

NEW CHALLENGES FOR CONTEMPORARY ARCHITECTURE: INTERDISCIPLINARITY – INNOVATION – SOCIAL COMMUNICATION

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This paper refers to seeking new possibilities for contemporary architecture to develop. The discussed problems focus on interdisciplinarity, innovation, social communication as elements indispensable for development. The article applies to the essence and the notion of relations between these elements. The presented examples illustrate selected design problems. Social communication is described as the determinant of modern society development based on information flow. Two projects are presented, both practical examples of the discussed issues.

Key words: interdisciplinarity, innovation, social communication.

Стаття присвячена пошуку нових напрямків розвитку у сучасній архітектурі. порушені теми зосереджені на інноваційних технологіях і проблемах комунікації, які не існують окремо, та визначають головну ціль взаємодії між основними елементами розвитку цих напрямків. Наведені приклади ілюструють можливості різноманітного проектування, заснованого на тенденціях розвитку сучасного суспільства. А найважливішим чинником розвитку є поле зв'язку, яке базується на потоці інформації. Подано два проекти як практична ілюстрація обговорюваних питань.

Ключові слова: міждисциплінарність, інновації, соціальна комунікація.

Introduction

Architecture is not a field automatically associated with innovation. It seems that architecture can make use of innovation rather than create it. Consequently, questions arise as to what is innovation and how it influences modern architecture? Or should it even?

Innovation can come into existence in many ways: in one field or at the point of contact of many fields. When innovation becomes an element of interdisciplinarity, the results are usually most interesting and most surprising. They often stimulate the development of contemporary architecture. One of the fields corresponding and co-operating with architecture, in order to create innovation, is social communication. Presenting communication as an exemplary field is intentional, because it is one of the indicators of contemporaneity.

The concept of innovation

Today, architecture can be regarded as a product affected by many factors. Innovation is what helps this product gain advantage, spring up and compete effectively.

Innovation is a complex notion. For example, there is no unanimous, unequivocal definition of innovation among the experts on management, marketing and economy. Especially, there is no conformity as to whether innovation theoretically exists or not, and should it be discussed without being proven by the market.

According to Peter Drucker innovation is: “the specific tool of entrepreneurs, the means by which they exploit change as an opportunity for a different business or a different service”[1]. To Drucker, innovation is more an economic or a sociological idea, than a technological one.

Chris Freeman writes that innovation can be spoken of when it becomes a subject of trade, in other words – when it is sold. Unfortunately, Freeman does not state what sales figures make innovation permanent on the market.[2]

Another approach towards innovation was presented by G.S. Altshuller, who emphasized the connection between innovation and creativity, and the necessity of active creative processes within innovation. According to Altshuller, innovation is “a complex phenomenon and a collection of skills, a different approach to organizing, synthesizing and expressing knowledge, to perceiving the world and creating new ideas, perspectives, responses and products”. [3]

Innovation in architecture

There is a basic model of innovation, which is now discussed: Product-oriented innovation – every change that leads to improving already manufactured product, or to expanding the range of products. Product-oriented innovation can be based on new technologies, on new applications of existing technologies, or on applying new know-how. Process-oriented innovation refers to the development of new methods, tools and attitudes, as well as to the improvement of existing methods. These methods consist in changing the tools or the organization. [4]

In the context of architecture, the first type of innovation could be considered as the evolution of form and construction – innovative use of new materials, structures, formal and aesthetic solutions etc. The second type of innovation is the development of function, its innovative and unconventional modelling, seeking for new or improving existing interior spatial designs, the way a building is functioning in the public space, its interaction with a user, project interdisciplinarity etc. It is also – in the economic view of innovation – seeking for the best project placement on the market.

Communication as the marker of our times

Due to the wide range of both interdisciplinarity and innovation concepts, this paper focuses on a selected problem in order to describe both concepts better in the context of architecture. The problem is communication – intertwined with the present, playing key role in contemporary architecture.

It is hard not to notice how significant are the media and the information flow. The idea of a “communications revolution” together with the idea of an “information society” are commonly accepted in an objective description of our times and the currently emerging type of a society. [5] Thus, information flow is what transformed the post-industrial society into a society based on knowledge and skills, and what transforms it still.

