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Uniqueness or Uniformity - Studies of Media Architecture

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Abstract. A development of media architecture is presented in light of such phenomena as aesthetization, consumerism and digitization. This article deals with media architecture in commercial spaces. Media solutions has impact on the architectural skin, making it into visible and dynamic points of the image of a post-modern city. This article presents the specificity of media solutions, depending on the function of commercial activity buildings (museums and other cultural objects, sports facilities and multi-functional halls, shopping malls, hotels and offices). The analysis was based on a set of 60 representative examples of media architecture objects. Starting with our own definition of a media solution (understood as a synergy of form, transmission and display element), the article presents the main relations between the range of solutions, the content of transmission (from commercial to non-commercial content) and technologies (from media mesh to architectural media details). The analysis allows us to point out main similarities of components of media solutions among functional groups. The scope of uniformity of media of architectural objects is in the whole group of representative examples. The article stresses that the form, the discretion of media solutions (connected to artistic content, nonfigurative transmission and slow speed of changing images) and architectural media details are the most important factors influencing the uniqueness of media architecture. The relation between the discretion of media solution and the occurrence of media detail is also examined.

1. Introduction

The space of contemporary cities is influenced by cultural and technological changes. It is noticeable through new solutions in architecture, also from the field of media architecture, which allows the emission of changeable, visual content by architectural structure. This new tendency in architecture is particularly visible in commercial spaces, which are called spaces where “objects of commercial activity” are located. This term refers to architectural objects that are important from the point of view of the industries of cultural goods, visual identification of the city, the development of urban tourism and creation of a city product. Taking into account the characteristics of the above phenomena, seven groups of functions of “objects of commercial activity” were indicated, and they constitute the research subject of this article.

Rifkin emphasizes that the era of transformation of capitalism “from industrial to cultural” has come. He notes that culture has become the most important commercial resource, which causes the rapid development of industries of cultural goods and trade of “cultural experiences”, connected with tourism, recreation, fashion, sport, gambling and the development of virtual worlds [1]. As Ritzer notes, it generates a great number of “means of consumption”, including shopping centres, megacentres, superstores, Disney Worlds, cruise ships and casinos, and, what is less obvious, also stadiums, airports and museums [2]. In this article “means of consumption” are called “objects of



commercial activity". The analysis concentrates on such functional categories of buildings, as: museums (category A), other cultural and cultural - entertainment objects (category B), sports facilities and multi-functional halls (category C), shopping malls (category D) and boutiques (category E). The group of buildings which constitutes the research area includes also office buildings (category F) and hotels (category G), which are the significant elements of the visual identity of the city, and also follow city as a product approach [3]. Out of these seven functional groups, a total of 60 objects of media architecture have been analysed.

2. Media architecture - integration of information transmission

Commercial space is full of various signification and information [4]. An important role in the area of visual communication has been given to advertisement. The great number of traditional and digital billboards and other marketing signs very often lead to the domination of the information garment [5]. over the architectural structure. Application of media solutions within the external skin of architectural objects allows us to avoid this problem. Moreover, such dynamic transmission provides them increased visibility and recognition after darkness. Such media lanterns constitute also a form of advertising, attracting customers with a wide offer in the field of industries of cultural goods. Media solutions integrated with facades promote companies occupying such stand-out buildings. Light transmissions point-out architectural icons, important from the point of view of urban tourism and production of a city product.

Caspary claims that media architecture transforms static discipline which is architecture into something variable and even interactive, where the facade becomes an interface, and the ornament transforms into an electronic display generating moving images [6]. Haeusler's research on media architecture is based on a model pointing to three interdependent areas: 1. hardware - architecture & design, 2. software - design & IT (Information Technologies), 3. interaction design - HCC (Human Computer Interaction), HRI (Human Robot Interaction) [7]. In this article media architecture is defined as a kind of synergy of architecture, art and information and lighting technologies [8]. This assumed model allows one to describe a media solution based on three basic components (figure 1): 1. form (architectural form, located on the border of architecture and art), 2. transmission (media / information transmission - on the border of art and technology), and 3. displaying element (element enabling the transmission of information - on the border of architecture and technology).

