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SPATIAL AND SOCIAL ASPECTS OF CREATING THE HOUSING ENVIRONMENT IN BIG CITIES

Introduction

The attainment of social justice in society is one of the conditions for a constant, balanced development of civilization. This, however, is impossible if people are not provided with high-quality affordable housing. Particular countries and cities propose specific solutions and tasks to solve these problems. A sound housing policy promotes an increase in quantity and quality of public housing, contributes to a constant and conflict-free development of cities and societies. Additionally, a range of parameters of the surroundings exist that are not subject to any normative regulations, but have a significant impact on the comfort, social and psychological health of residents, housing safety, etc. These parameters are controlled solely under state and municipal housing policies, which, in turn, should be based on scientifically substantiated principles of creating the housing environment.

The current research on housing

Today, Ukrainian scientific literature and social networks are abundant with publications on the creation of the housing environment. These publications are commentaries, analytical reviews or criticism offered by developers, investors, commercial representatives, potential or actual consumers. It is,

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undoubtedly, valuable empirical material partially reflecting the situation in this area, however, as a rule, it does not take the form of generalized systematic information and, what is more, does not contain concrete recommendations. Therefore, the development of the theoretical foundations of housing policy in big cities is an urgent problem and how it is solved significantly influences the well-being of societies. Unlike in Ukraine, in Western countries, the question of social and psychological comfort of residents in the housing environment as well as the relationship between social safety and the height and typological structure of buildings have been studied for several decades (for example: Dasgupta, Bhattacharyya 1992; Bordas-Astudillo at al. 2003; Appold, Yuen 2007, Bonnefoy 2007).

The results of their studies are reflected in the contemporary housing architecture, which differs significantly from that of the 50s and 70s of the 20th century. In Ukraine, these research results are hardly known, and any attempts to implement them in housing designs meet with skepticism on the part of architects, developers and city authorities. Reasons for such an attitude are as follows:

- distrust in the research results obtained in the field of environmental psychology;
- conviction that these results are not of importance for the city and that they might not bring economic profits (developers are convinced that implementing the research results obtained in environmental psychology into the practice of Ukrainian housing construction reduces the profitability of the building business);
- opinion that these results are not adequate for Ukraine because the Ukrainian society differs from the societies of Western Europe.

Accordingly, the *purpose of this article* is to manifest the character and scope of the impact of typological parameters of housings on social safety and on the social and psychological comfort of residents in the housing environment. For this purpose, the authors undertook empirical sociological research carried out in residential city blocks.

When it comes to the *study scope*, the authors considered those aspects of housing policy that fall within the competence of city authorities, architects-scientists, as well as sociologists and psychologists. The aspects of housing policy that are regulated by the state jurisdiction were not taken into consideration, and these are: the improvement of housing provision via price regulations, the activity of financial institutions involved in the housing sector, scientific research, the development of project norms and their

monitoring, traditional and competitive designing, juridical and legislative protection, implementation of housing programs, opposing speculations, corruption, or financial assistance.

The argumentation in this work is validated with the methods and results obtained from sociological studies conducted by the scientists of Institute of Architecture of Lviv National University under the supervision of the article authors. These methods and results are directed at the disclosure of certain aspects related to the creation and functioning of apartment blocks in cities.

Presentation of the basic material

According to A. Maslow's theory of motivation, individuals who have satisfied their primary physiological needs (air, water, food, sleep, sex drive, dwelling, etc.) progress on to meet higher level needs, namely, those related to safety as a social construct (Maslow 1999). Social safety has a high priority in the hierarchy of needs because people spend most time of their lives in their dwelling place¹. Hence, since the beginnings of masonry, the main purpose of a dwelling has been its being place of protection from wild animals and other hostile individuals. For people, the motto "My home is my castle" has been the algorithm of creating the housing environment for ages. In some cases, safety problems have been addressed by providing defense solutions in individual residential buildings; in others, by constructing fortifications surrounding a number of housing units.

