related pieces of information calls for clearly outlined distinctions augmented by spatial division. The latter effect, while not completely achieved, has been evidently a core concept for Jean Nouvel in his Quay Branly Museum in Paris, where geography of cultures becomes the starting point for organization of architectural environment, spatial disposition to bring together cultures from various areas of the world, yet grouped regarding their common origin. James Clifford quoted the architect:

Rys. 2. Wnętrze Muzeum Jacquesa Chiraca na Quai Branly w Paryżu, Jean Nouvel, 2006, Źródło: [18]
Fig. 2. Musee du Quai Branly Jacques Chirac in Paris interior, Jean Nouvel, 2006, Source: [18]

This is a museum built around a collection. Where everything serves to draw out the emotions at play within the primal object, where everything is done to shield it from light while capturing that rare sunbeam, so necessary for the vibrancy of a spiritual presence. [7, p. 4] and also depicted museum space as a result of extending the concept of primeval forest as a loose connection between the cultures developing in intertropical zone, with architectural shell protecting the items stored inside, and natural extension built with plants and site arrangement outside (*ibid.* 4-5). The organization of the building is dictated by the technology of Quai Branly Museum – with its imperative to unify the garden with darkened interior shaped with scattered columns, with the idea of processional loops allowing visitors to experience variety of contemplative routes. It is interesting that Alexandra Martin dissects the structure arguing that this resource-oriented design led the architect to successfully acquire architectural solution which is strongly saturated with ideas, with philosophy, showing clearly that smart construction of the process and its organization not necessarily forces an architect to win some goals while losing others – in this case the philosophy of the site has been masterfully constructed, interpreted, and translated into complex architectural object, which conveys also strong political statements of equality (of cultures) [15, p. 57-59]. In this case architecture is supportive, it envelops exhibits creating an environment for them, building a stage, a background. The subject of this kind of architecture are the exhibits, and although still architecture can remain a bold statement, for the visitor it is meant to be admirable, but secondary stimulus.

Aim-oriented design process proposes completely different approach, in which the unifying idea plays fundamental role in conceiving the architectural solution. The architecture and the exhibits are one – they tell one story, contribute to the narration, although the story may be multithreaded. They refer to the same set of values, and they are culturally equal. The volume, the form, details, are an extension of exhibition and items or pieces of information collected in there. This approach requires profiling and is most often used, when museum is an institution with strong ideological, sociological or philosophical mission. Again – this kind of perceiving the design process doesn't eliminate the possibility to acquire the optimal technological solution, but more important is the overall experience, feeling of what is told in such a museum. It is not very hard to find good example of that type of a place – Moshe Safdie's Yad Vashem Holocaust Museum in Jerusalem. Jewish-Canadian architect decided to organize the museum along the route from the entry to the terrifying, dark space filled with witnessing elements and detailing strongly interwoven with exhibits, leading the visitor to the light, but to the chasm opening below cantilevered opposite end of the main volume [19, p. 19-20]. The object was seen as the entity, with all its components creating one environment, on the one hand expressing the horrors of holocaust, on the other hand toning down those components which could be interpreted as too literal. An interesting example of this thinking is given by Sarah Trager – masking of sprinklers was deemed to be necessary to avoid traumatizing any witnesses of the genocide by associating these pieces of equipment with gas chamber fittings (*ibid.* 20). Visitors are confronted with processional route, forcing them to experience relations, to see the documents and records, to hear and acknowledge victims' memories along meandering axis with clear, visible direction. Going forward is not always permitted and purposeful obstacles deviate visitors from the main axis to detour and confront adjacent spaces, to understand this main direction as a symbol. Central, ending chamber filled with pictures of lost memories, lost situations, and lost people, and finally the opening to the light, and to the landscape of regained land – both literally and metaphorically express the concept of the past and the memory on which contemporary nation of Israel is founded. Amos Goldberg, although formulates serious critical remarks directed more towards the exhibition itself than to the architecture, notices the relationship between the importance of Shoah, so crucial for building Jewish identity, and politicized form, almost exaggerated with symbols [9, p. 191-192].