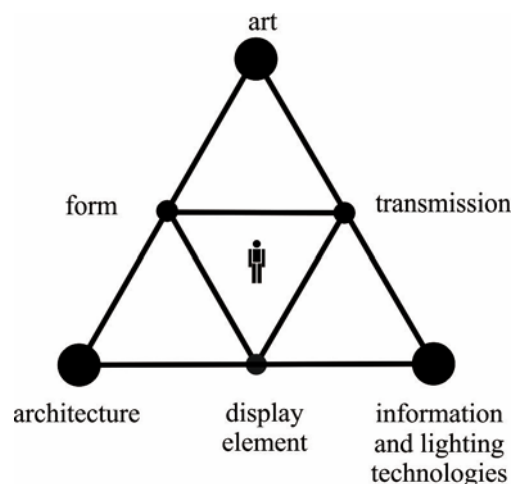


Figure 1. Graphic illustration of the definition of a media solution.

The display element integrates two basic issues: 1. the transparency of the surface integrated with the media solution (which was obtained through media meshes, and in the next step, through the integration of the lighting system between the layers of the façade) and 2. the presence of media detail

(as a return from ready products to solutions dedicated to a specific object). It should be added that the innovativeness of the display element is also associated with its possibility to be embedded in any shape of external architectural structure - not limited to flat ones [9]. Haeusler stresses even the greater need for this kind of flexibility, by making the transmission independent of the additional technical infrastructure. Such a solution is designed to medialize surfaces of any shape, providing access to daylight and ventilation, through the creation of "autonomous pixel" technology, controlling all pixels individually, eliminating the need of cabling (through communication via bluetooth or Wi-Fi system), meeting the requirements of energy efficiency (installation of photovoltaic cells inside the pixels) and minimizing CO₂ emissions [10].

The display element allows the functioning of the media architecture, however, we cannot concentrate only on technology while evaluating media architecture. The effect of media architecture object is conditioned by three components of the media solution. This is why the evaluating process of media architecture requires taking into account also the features of the form and the characteristics of the transmission. The goal of the article is to examine if media solutions lead to uniqueness of architectural objects or rather to their uniformity due to repeatability of similar solutions.

3. Media solution - method and criteria for case analysis

During conducted studies, a set of 60 commercial activity objects, with media solutions integrated into their external architectural structure, were taken into account. They were analysed in terms of detailed features describing the three components of the media solution: the specificity of the display element, the features of the form and the characteristics of the transmission. The analysis allowed us to present the frequency of features' occurrence within the functional categories of commercial activity objects.

The form of the object, defining the external architectural structure, was analysed in terms of such criteria as: 1. scope of the media solution (place of occurrence - ground floor, front facade, corner, roof, whole form, part of the form, several forms, or the highest part of the building), 2. appearance of the form, including: a compact form, a round compact form, a simple form composed of parts and an organic form; 3. essential features of the form (including large cubature, significant height, originality of the form, occurrence of media detail and the uniqueness of the form (meaning positive evaluation (accepted by the author) that determines the originality and accuracy of an architectural form) (see table 1).

The display element, constituting the second component of the media solution, was examined on the basis of such analysis criteria as 1. size of the media solution, 2. its features, including: 2a. transparency of the surface integrated with the media solution, 2b. presence of media details and 2c. energy efficiency (as a feature of the display element) and 3. type of integration of the display element with the architectural structure by distinguishing solutions for 3a. masking (obscuring) the existing external architectural structure or 3b. integrated with the architectural structure (with visible drawing of the facade), 3c. distinguishing the newly designed and 3d. rebuilt buildings (see table 2).