After the doctrine of "contemporary architecture" was introduced, the issue of housing environment safety has taken second place. Residential buildings in areas sparsely occupied by housing, surrounded by greenery and sunlight, seemed to be free of antisocial phenomena; on the other hand, new architecture gave birth to new problems connected with the growing height of buildings and social residential segregation. Before 1991, i.e., before the fall of the socialist regime, the question of safety in the housing environment had been ignored in Ukraine. This problem had been associated exclusively with the capitalist lifestyle. Any research on the impact of housing types on residents' safety had been seen not only as needles from an ideological point of view, but also as harmful from the perspective of the state housing policy supporting the increase of building height (the then authorities considered

¹It is noteworthy that factors contributing to physical safety in the housing environment, for example, anti-slippery floor coatings, handrails at an appropriate height or installing them in buildings, low emission of harmful substances, etc. are investigated, described and regulated by normative documents. The problem lies in their implementation and in the execution of the normative regulations.

this increase to be an achievement and advantage of the socialist regime). For example, sociological studies carried out in Lviv in 1989 did not point to the respondents' concern about safety problems in the housing environment. However, already in 2002, representative sociological studies held in the framework of the Master Plan of Correcting Lviv showed that 44.5% of the respondents expressed their concerns about safety regarding the external dimension of the housing environment² (Kryvoruchko 1989).

The development of delinquency in the environment of a typical building of the 1960s-80s had a negative influence on the prestige of some city districts and is still considered a dangerous phenomenon. As a result, the better-off members of the society leave substandard city districts at the earliest opportunity. Those who stay, primarily due to low flat costs, are marginalized, frequently show low level of consciousness and social culture, and form dysfunctional families. Such districts experience an increase in vandalism, aggression, crime, etc. (Hnes 2001). This provides a stimulus for the remaining respectable members of the society to abandon the high-rise housing districts: they frequently sell flats at symbolic prices. If the process accelerates, these districts turn into criminogenic urban ghettos. History demonstrates a considerable number of such scenarios in high-rise housing districts (High-rise Living... 1974).

The issue of housing environment safety has been widely addressed in specialist literature and in practice as private companies dealing with dwelling safety have emerged. However, the services of such companies aim primarily at the protection to residents and their belongings against the criminogenic surroundings. The companies struggle with antisocial phenomena and their consequences, but not their causes. In the meantime, some studies in environmental psychology show that certain types of housing can stimulate antisocial behaviors of residents, whereas, other types are conductive to reducing the frequency of their occurrences (Williamson 1978, High-rise Living...1974).

The research methods used in the present study include: sociological inquiry among dwellers of different types of housing; inquiry of 35 district police inspectors of the residential city blocks (in a few cases, residents of residential blocks); comparative analysis with similar sociological studies conducted in residential city blocks (Ruzhzhe 1985). The research objects are residential micro-districts of Lviv that differ in the height of buildings: 9-14-storey buildings (Sykhiv district built in the 1980s); 5-9-storey buildings (the districts: Southern, Ryasne and Sriblyasty built in the 1970s);

²Altogether, 483 people were involved, representing 811 thousand inhabitants of Lviv.

5-storey buildings (the districts of Lyubinska, Horodotska and Vyhovsky Streets, built in the 1960s); the district of 1-2-storey cottages and 2-storey sectional buildings (the districts of Varshavska, Knyahynya Olha, Stryska Streets and Sknyliv built in the 1950s).

The results of the polls carried out among residents of particular districts show that the districts with 5-9 and 9-14-storey buildings are considered to be the most dangerous to live in (34% and 38% of respondents respectively); the districts with 5-storey housing buildings are regarded as dangerous by 21% of people; and the districts with 1-2-storey buildings – by 7%. On the other hand, as the *safest* for living were considered the districts with 9-14-storey buildings (15% of the polled); the districts with 5-9-storey buildings – 18% of respondents; the districts with 5-storey buildings – 23%; and the districts with 1-2-storey buildings – 44% of the polled residents.