Rys. 3. Wnętrze Yad Vashem Holocaust Museum w Jerozolimie, Moshe Safdie, 2005, Źródło: [21]
Fig. 3. Yad Vashem Holocaust Museum interior in Jerusalem, Moshe Safdie, 2005, Source: [21]
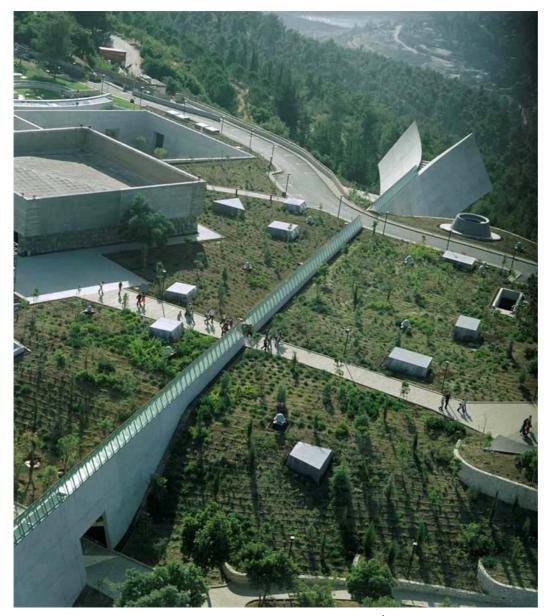
Seemingly these exemplary cases offer very close design process organization. In both cases architect is expected to tackle complexity of architectural problems and dynamic reorganization of relationship between the verbal and the visual [5]. The similarity may be seen in general design organization decisions – where value driven approach and criteria setting precede active design research. It also contributes to the multithreaded meta-design extension replacing the traditional self-contained design model [1]. This multi-threadedness constitutes a platform to include important contents – criteria referencing, dialogue building, potentially also participatory issues [8, p. 43-52]. However closer examination discloses the fact that exemplary cases, while processed according to different orientation, result in a significantly different application.

	Quai Branly Museum, Paris	Yad Vashem Holocaust Museum, Jerusalem	Digital Arts Museum Madrid
design process	resource-oriented	aim-oriented	aim-oriented
conceptual origin	collection, its taxonomy, meaning of exhibits	idea, mission, message of the institution	idea, mission, the notion of digital art and its communication, message of the institution
exhibits	independent, loosely connected, depicting variety of cultural concepts	strongly connected	integrated

keywords	variety	unity	holistic approach
architectural volume	supportive (culturally related), providing background	semantically loaded, extending the narrative, equal in conveying the message	semantically loaded, co-producing the narrative, equal in conveying the message
architectural interior	background	active setting	interactive setting
reference	technology	symbol	interface

Tabela. 1. Analiza porównawcza: proces projektowania muzeum zorientowany na zasoby versus zorientowany na cel (oddziaływania instytucji).
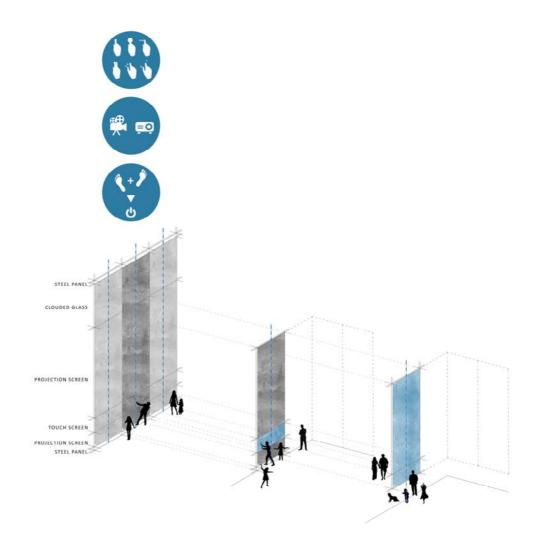
Table. 1. Comparative analysis: resource-oriented versus aim-oriented (aim as impact of the institution) design process of a museum.

Rys. 4. Yad Vashem Holocaust Museum w Jerozolimie, Moshe Safdie, 2005, Źródło: [21]
Fig. 4. Yad Vashem Holocaust Museum in Jerusalem, Moshe Safdie, 2005, Source: [21]

Comparative analysis displays fundamental conceptual differences, despite similarities mentioned above. Where in one case, resource-oriented, architecture forms a kind of background for exposing the content, in aim-oriented design process architecture is part of the content. Variety is replaced with unity, or like in author's project, holistic approach. Where in resource-oriented process architect retracts the permanent interior components of architecture, in aim-oriented process interior design must cooperate and intertwine with exhibits, providing active or even interactive environment.

