SPACES OF SOCIAL INFLUENCE

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PRZESTRZENIE WPŁYWU SPOŁECZNEGO

Abstract
Social influence, a phenomenon studied by social psychology, contains a spatial aspect that exerts an important influence on both architecture and urban space. This article presents some of the areas and methods of social influence, as well as the associated features of human psychology and social phenomena, with some final remarks concerning manipulation and propaganda. This article include the presentation of methods that architecture and urban planning employ to influence people (both individuals and groups), such as the communication function of built structures, the identity and symbolism of space, and the phenomenon of unification. The research undertakes the problem of a large emotional potential of memorial and symbolic spaces, as well as the hierarchy of spaces and their atmosphere. Using the methods of identifying areas of influence described by social psychology, elements in architecture and urban planning susceptible to social influence have been noted.

Streszczenie
Wpływ społeczny, będący fenomenem badanym przez psychologię społeczną, posiada swój aspekt przestrzenny, a zarazem w istotny sposób oddziałuje na kształt architektury i przestrzeni urbanistycznej. W pracy przedstawiono obszary i metody wywierania wpływu społecznego oraz związane z nimi cechy psychologii ludzkiej i społecznej, jak również fenomeny manipulacji i propagandy. Przedstawiono elementy architektury i urbanistyki mogące posłużyć do zmiany postaw jej użytkowników (zarówno jednostek, jak i grup społecznych), jak komunikacyjna funkcja struktur zbudowanych, tożsamość i symbolika przestrzeni czy fenomen unifikacji. W pracy poruszony został problem przestrzeni o znacznym ładunku symbolicznym i emocjonalnym, przestrzeni pamięci, jak również hierarchiczności przestrzeni, jej nastroju. Posługując się metodami identyfikacji obszarów wpływu, opisanymi przez psychologię społeczną, wskazano na zjawiska w architekturze i urbanistyce podatne na wywieranie wpływu społecznego.

Keywords: group manipulation; social influence; architecture of power; psychology of space; spatial identity; symbolic communication; urban space hierarchy

Słowa kluczowe: manipulacja grupą; wpływ społeczny; architektura władzy; psychologia przestrzeni; tożsamość przestrzeni; symboliczna komunikacja; miejska hierarchia przestrzeni

INTRODUCTION

Architecture is an important tool of community influence – through using spatial relationships and details it symbolizes specific human group, and by organizing space it manifests power. The issue of the relationship between a given social group and its constructed surroundings is a very important practical outcome for architectural activity, since some architectural images may be used as subjects of manipulation or influence. Architecture can also be the basis for creation of social bonds, ritual forms and relationships, which themselves are a necessary element in the structure of society. Architectural objects are built to perform

certain social functions, but even when they are created for purely utilitarian purposes, they possess the power of communication – the medium is the message (McLuhan, 1964) - they communicate about their own existence and the space occupied by them, which is always part of a wider urban context.

Architectural structures are one of the largest, most expensive and longest-lasting products of human activity – the question is therefore, whether as such, they may constitute an element of manipulation and control, which is often short-term phenomena. The work aims at answering this question by placing the methods of social influence, as well as related features of human psychology and social phenomena, within the context of architecture.

1. METHODS AND INSTRUMENTS OF SOCIAL INFLUENCE

Social influence, which can occur under the influence of peer pressure, or through leadership, can affect emotions, opinions and behaviours. Actual influence is based on the features of human psychology, enabling acceptance of information as proof of the fact. These features include for example the desire for belonging and acceptance of the group, the need for self-affirmation, conformity, willingness to find meaning and identity (Kelman, 1958, Deutsch, Gerard, 1955). The psychological underpinnings of influence include, amongst other considerations, seeking pleasure and compliments, avoiding negative emotions, the inability to deny, no clear sense of identity and personal boundaries (Braiker, 2004), and the simplification of processes through automatisation of behaviour (Cialdini, 2001). Social psychology has identified several factors, which reinforce our susceptibility to social influence: the strength and validity of the influencing entity, immediacy effect (proximity to a targeted group), and the size of the group (Latané, 1981). Areas of social influence, which can be distinguished, include conformity, conversion, identification and internalization.