The impressions of the district police inspectors largely coincide with the opinions of the dwellers: 70% of the inspectors consider the districts in which 9-storey buildings dominate as the most dangerous to live; 25% of the inspectors polled regard as dangerous districts with 5-storey buildings from the 1960s; and only 5% of the inspectors described the districts with 1-2-storey buildings as dangerous to live. Moreover, 83% of the inspectors from the districts in which 5-9-storey buildings dominate deem them the most criminogenic, and 100% of the inspectors from the districts with 9-14-storey buildings regard these districts as being the most dangerous places to live in.

Among various occurrences of antisocial behavior, the respondents mentioned: family conflicts (78% of the polled), hooliganism (63%), neighbor conflicts (63%), mugging (53%), acts of vandalism (45%), apartment burglaries (42%), conflicts between teenagers (33%), violence and rape (32%).

At the same time, it should be noted that burglaries occur more frequently in the districts with 1-2-storey buildings (about 15% of break-ins) than in those with 5-storey (11%), 5-6-storey (10%), or 9-14-storey buildings (12%). These data can be linked to worse "working conditions" for the robbers in high-rise buildings, easier entry to 1-2-storey buildings and a higher level of welfare of residents living in cottages that lures burglars. Comparable results were obtained in some studies conducted in Western countries (Williamson 1978). Crime incidents in higher buildings are most likely to happen in lobbies (some 30% of cases), lifts (some 20%), as well as staircases, basements and garrets. Almost one-third of the respondents themselves or their family members have experienced rowdy actions inside or outside their housing places. The data for the residents of 1-2-storey buildings are 20%; for the dwellers of 5-storey buildings, 10%, for the people

living in 9-14-storey buildings, 30%; finally, for the residents of 5-9-storey buildings, 50%, i.e., every second person.

Occurrences of vandalism in the house surroundings include damaging: the front door (the portals, basement door, flat door, etc.), elements of public welfare (flower-beds, lanterns, trash bins, benches), walls (graffiti and surface scratches), signaling system, lifts, etc. Such incidents also strongly depend on the height of buildings. In 1-2-storey buildings, only 3% of the respondents noted cases of vandalism; in 5-storey buildings, 56%; in 5-9-storey buildings, 79%; in 9-14-storey buildings, 66%.

Based on the obtained results, it can be stated that the building height influences residents' social safety. To some extent, this relationship can be explained by the fact of «overcrowding», which is a derivative of the settling density, i.e., the number of people per unit of area (Nijt 1983). The increased settling density leads to the increase in the rates of social pathology, including aggression towards other people and the surroundings. These changes in people's behavior are particularly noticeable when the number of persons in one lodging increases, bringing to mind the primeval fight for the territory of an individual (Khejdmets 1979). The growth of the frequency and intensity of social contacts in primeval territories destabilizes one's emotional state, leads to certain physiological changes in human organisms (rise of blood pressure, heightened levels of the adrenaline secretion), and, eventually, leads to anti-social behaviors of an individual.

To reiterate, the concept of primeval fight for territory helps explain the relationship observed in the current study, namely that an increase in the building height leads to the increase in the settling density and, consequently, to the rise of crime rates in the housing environment. The concept helps to explain also some situations that contradict our observations, such as lower rates of antisocial behaviors in the 9-14-storey buildings from the 1980s compared to those in the 5-9-storey buildings from the 1970s. A decisive factor in this particular case is the difference in the settling density formulas used for the buildings. The 5-9-storey residential buildings of the 1970s were mainly settled using the formula $k=n-2^3$. The flats had a connecting room, usually a living room, through which one had to pass to get to other rooms. On the other hand, the 9-14-storey housing city-blocks from the 1980s were designed using the formula k=n-1. These flats had no connecting rooms. Thus, although they were higher and had a higher quantity of living space per hectare, the blocks from the 1980s had a lower settling density of living rooms. Unlike in the 5-9-storey buildings from the 1970s, in

 $^{^{3}}k$ – number of rooms in the apartment, n – number of family members.

the buildings from 1980s, overcrowding was eliminated by providing every individual with a personal living space, a separate room however small it was. People did not have to endure parading through the crowded living room to get to other rooms.