Still, within this distinction (resource-oriented and aim-oriented), one can find further nuances and differences, and it can be proven by the examination of Digital Arts Museum Madrid (DAMM) project elaborated by Armageddon Biuro Projektowe in 2014 for competition (prize awarded). The project supposed to deliver multilevel museum to small landplot of less than 700 sqm. Empty lot squeezed in dense quarter near the theater of Valle-Inclan, by the Calle Valencia.

Rys. 5. DAMM – koncepcja powiązana z definicją muzeum sztuki cyfrowej, Źródło: R. Barełkowski z zespołem, 2014.
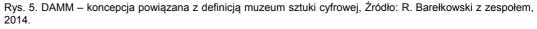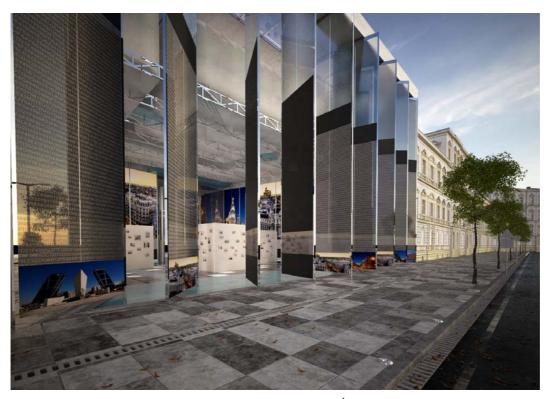
Fig. 5. DAMM – concept related to the definition of digital arts and dedicated museum, Source: R. Barełkowski et al., 2014.

The design process has been oriented on the definition of digital arts museum. It started with the ephemeral nature of digital form, and went for the architecture that is permanently reconfigurable, responsive, potentially accessible 24/7 thanks to revolving computer screens which can be made usable for pedestrians even when museum – the building is closed. All architectural components have been derived from this conceptualization, from the understanding of what it means to visit digital museum, to communicate through digital means. It made the interior unimportant, merely a temporary vessel for people and equipment, purposeful as long as interaction may go on.

The greatest distinction between Yad Vashem Holocaust Museum project and DAMM is found in referential meaning of the process. Moshe Safdie's approach delves deep into semiology, invades all senses with condensed imagination, while DAMM attempts to eliminate physicality of the interior, retaining only shell as a multimedia screen to convey museum's message. The most important conclusions from extended comparative analysis is presented in table 1.

Rys. 6. DAMM – wizualizacja fasady interaktywnej od Calle Valencia, Źródło: R. Barełkowski z zespołem, 2014.
Fig. 6. DAMM – interactive façade seen from Calle Valencia, Source: R. Barełkowski et al., 2014.

4. DANGEROUS TOOL

The rejection of ignorant concept of inspired search for random optimal solution in case of museum is even more important than in any other architectural case. Museums are often regarded by architects as exceptional opportunities to create free form, independent from multiple typical constraints of design, but such an understanding is naïve and counterproductive. Intuition is just a tool, and like every tool it must be reasonably and purposefully used. Design process tells us how to connect the use of many tools, how to organize, and most of all, how to achieve the goal – which in case of a museum is ex-

tremely significant and has power to influence human or social opinions, to rewrite history, to reshape narratives. Architecture of a museum is like the body of a weapon – it must be well crafted and may be reconfigurable, but still there is a dangerous and deadly potential of an improper use. Control and understanding, responsibility and sensibility are virtues which should be reflected in the process. However, the process itself is determined by concrete actions, by instrumental progressing of various architectural tasks, and finishing those tasks or shaping particular spaces has severe consequences affecting human lives, human perception, human knowledge and human identity.

Conscious selection of project organization leads to more profound and more responsible answers architect can give by architecture. The insight into methodology of designing connects intentions, plans, policies, with final result. Both approaches – resource-oriented and aim-oriented – provide opportunity to create meaningful yet sensible architecture, the one that lasts and offers added values, deeper significance, cultural enrichment. But the process starts with comprehension, with acknowledging that complex cultural construct – museum – calls for immersion, for an attempt to merge verbal and visual, ephemeral and physical.

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