The process of influencing a group or individual is carried through until they adopt the intended point of

Fig. 1. Millenium Park (1997-2004) was a part of Chicago Mayor's R. Deley effort to greening of the city, which activities (Vitullo-Matin, 2013) lead, amongst other factors, to his 5-fold re-election as Chicago Mayor; photo: J. Crocker, 13 October 2005

view, and this may take place in a rational or emotional manner, using a variety of methods (Cialdini, 2001), such as:

(1) Reciprocity (the tendency to reciprocate a favour). For example politicians build and modernize buildings and spaces within public realm (eg. parks, streets, squares, infrastructure and buildings owned by the people and controlled by government officials) to be more popular amongst the voters (Fig. 1).

(2) Consistency and commitment (avoiding internal contradictions - a small step in any direction can cause a complete change of attitude). An example of consistency in spatial planning can be city centre design for concentration of skyscrapers in one predefined area (Fig. 2).

(3) Conformity - adaptation to the external behaviour of existing regulations and standards (Kelman, 1958) in order to avoid punishment or to gain rewards (Deutsch, Gerard, 1955). To induce conformist behaviour both positive and negative emotions are being used. For example, fear strengthens the chances of conformist behaviour. Conversion is a deeper kind

Fig. 2. Example of consistent city skyline, with clear skyscrapers concentration, Cleveland, Ohio, 2006; photo: Avogadro, 15 August 2006

of conformism, which includes also opinion change. In spatial realm the neighbourhood decoration can be an example of conformity – bringing similarity to cultural landscapes.

(4) Authority and Identification - behaviour or opinion change under the influence of a liked or respected person. Authority, with confirmed status and reputation within the group, is seen as being reliable, and helps build confidence and authenticates information. Other elements that support building trust include knowledge and attractiveness. Authority and identification support internalization processes, which is the acceptance of the imposed standards (Milgram, 1963). Authority can be transmitted through architectural buildings, such as the Bucharest Palace of Parliament (Fig. 3).

(5) Social proof (greater openness to things confirmed by the behaviour of others). Open public spaces, designed for gathering of large number of people act as social proof arenas, for example St. Peter's Square in Rome, acts as social proof for Christianity (Fig. 4).

(6) Affection (greater susceptibility to influence of popular people). An example is the sculpture of former Egyptian president, H. Mubarak, located next to (and above) country Nobel Price laureates (Fig. 5).

(7) Deficiency (perceived resource constraints generate demand). One of the resources is space – therefore limited perception of space, located in prime locations due to traffic intensity, view, etc. leads to rising of land and real estate prices.

1.1. Manipulation

Psychological manipulation is a type of social influence, aiming to change perception or behaviour (Braiker, 2004). Manipulation is generally seen negatively, but its mechanisms can be used for constructive purposes and with respect for rights of individuals or groups, such as to convince them to change to a healthier lifestyle, or environmentally-friendly behaviours. Persuasive communication uses the phenomena of behaviourism, psychoanalysis and cognitivism such as:

- conditioning (by associating stimuli and effects, reward instruments leading to behaviour reinforcement or weakening);
- psychoanalysis (using, among others, the principle of pleasure and temptation); cognitive dissonance (rationalization of mixed messages leading to strengthening of the message);
- role models (in order to identify and internalize the proposed values).

Manipulation can occur by positive support (as compliments, awards, etc.), or negative support (by

Fig. 3. Example of architecture communicating authority: Bucharest Palace of Parliament (1984-1997), designed as seat of political and administrative power of N. Ceaușescu; photo: Carpathianland, 20 September 2012

Fig. 4. Example of urban design allowing social proof: St Peter's Square in Rome, Italy, 1656-1667; photo: François Malan, 4 May 2005

Fig. 5. Example of design linking a sculpture patron (President H. Mubarak, on the left) with image of three Egyptian Nobel Laureates. Outskirts of Cairo, 2010. During the "Egyptian Spring" of 2011 the dictator's portrait has been severely vandalised; drawing: the Author

helping to change the negative situation) or directly – by providing a penalty. Manipulation can affect key factors influencing the decisions, such as the education system, or emphasise validity of certain social groups or selected values, such as nationalism.