The last component of the media solution, that is the transmission, was considered in the case analysis in terms of such parameters as: 1. content, including division into: 1a. completely non-commercial transmission, 1b. completely commercial transmission and 1c. partially non-commercial transmission, 1d. displaying advertisements on the entire facade, 1e. displaying advertisements on a fragment of the facade, 1f. displaying the logo and 2. image characteristics, including 2a. the prevalence of non-figurative images, 2b. the prevalence of figurative images, 2c. the mix of nonfigurative and figurative images and 2d. low image resolution (also possible for a display element adapted to generate high resolution images). Based on films presenting media solutions (available on the Internet), as well as on own observations during study trips, 3. the colour of the images used in transmission was also taken into account (including: 3a. monochromatic colour scale, 3b. subdued colours, 3c. intensive colours) and 4. rate of changes (including: 4a. fast rate of changes and 4b. slow rate of changes. All features describing the transmission are presented in table 3.

4. Results and discussions

Tables 1,2,3 include the percentage of cases belonging to the functional category of objects, which could be described by specific features of the media solution.

4.1. Relations in the scope of form

It was noticed that the scope of media solutions is connected to category of commercial activity objects what is caused by specificity of the architectural form due to the objects' functions. The most repetitive relationships that we can associate with the phenomenon of objects' uniformization are observed in the group of sports facilities and entertainment halls (category C), shopping malls (category D) and boutiques (category E). The most unpredictable range of media solutions that can be associated with the objects' uniqueness occurs in the group strongly associated with the originality of the architectural form. It causes the diversity of media solutions in various parts of the form, which we observe in this group of museums (category A) and other objects cultural, and cultural and entertainment objects (category B), as well as hotels and multifunctional facilities (hotel + offices + services) (category G)) (table 1).

Table 1. Form of media object versus its function, in terms of range of media solution and features of form

scope of media solution / features of form	A museums	B other cultural objects	C sports facilities and multifun. halls	D shopping malls	E boutiques	F hotels (hotels + offices + services)	G office
ground floor	44%	57%	0%	30%	40%	50%	22%
front facade	43%	57%	0%	70%	60%	17%	44%
corner	0%	0%	0%	50%	40%	33%	11%
canopy	14%	29%	0%	0%	20%	33%	6%
whole form	14%	29%	100%	50%	0%	67%	33%
part of the form	43%	29%	0%	0%	0%	0%	6%
several forms	0%	0%	0%	0%	0%	33%	6%
the highest part	29%	0%	0%	0%	0%	0%	6%
simple compact form	29%	14%	43%	10%	60%	33%	50%
round compact form	0%	14%	57%	70%	0%	33%	22%
simple form composed of parts	43%	29%	0%	30%	40%	17%	39%
organic form	29%	43%	0%	0%	0%	33%	0%
large cubature	14%	29%	100%	70%	0%	17%	0%
significant height	14%	14%	0%	0%	20%	33%	61%
originality of form	57%	86%	29%	30%	20%	67%	28%
media details	71%	86%	86%	70%	40%	67%	33%
uniqueness of form	71%	71%	71%	60%	20%	67%	28%

Media solutions covering the entire architectural form, they are typical for sports facilities and entertainment halls, characterized by a compact form (C-100%), for hotels and multifunctional facilities (hotel + offices + services) (G-67%) and shopping malls (D-50%), and also quite numerous in the group of office buildings (H-33%) and objects related to culture (B-29%). Media solutions reinforce their visibility in commercial spaces covering several architectural forms, which we observe in the group of multi-functional facilities (hotel + offices + services) (G-33%) and office buildings (H-6%) (see table 2). The distinction of a certain part of the form by the media solution is the most visible in the group of museums (A-43%) and other cultural, and cultural-entertainment facilities (B-29%).