There are two types of the communication process, depending on the goal of its participants: informative communication and persuasive communication. [6] The first one, as objective and neutral, requires a reliable presentation, fitted to diverse recipients’ needs; the second refers to the desire to change, consolidate or shape the recipients attitudes.

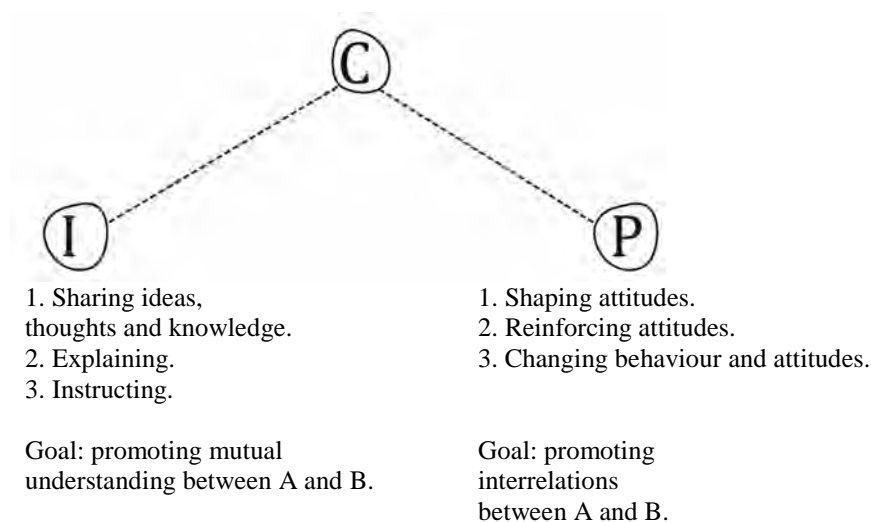


Fig. 1. Communication schema [2] (C) communication, (I) information, (P) persuasion

The main goal of the informative communication is an agreement and understanding among the process participants. This type of communication is strictly informative. The data presentation is objective, factual and neutral. The key is the use of proper communication methods, depending on the specificity of presented data and their recipients, so that the message is completely comprehensible. Such a goal is not easy to achieve in view of the fact that every information received is previously worked up in our individual processing system, every received data passes through our knowledge first. That is why the same data can be the source of different information for different people.

Persuasion is when communication's goal is not only to inform (the presentation is not strictly objective and neutral). The basic feature of persuasive communication is influencing the recipient in order to induce him to accept and adopt behaviour and attitudes consistent with the sender's intention (voluntarily, not under duress). *Persuasive communication is a comprehensive, interactive process, in which the sender and the recipient are connected through verbal and non-verbal symbols, and through these symbols the persuader wants to affect the persuaded person in order to change their reactions, behaviour, shape new attitudes or modify the existing ones, provoke action.*[7]

The analysis of examples on how communication meets architecture

To make the topic intelligible in the context of architecture, two exemplary projects are presented, the authors of which refer to the problem of communication.

The first project, by MAKE architects, presents a classic approach towards urban information, based on informative communication.



Fig. 2. London Information Centre, exterior, MAKE architects.

<http://www.topboxdesign.com/city-of-london-information-centre-by-make-architects-united-kingdom/city-of-london-information-centre-by-make-architects-united-kingdom/> (accessed on 31 Oct 2011)

The building, designed by British architects, though modern and dynamic in form, presents a rather conservative interior. Due to the subject of the project, the designers had to address the interdisciplinarity. The message is limited to information, and its media are leaflets and employees. Perhaps, the investor wanted only to communicate the most interesting information about current city events, but it is quite obvious that the full potential of communication was not exploited. The new information centre will not shape visitors attitudes, it will only indicate places, where such shaping can occur. For some of the recipients this will be enough, for some – unfortunately not. From a marketing point of view, users who do not become the recipients of city offer are of no value. The whole venture seems not to exploit the potential of interdisciplinary connection between architecture and communication: this project is lacking an element of innovation which would bring it to a different level.



Fig. 3. London Information Centre, interior, MAKE architects.

<http://www.topboxdesign.com/city-of-london-information-centre-by-make-architects-united-kingdom/city-of-london-information-centre-contemporary-interior-design/> (accessed on 31 Oct 2011)

The second example is the project of a Dutch pavilion by Bureau B+B for Landscape Park Exposition in 2013, in Jinzhou.