1.2. Propaganda

Propaganda is a form of manipulation, affecting the larger social groups through the creation of myths – coloured images, manipulating human psychology, forcing the receivers to be active without their conscious choice. Propaganda reaches through to the most subconscious of people's habits. *"As a result, its receiver adopts new criteria for evaluation and selection, he does so in a spontaneous manner, as if he has chosen them. In the advertisements, models (films), technology, education, work, architecture"* (Ellul, 1973). One of conditions of the success of propaganda is its effective standardization as observed in human creations, increasingly evidenced since the industrial revolution. Increases in the effectiveness of propaganda are therefore associated with the degree of uniformity of the individual, facilitated by the process of erosion of personal and social identity, characteristic to modernity. In post-modernism reality, individuals are immersed in a rivalry between the products, ideas, information and entertainment. In this abstract and incoherent world, propaganda offers the opportunity to organize information, provides responses to problems and furnishes affirmation. Therefore, to a large extent, propaganda takes the role of culture-creation. Affirmation can be observed for example, in the support narcissistic characteristics which are in distant relationship with the actual values but effectively fill the gap left by them (Ellul, 1973, Gawlikowska, 2011).

The role of propaganda is particularly clear in the modern world where competition is primarily a matter of economic advantage and power over consciousness - the media. One result of media development is to unify the message and therefore the world identity, resulting in disappearance of local differences.

The unification process is also supported by machined mass-production, as well as the rules of capitalist production – efficiency, performance or multiplication, which *"puts emphasis on speed"* (Rewers, 2005), leading to the multiplication of architectural forms (Fig. 6). Unification understood in such manner is also one of the basic conditions of effective propaganda (Ellul, 1973). The threat in this context is, what already Joseph Goebbels wrote: *"propaganda in the simplest way to present complex processes of political and economic life. It functions by simplification of thinking of the masses by and reducing them to primitive patterns"* (Ellul, 1973).

Fig. 6. Example of unification trend in contemporary architecture: modern shopping mall, which could be located anywhere in the world. Guangzhou, China, drawing: the Author

2. ELEMENTS OF ARCHITECTURE AND URBAN PLANNING THAT CAN BE USED TO INFLUENCE ITS USERS

The desire to influence may for example have the goal of strengthening support for new government or social system legitimation, expressing the domination of an ethnic group or changing cultural attitude. Spatial symbols in public space constitute a part of public mental domain – which is an area of non-physical dimensions, sometimes referred to as public conscious-
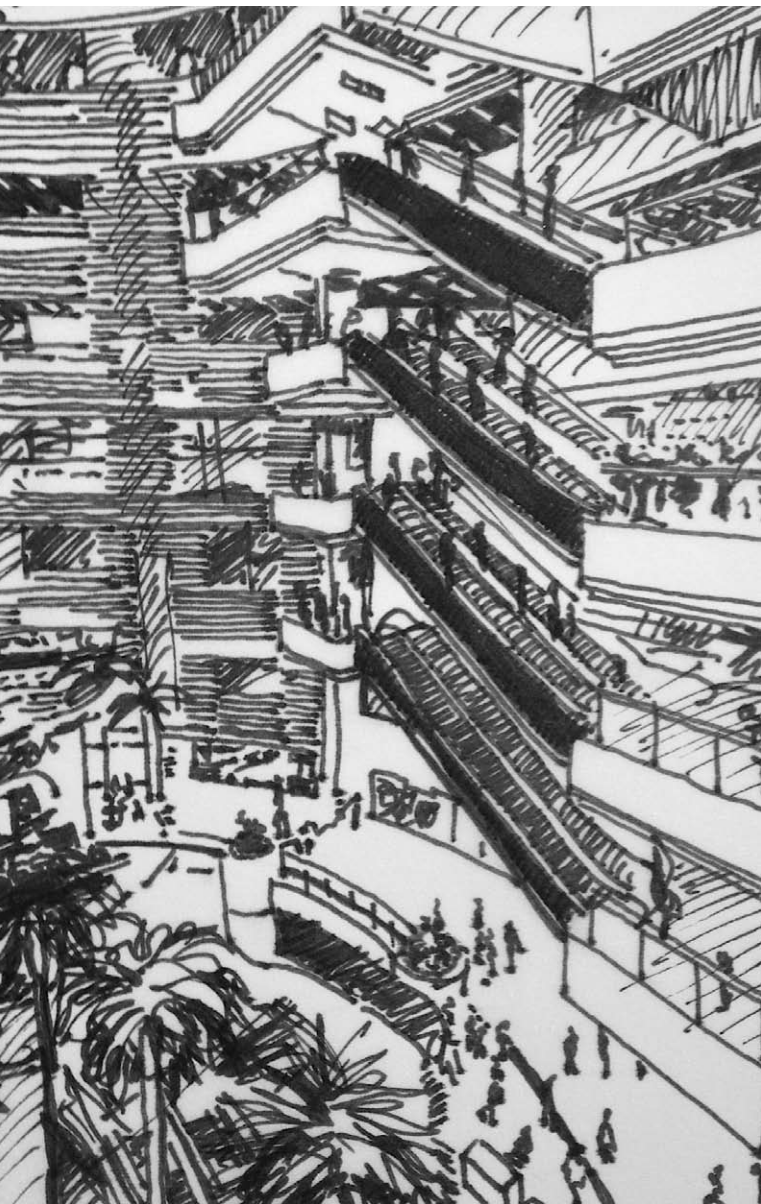
ness, social information space, etc. This domain can be affected by spatial design also due to the phenomenon of association allowing to influence the public mental domain through visual image. For the successful social influence through space, perception and psychology of its observers has to be studied.