Media solutions integrated with the front façade are most often associated with shopping malls (D-70%), boutiques (E-60%), cultural and cultural-entertainment facilities (B-57%), as well as office buildings (H-44%) and museums (A-43%). Facade media solutions appears on both flat and curved surfaces. The media solution on the corners of objects is quite widespread in the trade – especially in the group of shopping malls (D-50%) and boutiques (E-40%), and in the group of hotels and multi-purpose facilities (hotel + offices + services) (G-33%). When it comes to media solutions on the ground floor, two trends are visible. The first lies in freeing the ground floor from media solutions and providing the view inside of the building or giving the place for shop windows (this trend is most visible in shopping malls (D-70%). The elimination of the media solution from the ground floor also results from the functionality of the entrance zone (sports facilities and multi-functional halls (C-100%), office buildings (H-78%)) (see table 2). It is worth to say that starting the media surface above the ground floor gives the impression of lightness of form, which is very often used in the cases of compact, large cubature objects. The second trend assumes the use of media solutions on the ground floor as a coherent element of the entire façade (most often visible in the group of museums (A-43%) and other cultural or cultural and entertainment objects (B-57%) and in the group of hotels and multifunctional facilities (hotel + offices + services (G-50%) (table 2). Media solutions on the ground floors can also be used to accentuate the entrance zone or intermediate spaces (on the edge of the object and the public space) - through media walls at the level of the ground floor or within the canopy above the head.

Summing up the analysed question of form, it is noticeable to assign media solutions not only to flat facades, but also to other elements of form, horizontal and curved surfaces, as well as elements multiplied in space. It gives many variants of designing the media architecture objects' form, creating the opportunity for its uniqueness. However, in the light of the visible relationships between form and function of commercial activity objects, one cannot deny a certain uniformity within functional groups of them. It should be emphasized that the media solution is only an additional layer of the external architectural structure, and it is the form that determines mostly the visual uniqueness of the object. The same happens in media architecture cases which, during the day should be evaluated according to the same criteria as those without media solutions.

4.2. Relations in the scope of the display element

On the basis of the analysis, it can be concluded that the range of media solutions has significantly increased its scale. The first medial transparent facade has an area of 300 m² (T-Mobile in Bonn from 2003). The area of the next ones amounted to more than several thousand of m² (as Star Place Façade in Kaohsiung from 2008 - approx. 5000 m²), or a dozen of thousand m² (as not existing anymore, Bayer headquarters in Leverkusen from 2009 – 18 000 m², or Hanjie Wanda Square in Wuhan from 2013 - 17 849 m²). The largest media projects currently cover several architectural forms increasing the media surface up to 50000 m² (as Flame Towers in Baku from 2012). The display element does not adapt only to flat surfaces, but it follows also the round and organic shapes of the form. Most often, the display element is integrated to newly designed objects, however, it is also used in the case of reconstruction or revitalization of existing facilities, which is most often observed in the group of museums (43%), office buildings (33%) and shopping malls (30%), table 2.

The research shows that the majority of analysed media architecture objects (60% - 36/60) is characterized by an individual media detail. It indicates a greater aspiration of media architecture towards uniqueness rather than uniformity associated with the development of media nets. The media detail within the external architectural structure appears mainly in the group of sports facilities and multifunctional halls (86%), museums (71%) and other cultural and cultural-entertainment objects (86%), shopping malls (70%), and hotels multifunctional facilities (hotel + offices + services) (67%) (table 2). In more than half of cases the media detail is used in the case of opaque surfaces (19/36 - 53%). The media detail rarely distinguishes transparent (13/36 - 36%) or partially translucent (4/36 - 11%) surfaces. It can be noticed that media details usually revive "dead surfaces" framing spaces that

do not need natural light. The individual media detail contributes to a certain degree to the uniqueness of the object, although a certain pool of similar solutions is also visible.