Fig. 4. Dutch Pavilion, Landscape Art Exposition in 2013, in Jinzhou, interior, Bureau B+B. Photo by Bureau B+B. <http://www.archdaily.com/'fierljep'-polder-and-information-centre-bureau-bb/> (accessed on 31 Oct 2011)

This design consists of a building and a large meadow with a system of criss-crossing ditches, surrounded by a levee. Inside the pavilion, visitors can learn about Dutch farmers traditional way of moving across polders using long poles, which is now an unconventional national sport of the Netherlands. Then, visitors can put on their own wellingtons and, after a brief training, they can go in for it themselves. The supreme goal of this project was to create a communication space, where one could communicate “through environment”.

The Dutch used a common method of experience design based on creating interactive products, environments where a user receives information and responds to it according to own experience and skills. Designing exhibitions, expositions etc. is often connected to creating behavioural scenarios. It is all for the sake of reaching the recipient, engaging him, because this makes educating him or shaping his behaviour easy. In the Dutch pavilion, both methods of reaching the recipient are used and the potential of communication is fully exploited through information and persuasion. It seems that the Dutch project derives much more from the communication theory, and in an innovative way translates theory into practice. Such innovation will probably arouse visitors interest in Dutch tradition, as well as some deep emotions, and will create a positive image of Dutch culture.



Fig. 5. Dutch Pavilion, Landscape Art Exposition in 2013, in Jinzhou, exterior, Bureau B+B. Photo by Bureau B+B. <http://www.archdaily.com/'fierljep'-polder-and-information-centre-bureau-bb/> (accessed on 31 Oct 2011)

A simple diagram[8] explains, in a very comprehensible way, what is an area of communication: it is a mix of what environment creates (environment meaning specially designed surroundings ensuring proper conditions for message transmission) and of the message form (the use of certain measures in order to emerge in the public space and reach the recipient).

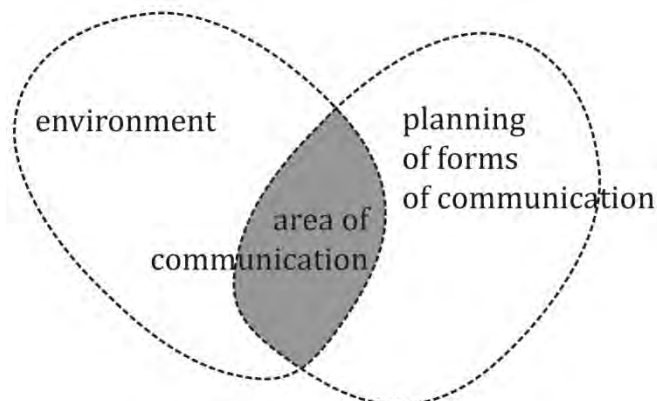


Fig. 6. Communication area.

Berger C., Lorenc J., Skolnick L., *Czym jest projektowanie wystaw*, ABE Dom Wydawniczy, Warszawa 2008

Summary

Social communication was selected as an exemplary field to illustrate how innovation and interdisciplinarity meet architecture.

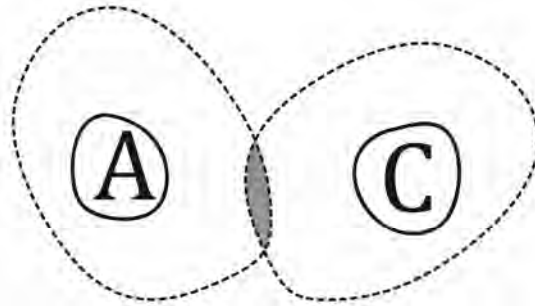


Fig. 7. Architecture and communication – a synthesis. Drawing by author

Innovation is usually born where various fields interact. All areas of contemporaneity make their way towards interdisciplinarity. It is important that designers are aware of this process. This awareness may be of help to architects who shape the landscape, allowing them to design architecture that will become a valuable part of the present and will meet present-day needs and conditions. Through being aware, the architecture defends itself from being pushed into a passive and inferior role. Modern architecture should aspire to being the subject of real events, to shaping and influencing them.

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