Architecture and urban planning are important elements of space, constantly and directly surrounding their users, and as a communication media they may transmit non-verbal content (Eco, 2002). These two features make an architectural space particularly interesting for groups and individuals who want to have a social impact. This is especially valid for the public spaces, which are social and generally open, for example streets, squares, parks, and railway stations. Also areas which are not a part of public spaces, but which are visible from public areas, for example building facades can be used for advertising and social impact. Public spaces can become cultural areas becoming media for specific values and characteristics (for example Old Town district in Warsaw), making them additionally important for the local community and, therefore, potentially more susceptible to influence.

Public spaces are particularly susceptible to manipulation and propaganda because there communities gather, social rituals are created and information is transmitted. Operating modes of public spaces also impose culture of behaviour and normalize the routes and experience of its users. Depending on their shape they may contribute to social group creation or alienation, they may also indicate the superiority of the institution, social class or social function by creating dominants in space, by number of urban connections and by application of ornamentation. Therefore, they play both a communicative and influence supporting function by creating the position and authority of the selected institutions. Spatial identity phenomenon and identification with symbolic values and spaces of historical memory is important in that regard.

Territorialism is a human characteristic - groups and individuals establish their territory and defend it against appropriation or violation. In areas identified by themselves as "own" (which can include local public spaces, and the whole city), people feel more comfortable. Both public and private spaces usually have psychological and legal boundaries, which take the physical form of the signs and fences, hills, vegetation, bollards, etc. The psychological divisions can draw on ownership, familiarity, even fashion and character. Personal territory in a public space (for example in the office) can reduce negative effects of crowding (Calhoun, 1947). Status of the space is partly formed by the level of availability and by degree of control. Territorialism is

manifested also through the styles diffusion process - depending on the nature of the political system, newly conquered territories may be labelled with the invaders style or can keep the architectural elements characteristic of the conquered culture, which can be a part of a long-term strategy for preservation of power by reference to the familiar elements and significant symbolism.

2.1. Elements of architecture shaping the thoughts and emotions of its recipients

Architecture designed to consolidate the power of the ruler was aimed to evoke different emotions in its viewers - from fear to admiration of wonder and beauty of objects, which translated often into relationship to the ruler, his regime and values he represented.

Territorialism is associated with control and depth of space, the elements communicating degree of availability and openness, and location within hierarchy. Control can be based upon the degree of availability of space, upon scale of the space and its configuration, allowing control of human behaviour and, in some cases, usage of weapons and force. In contemporary world, the visibility can be seen as a trap, by which modern society has undertaken to create control system of power and knowledge (Bentham, 1995). The space can communicate different meanings, depending on the configuration of the symbolism contained within it and its context: the limited availability of space, for example, can be considered as prestigious or the opposite - a place with the highest number of location urban connections can be regarded as the most prestigious in the city. Urban axes are, however, a universal symbol of high position in social hierarchy, symbolically indicating the cosmic axis. Similarly, a significant difference in scale is read by the public as a symbol of dominance and superiority.

Spaces may appear hostile and cause fear not only by their inaccessibility, size but also their shape, which can communicate danger (such as objects with sharp corners). It has been found by neuroscience that viewing sharp edges produces greater activation of the amygdala, a brain area involved in fear and emotional arousal, than looking at curved contours. This may be underlined by a sense of danger which people subconsciously associate with sharp angles, provoking what neuroscience calls an "avoidance response" (Bar and Neta, 2008; Pradeep, 2010). Marketing scientists agree that straight shapes convey strength, aggression, brutality and dominance, whereas curvature and roundness evoke harmony, softness, compassion, community, safety and perfection (Schmitt and Simonson, 1997). This applies to sharp edges, as

well as to hardness and roughness of material. On the other hand the spaces can be used to operate with ovoid forms and materials to give the impression of softness and warmth referring to positive emotions and associations. It can be deduced that lowered degrees of sharpness will provoke gradually decreasing negative neuronal response – therefore for example the soothed architectural geometry and urban buffer zones, preparing for high-rise buildings and would be preferred if soothing effect is envisioned by planners and designers. This is not always the case, such as when architects purposefully create objects to drag attention and cause strong emotional response (Hildebrand, 1999).