Table 2. Features of display element versus function of media object

	A museums	B other cultural objects	C sports facilities and multifun. halls	D shopping boutiques malls	E	F hotels (hotels + offices + services)	G office
transparency	43%	57%	29%	30%	40%	67%	83%
media details	71%	86%	86%	70%	40%	67%	33%
energy efficiency	0%	14%	0%	10%	0%	0%	6%
masking the architectural structure	0%	0%	0%	20%	0%	0%	0%
integrated with the architectural structure	100%	100%	100%	80%	100%	100%	100%
in the newly designed	57%	100%	86%	70%	80%	100%	67%
in the rebuilt buildings	43%	0%	14%	30%	20%	0%	33%

The lack of media detail is conditioned by the following types of solutions: 1. using a media mesh outside the facade (e.g. T-Mobile in Bonn), 2. placing light sources along curtain wall profiles (e.g. Ars Electronica in Linz), 3. applying display panels to the façade (eg Hollister Store in New York). However, it should be stressed that the lack of media detail does not determine the lack of uniqueness of the object. All the time we should remember that the media solution is also a resultant of form and transmission.

Energy saving aspect of display element, the research shows that it is not a typical characteristic of the display element. It occurs only in three examined cases (3/60 - 5%): Zero Energy Media Wall in Beijing, Main site of ENERGIE AG in Linz, and in the case of Viva building from Floating Island in Seoul). All of them use PV cells, compensating losses of energy powering the media facades. The low number of buildings using energy-saving solutions confirms that the problem of energy savings is often overlooked in the media solutions and this is a future challenge. Using PV cells can be also used as a possibility to create impressions of the uniqueness of the façade also during the day, which we observe in the case of Zero Energy Media Wall from Beijing.

4.3. Relations in the scope of transmission

The conducted analysis shows that in most cases the transmission is completely devoid of commercial content (43/60 cases - 72%). It can be observed it most clearly within museums (100%), hotels or multifunctional facilities (hotel + offices + services) (100%) and other cultural, cultural and entertainment facilities (86%), but also among sports facilities and multifunctional halls (71%), table 3. This type of transmission is less frequently characterized by office buildings (56%) or commercial ones (shopping malls and boutiques) (60%) (table 3). This can be interpreted by the need of the second group of objects for visible presentation of the brands located inside. What is more, the logo is a repeatable element of transmission in a group of boutiques (40%), office buildings (39%), sports facilities and multifunctional halls (29%) and shopping malls (20%). Displaying advertisements is not a frequent phenomenon, and most often it concerns simplified animations. However, it has been said that such cases also occur (on the entire façade surface) for seven media solutions (7/60 - 12%), including 3 office buildings, 2 shopping malls and 1 boutique and 1 multifunctional hall.

Table 3. Features of transmission versus function of media object

	A museums	B other cultural objects	C sports facilities and multifunct. halls	D shopping malls	E boutiques	F hotels (hotels + offices + services)	G office
completely non-commercial content	100%	86%	71%	60%	60%	100%	56%
completely commercial content	0%	0%	14%	0%	0%	0%	0%
partially commercial content	0%	14%	14%	40%	40%	0%	44%
displaying advertisements on the entire facade	0%	0%	14%	20%	20%	0%	17%
displaying advertisements on the fragment of the facade	0%	14%	0%	10%	0%	0%	6%
displaying the logo	0%	0%	29%	20%	40%	0%	39%
the prevalence of the non-figurative images	71%	86%	71%	60%	60%	100%	50%
the prevalence of the figurative images	14%	29%	29%	20%	40%	0%	17%
the mix of nonfigurative and figurative images	14%	14%	14%	0%	40%	0%	33%
low image resolution	86%	100%	86%	90%	80%	100%	94%
monochromatic colour scale	43%	29%	7%	10%	40%	17%	14%
subdued colours	57%	50%	14%	35%	60%	25%	19%
intensive colours	43%	50%	86%	65%	40%	75%	81%
slow speed of changes	71%	93%	57%	75%	70%	92%	83%
fast speed of changes	29%	7%	43%	25%	30%	8%	17%