In each of these cases architecture will perform certain functions, which will be identified with emotions documented in forms of spatial structures. Negative emotions will support the process of conformity (Deutsch, Gerard, 1955), while the positive associations will make the institutions associated with the architectural objects more acceptable and likable (Milgram, 1963; Cialdini, 2001; Gawlikowska, 2011), and therefore translate into a rational perception of the institutions as more useful and friendly.

Phenomena described above belong to the field of environmental psychology which is a discipline initiated in 1960s which focuses on interrelations between people and their surroundings. The field defines environment broadly as encompassing natural, social, built, learning, and informational environments. Medicine doctor Jonas Salk, who created polio vaccine in the surrounding of XIII-century monastery in Assisi, Italy noticed, that his ability to think clearly is influenced by the surrounding,

Fig. 7. Scientific facility designed to stimulate breakthroughs and encourage creativity: Salk Institute in La Jolla, California. Louis Kahn, 1962-64. Courtyard axis — Jonas Salk Institute in La Jolla, California.
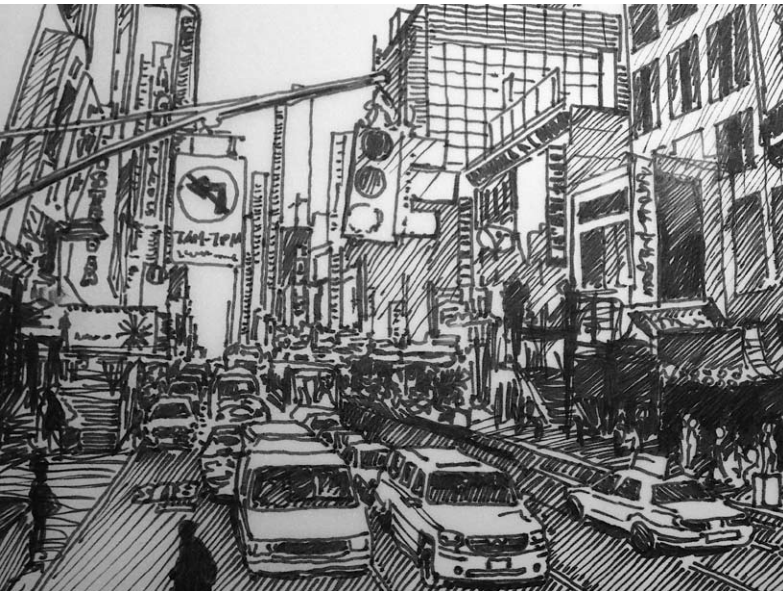Photo: Jim Harper, 9 February 2004

Fig. 8 and 9. Examples of street designs very different in terms of traffic, daylight, surrounding buildings size and density, as well as the amount of greenery. Left: street in New York; drawing: Author; Right: ASLA Honor Award Recipient, NE Siskiyou Green Street, ASLA; photo Kevin Robert Perry

After this experience together with architect Louis Kahn, he has initiated the Salk Institute in La Jolla. The institute was designed as a scientific facility to stimulate breakthroughs and encourage creativity (Fig. 7) (Anthes, 2009).

Further investigation and experiments in the field of environmental psychology found interesting correlations between ceiling height and the way people think: higher the ceiling, more free and abstract thinking patterns (Mayers-Levy, 2007). Positive effect on academic performance and concentration has been reported in connection to the abundance of daylight and views into natural settings (Heschong Mahone Group, 1999; Wells, 2000; Taylor et al. 2001; Berman et al. 2008).

2.2. Elements of architecture, shaping social rituals, behaviour and relationships

As introduced above, thought processes have an effect on behavioural aspects of social life, and since everyday rituals are placed within spatial environment: squares, markets and streets, design effects thoughts and emotional patterns of its users. The design of streets can affect human condition through the amount of greenery and height of buildings letting in natural light (Fig. 8 and 9), as well as through the amount and organization of information (Fig. 10 and 11).

Environmental psychology has proven that an over-informative urban setting, no matter how stimulating, requires additional cognitive work to be comprehended – its observers less intellectual capacity than the natural green setting (Berman et al. 2008). Results of this study

can serve as basis for a hypothesis, that in urban chaotic advertisement which is the case of many of Polish cities (Fig. 10), will cause more cognitive stimulating distraction than calm and organized Swiss urban design (Fig. 11), resulting in different mindset of its citizens. The author who lived both in Switzerland and Poland can generally confirm that Swiss organization could be very educative for Poles, who are generally more spontaneous and do not value organization as much as the Swiss citizens. Perhaps this difference is partially caused by the design of architecture surrounding the everyday life.

Architecture has a number of tools that can be used to shape its inhabitants. It has the power to communicate and embody values that are important to the community. This forms the basis for the creation of rituals in space leading to the production of social norms of behaviour and usage of space, as well as human relationships. People can be for example influenced by the mood of the place (designed as a beautiful and friendly or brutal and repulsive), impressed with the spatial hierarchy or recognize an authority by its historical ties with spaces.

As the highest human need is the need for security which requires an image of the world that would fit to the everyday experience and would give each individual a particular orientation in the midst of the forces of nature and society, architecture which embodies these insights, is particularly interesting in the context of social influence. It is demonstrated in the vulnerability of sites assimilated with social groups, such as the sacred spaces or memory spaces.
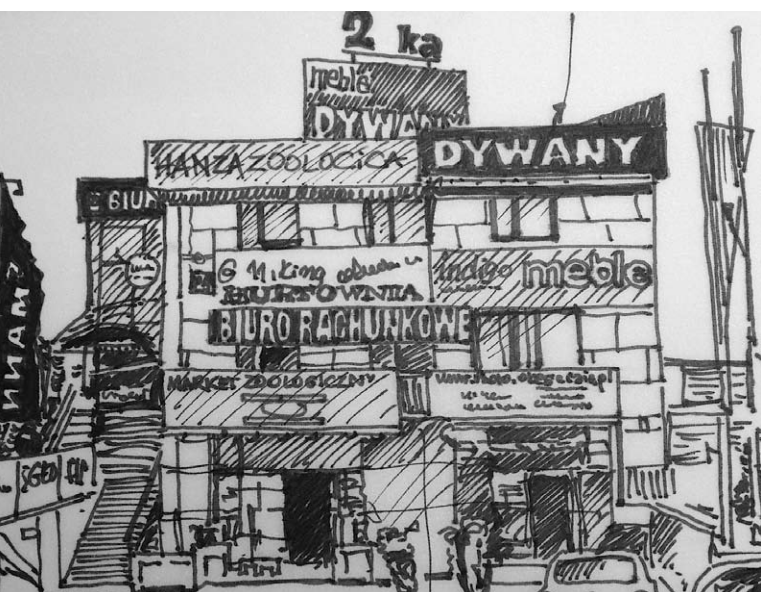
Fig. 10 and 11. Examples of architectural aesthetics in public spaces in Poland (left: Warsaw, chaos of advertisements; drawing: Author) and Switzerland (right: Aarau, car park, Schneider & Schneider Architects; photo: H. Helfenstein)

Architectural objects performing essential societal functions or the places holding important community rites or rituals can become the embodiment of the ideology guiding their users, which consist usually of a particular social group. In cases where such ideology takes the form of religion, these sites can be in the group consciousness transformed into holy places (Philip, 1999).

In addition to the influence of social symbols and emotions stored in space, and rituals associated with it, there are effects on social behaviour of its users. Spaces may have for example a pro-social character, raising the inter-personal communication (Hall, 1997) by creating a sense of security and comfort, encouraging to shorten distances, creating groupings (Anthes, 2009). Space, depending on its organization, the number of stimuli, light, colours and furnishings (or urban organization) supports contact and conversation, relaxation or on the contrary - it does not support such behaviour (Wejchert, 1974; Anthes, 2009).

3. ARCHITECTURE AS A COMMUNITY DEVELOPMENT TOOL

There are a number of spatial tools, that could be used for the development of society, transmitting a range of positive incentives, supporting self-esteem, communicating and stabilizing both individuals and communities, and the negative - even destructive. Perceived reality is correlated with space identified with it, enabling to influence the identity of its users (Gawlikowska, 2011).