Fortunately, only in one of the analysed cases - in *Ziggo Dome* in Amsterdam, the advertisements displayed on the facade are presented in high resolution, making it more like typical advertising medium than an architectural object. The advertising appears in high resolution also on the facades' fragment of three other objects (3/60 - 5%) (*Klubhaus St. Pauli* in Hamburg, *Mall Taman Anggrek* in Jakarta, and *Architectural Advertising Amplifier* in Singapore.) It should be noted that advertising content of the transmission appear sometimes after a few years, although it was not originally intended (eg *Chanel Store* in Tokyo and *Seoul Square* in Seoul). As far as the visual characteristics of the transmission is concerned, in most cases, non-figurative images are broadcast on the facade (40/60 - 67%), but also a mixed transmission appears (11/60 - 18%) so as typically figurative ones (9/60 - 15%). The mostly non-figurative transmissions prevail in the group of hotels and multi-purpose facilities (hotel + offices + services) (100%), as well as in the museum group (A-71%) and other cultural and cultural entertainment facilities (B-86%), sports facilities and multifunctional halls (C-71%). Figurative and mixed images predominate in the group of boutiques (E-40%) (see table 3). It

should be noted, that the figurative transmission can also be characterized by a high aesthetic value devoid of commercial content (eg *Hollister Store* in New York). It should be emphasized that what distinguishes generally the objects of media architecture in relation to traditional marketing displays is the use of a message devoid of commercial content. Abstract digital images dedicated to specific objects give them certain signs of uniqueness. Such specificity of the image, contrasted with aggressive marketing messages, in this article will be called as the discretion of media solutions.

As a result of analysis of 60 subsequent cases, it was noticed that the key features for the discretion of the media solution are: 1. completely non-commercial transmission, 2. mostly non-figurative image, 3. low resolution, 4. monochromatic colour scale and 5. slow rate of change. For each fulfilled criteria, one point was awarded to the considered media solution. For a solution with incomplete characteristics (in the fragment of the media solution or visible to some extent), 0.5 points were awarded. The group of features that noticeably weakened the discretion of the media solution included: 1. a totally commercial message and a 2. fast rate of change. For each of these features, the resultant grade was lowered by 1 or 0.5 points, depending on the range of their occurrence. The score was not reduced when: 1. the picture was mostly figurative and for 2. intense colours, because these features do not visibly affect the discretion of the media solution. The sum of points thus obtained made it possible to determine the degree of discretion for each considered media solution. Scaling the obtained results, the highest degree (I degree) of discretion was given to the solutions for the point interval in the range <4-5> points. The average degree of discretion of solutions in turn corresponds to the interval <2-4>, and the lowest (discretion) 3 for the remaining points obtained. Discretion was assessed for a given media architecture object, so these ratings were not differentiated for different scenarios. The results for individual functional groups are contained in table 4.

Studies have shown that almost half - 46% of analysed media solutions (28/60 cases) are characterized by the highest, first level of discretion of the media solution. The second degree of discretion of the media solution is characterized by a similar group of objects - 40% of cases (24/60). The least numerous group of cases with low discretion of the media solution constitutes only 14% of cases (9/60). It allows one to notice that generally, media architecture does not strive to imitate the characteristics of an aggressive billboard, but is approaching the abstract transmission. It can be read as a positive side of this phenomenon, providing objects' uniqueness.

Table 4. Discretion of media solution and occurrence of media detail versus function of media object

	A museums	B other cultural objects	C sports facilities and multifun. halls	D shopping malls	E boutiques	F hotels (hotels + offices + services)	G office
high discretion of media solution	43%	86%	29 %	50%	20%	83%	33%
medium discretion of media solution	57 %	0 %	57 %	20%	80%	16%	44%
low discretion of media solution	0%	14%	14%	30%	0%	0%	22%
media detail	71%	86%	86%	70%	40%	67%	33%

The relationship between the discretion of the media solution and the occurrence of the media detail, characterizing 36 objects, was also examined. In more than half - 55.6% of cases of solutions, media solutions distinguished by media details showed the first degree of discretion (20/36). The second level of discretion was observed for 36.1% of solutions in this group (13/36) and the third degree of discretion was accompanied only by 8.3% of solutions (3/36). It should be emphasized again that the media detail is one of the features describing the form and the display element, which increase

the uniqueness of the external architectural structure. In combination with a high degree of discretion of media solutions, it has a positive influence on the image of media architecture like in *The ILUMA* from Singapore case.