In principle, tools of social influence (Cialdini, 2001), can be applied to architecture and urban design:

- **Reciprocity:** human tendency to reciprocate favours, is used for example by politicians promising the construction of public buildings in the event of election winning and by dictators "gifting" public spaces to the society. Also companies successfully use this technique to attract visitors. For example, in highly competitive field of attracting tourists to gamble in the country of Macau, apart from astonishing architectural solutions, Venetian Hotel sponsors a light show, which is projected every evening on the main building Façade (Fig.12 and 13), hoping for tourists to return the favour by entering the Venetian Hotel Cassino.

- **Commitment and consistency:** The human tendency to avoid contradictory emotions can be used for changing the image of a person or institution. It can be affected through the construction of an architectural object identified with the institution, with particular attention to aesthetics and sent messages. Rational, classical architecture is therefore often used by institutions that wish to create a notion of trust. For example banks and insurance companies often choose reliable, solid, monumental buildings in prime locations, to communicate its position and security (Fig. 14).

The phenomenon of commitment and consistency can be also observed in case of long pathways towards a certain location: people tend to translate time and effort which has to be put into reaching cer-

tain places into an increased enjoyment of the destination once arriving.

The Consistency rule has an effect on architecture, leading for example to the predictable design of a building's entrance and its function, unless the building has been designed to surprise. This is for example the case in postmodern architecture, which was playing with the rule of consistency.

- **Social proof:** Openness to phenomena, confirmed by the participation of other members of community can be used in public places, which carry a special symbolic cargo or host a social ritual. Along with the scale of these places the number of people gathering in them grows, providing powerful social proof, hence the impact, even if most of the people gathered at the site do not act under the influence of conversion but conformity. Both religious temples, and areas of political gatherings make use of this phenomenon (Fig. 15).

- **Authority:** architectural space supports creation and validation of authority and power legitimation through the use of symbolism and spatial hierarchy. Larger structures are given larger status – and therefore the institutions which want to show their authority tend to build large scale structures, showing symbolically their location in social hierarchy. Institutional authority-building can be illustrated by architecture plans for a massive new campus of Apple company in Cupertino. Planed structure is larger than the U.S. Pentagon and Empire State Building. Moreover, the authority of the institutions associated with the architectural object can be enhanced or compromised by affecting the hierarchy of space. Mussolini, for example, rebuilt the Via della Conciliazione to change the spatial hierarchy of St. Peter's Basilica, and thus symbolic validity of Christian religion.

- **Affection:** Architecture can create spaces which focus on the user's pleasure, having an impact on his susceptibility to system influence, associated with the architectural object. Known places, linked with a lot of positive memories are well socially perceived. This can be used for example by companies, linking the spatial and architectural symbols with the brands they promote. This method has been used for example to create the beer brand "Królewskie": linking both the label and the name with a well known location in Warsaw: King Zygmunt III Waza column (Fig. 16).

Fig. 12 and 13 – Example of reciprocation: Macau Venetian Hotel provides free entertainment through one of the world's largest architectural 3D light and sound shows - „*Winter in Venice*" (produced by Laservision company). View of the same building at different moments of the the show; photo: Author.

Fig. 14 – Example of commitment and consistency architecture: classical architecture of National City Bank headquarters, prime location: 55 Wall Street, Financial District, Manhattan, New York City (1836-41, I. Rogers)

Fig. 15 – Example of long pathway towards the building: Mortuary Temple of Queen Hatshephut, west bank of the Nile near the valey of the Kings in Egypt ; photo: Benjamin Franck

Fig. 16 – King Zygmunt III column in front of the Royal Castle in Warsaw (1643–1644, proj. A. Locci and C. Tencalli; reconstructed in 1948-49 after the IInd world war), photo: A. Zienowicz, 12 June 2008

- **Deficiency:** Less available resources are more attractive. This phenomenon can be observed in space, for example places of special natural beauty or prime location within urban structure, cause particular attention to architectural objects placed within them, and therefore their founders. This rule accounts also for other cases of scarcity – for example the only piece of WTC structure left untouched, slurry wall, the original bedrock with the concrete and steel foundation plates from which the towers grew, has been used in the Memorial Hall, in the new 9/11 museum.

Other tools of social psychology, describing social impact can be applied to architecture:

- **Identification and internalization** - which in media often takes form of connecting products with well-known and popular people. It occurs also in space, for example architectural buildings refer to popular design elements, influencing the users acceptance. For example, pyramids where designed to embody values of eternity and immortality which were to be identified with god-like Pharaohs. Djoser's Step Pyramid in Sakkara complex (about 2650-2575 BC) has been designed by architect Imhotep to host several structures pivotal to its function in both life and afterlife, to facilitate a successful afterlife for the king, so he could be eternally reborn. It was the largest structure of its time, a striking symbol of the Pharaoh's power and influence over his people.
- **Status and reputation** - credibility can be built in architectural space, for example, through links with symbolic objects relating to higher values. Space is not seen from a psychological point of view as uniform - some of the areas concerned are unique, and thus have a higher value, concerned as places of privileged, indicating their high status within the hierarchy. An example

can be taken from the city of San Gimignano, where in XI-XII century powerful families were in competition for the height of household towers (Fig. 17). In 1255 it was decided that the city town hall – Palazzo Vecchio will remain the highest building in town and it is not allowed to build larger structures. This rule has been soon broken by the Salvucci family and further by competing with it Ardinghelli family, proving their authority through the height of buildings.

There are also a number of phenomena that are specific to the architecture and its perception, which could provide the basis for social influence, such as:

- **Memory and sacred spaces** - for some groups, like nations, collective memory is a category of their constitution, and they need common elements in the public space, symbolizing the collective memory. These elements include architecture of historical buildings and commemorating monuments. Creating groups is directly associated with perception of members of other groups as outsiders – along with their culture, symbolism and architectural style. The destruction of these symbols, their manipulation and the introduction of alien symbols are perceived by the community as an attack on social identity (Gawlikowska, 2011). Influence on the locations with special symbolic potential, sacred places and places of memory, can be observed in the history of conflict, because these places, due to their emotional charge, are particularly vulnerable to the impact of manipulation.
- **Control over space** – the position of observer has a direct impact on perception of the architectural space, translating the strength of its perceived control into the observer's status. One example is Panopticon - the type of XVIII century prison, where it is possible to observe all prisoners without their knowledge.
- **Immediacy** - architecture surrounds society members naturally and permanently, it is therefore extremely useful for purposes of propaganda and manipulation (which can be defined as well as marketing and communication).
- **Depth of space** - some architectural spaces, such as the Egyptian temples include a carefully designed sequence of stimuli which, together with an increasing sense of depth and inaccessibility, lead to climax in the form of sanctuary. This process resembles the above-defined process of persuasion and is used also in the contemporary world. The depth of space, along with

Fig. 17 – Example of status architecture: city of San Gimignano, Italy: multiple medieval towers belonged to powerful families of XI-XIII centuries, competing for status and reputation; photo: Associazione Pro Loco San Gimignano

Fig. 18 – Example of inaccessibility causing interest to enter: Dozentenfoyer (faculty club) on the top of the ETH Hauptgebaude, with its magnificent panorama of the city; courtesy: prof. Jaffe

scarcity phenomenon lead to increased interest of society members to enter some areas reserved only for "club members". For example the Dozentenfoyer at ETH Zurich which allows to enjoy one of the best views in town, has a limited access, allowing only the teaching academic staff to enter. This causes significant interest in students and PhD students, who are very happy to visit this area.

Architecture, as a social phenomenon, takes place in the public space, and can be instrument of politics. Different systems have expressed their doctrines through spatial configurations, ensuring impact on the whole social group: *"Reform the environment: stop trying to reform people. They will reform themselves if the environment is right."*[1] After reversing the quote it turns out, that instead of dominating people, it's enough just to affect the built environment - then

the people will naturally degrade / improve (A. Gawlikowska, 2011). The fact, that architectural life cycle is usually longer than institutional cycle and lifes of the founders, did not prevent the use of it as a tool of social impact - showing the ego strength of its builders and founders.

CONCLUSION

Architecture and urban space through their symbols and organization are tools of social influence. Methods of influence through space include for example reciprocity, consistency and commitment, conformity, authority and identification, social proof, affection and deficiency. Features of human and social psychology, used to execute influence through spatial realm include, amongst others: belonging, acceptance, seeking pleasure as well as avoiding negativity and automatisation of behaviour. Architectural space can be used for manipulation and propaganda, since it occurs in direct vicinity of people and can direct gaze and behaviour, it can also be a material embodiment of memory, location of symbolic spaces or locus on control. Through the ability to symbolize and link to human identity it has a deep effect on human psyche and social behaviour. It can be used for example to consolidate power, set social hierarchy, strengthen a chosen value system or even improve learning and organization capacity of its inhabitants. Built space affects its users in a direct and constant manner, therefore the strength and depth of this impact should be an important part of architectural design.

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