It should also be noted that although the media detail is not usually visible from a distance, the object with an individual detail gains in uniqueness at close range. However, the lack of discretion of the media solution can significantly weaken this effect and the perception of the object using the media detail (such as *Hanjie Wanda Square* in Wuhan) and one devoid of detail (such as *Stadion Center* in Vienna) becomes similar. What is more, the low degree of discretion of the media solution can weaken the positive effect related to an interesting form and media detail, which we observe in the case of figurative transmissions for *Rockheim Museum* in Trondheim or *Klubhaus St. Pauli* in Hamburg. A negative case representing a lack of discretion in a solution devoid of media detail, we observe in the case of the aforementioned *Ziggo Dome* in Amsterdam. It should be emphasized that the profile of displayed content accompanying one media object can change depending on transmission, which changes also the image of the architectural object. Lowering the aesthetic values of the object we can observe for the case of *UNIQUA Tower* in Vienna in 2015, when the abstract, black and white installation called *Twists and turns* (from 2006) was replaced with a multicolour transmission containing text messages promoting the *Eurovision Festival*, taking place in the city in that time. The additional advertising content appeared also in the case of *Chanel Store* in Tokyo, however, in this solution, what is positive, the original convention of the black and white transmission remained. It should be stressed that the transmission is a very important element in the evaluation of media architecture, and can significantly weaken or strengthen the positive effect of the object in the commercial space. It requires conscious management of media content, which eliminates the threat of negative scenarios (located far from the discretion of media solutions). The risk of changing non-commercial transmissions into commercial ones is higher in the case of lack of media details, ensuring low resolution of transmitted images. However, even an abstract transmission in low resolution and based on a media detail may become unacceptable in the case of a fast rate of change of displayed content.

5. Conclusions

The uniqueness of media architecture is conditioned by the three components of the media solution - form, display element and transmission. Its evaluation requires taking into account many criteria describing these characteristics. Within the categories of commercial activity objects, it is possible to see similarities in a scope of media solutions, which come from the specificity of architectural form, connected with particular functions. We observe the most repetitive relationships in the group of stadiums, multifunctional halls and shopping malls. There are also features common to various functional categories of objects, for instance in the field of used media details. So to a certain extent, the uniformity of media architecture objects is visible. However, the media detail dedicated to a specific object always gives it some level of uniqueness. This feature is also enhanced by the discretion of the media solution, and the majority of the examined objects are characterized by a transmission significantly different from the aggressive messages flowing from digital advertising media. A media transmission with a high degree of discretion may be a very interesting effect in the night view of the object. However, the "evanescence" and "changeability" of the media object is not a justification for the not suitable, unsuccessful form of the object. The day view is still a key element in the assessment of the architectural objects. However, most of the analysed media architecture objects can be attributed to the uniqueness of form. It proves that, in general, the media solution accompanies objects with high aesthetic qualities. A media solution with a high degree of discretion can emphasize these objects' strengths enforcing their visual uniqueness, which is an essential feature in the context of commercial spaces. Apart from this, media architecture raises many objections to the energy consumption, especially in the context of a small number of solutions using renewable energy to power the transmission. Media architecture is certainly an aesthetic architecture, focused on the image

of the object. Should it be interpreted as an unnecessary superficiality, or a perfect tool to aestheticize the commercial space after dark? This is an open question that raises a lot of controversy, but undoubtedly media architecture plays a significant role in the image of the post-modern city and requires analysis, also in the context of legal regulations that should prevent light pollution.

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