Another explanation for the relation between the crime-related situations and the building height comes from the research conducted by V. L. Ruzhzhe (1985). In 1-2-storey buildings with yards, residents know one another, and the arrival of a stranger – a potential malefactor – will not remain unnoticed. In 2-4-storey buildings, 60-100% of residents know one another; in 5-6-storey buildings, which usually have a semi-closed type of the housing system, only 15% of residents are acquainted. In 9-storey buildings, the number of acquainted people does not exceed 1%, all the other persons do not know one another and among them criminals can hide.

Making acquaintance with one's neighbors is a guarantee of control over the common territory, as well as the initial stage of the so-called solidary system aiming at the preservation of the internal and external housing environment. The present research revealed that residents entrust their neighbors with taking care of their flat in numerous ways, which to a varying degree depends on how high the building it. For example, the data for those who give their neighbors the key of their own flat (to take care of plants or pets) during their continued absence are as follows:

- in 1-2-storey buildings 85\% respondents,
- in 5-storey buildings 80\% respondents,
- in 5-9-storey buildings − 40% respondents,
- in 9-14-storey buildings − 30% respondents.

Keep the car in the street near the house:

- 40% residents 1-2-storey buildings⁴,
- 83% residents 5-storey buildings,
- 50% residents 5-9-storey buildings,
- 33% residents 9-14-storey buildings.

Keep near the house other material belongings (for example, a bicycle, a sledge, a baby carriage) supervised by the neighbors:

- 1-2-storey buildings - 25\% residents,

⁴In the case of 1-2-storey buildings, residents' cars are, as a rule, parked not in the street but in the areas close to the building, or in the garage built into or attached to the building.

- 5 and the 5-9-storey buildings 18\% residents,
- 9-14-storey buildings 10\% residents.

A lower density of cottages in rural housing areas does not guarantee social safety, either: safety in 5-storey buildings is sometimes better than in city districts with cottage housing. Having one's neighbors at hand, neighborly aid and a safety net are important for forming a safe environment in 5-storey buildings. On the basis of the above discussion, one can conclude that 3-4-storey housing system seems to be an optimal type of dwelling when it comes to creating a housing environment with the maximal level of social safety and the minimal level of antisocial behavior of its residents.

In order to create comfortable dwelling conditions, residents must be provided with space that would let people live free from fear of crime. Already in 1971, the architect Oscar Newman promulgated the results of his research, informing that there was a considerably higher level of criminality in the multi-storey buildings surrounded by large open spaces in contrast to the buildings with many apartments of average and low height and with public internal yards (Gifford 2007). If the vertical and horizontal communication passages in high buildings are used by a large number of people, residents face the same problems as in the area or zone close to the building. By contrast, if the outdoor passages are of semi-private or semi-public nature (for example, internal yards, terraces, adjacent terraces connecting a number of apartments), external problems do not transgress the building. In this latter case, residents simply know members of their community, and they immediately feel concern about a stranger's presence. Likewise, the outsider himself does not feel at ease because he/she is aware of being identified as a stranger and of being observed by the residents.

The importance of the neighboring community to the feeling of safety was corroborated by researchers from Harvard University. They established that serious crimes occur 40% less frequently in those housing types where people know one another, take care of one another, and where the concept of community is present. It is also worth noting that people's income does not relate positively to the interdependence between communities and their feeling of safety. In fact, in those buildings where the residents were better off, the feeling of community was lower while the level of criminality was still relatively high. On the other hand, when the residents were poorer, the feeling of community existed and crime rates were lower (Gifford 2007).

The formation of a neighboring community is also influenced by the physical surroundings: in order to establish relations with their neighbors, people need a necessary space and a reason for assembling. It is ensured in the form of children's playgrounds, vegetable gardens, yards and shared areas, cafés, shops, etc. However, it is considerably more difficult to create assembly places with at least a minimal level of privacy near high-rise buildings. In this particular case, the type of housing system plays a significant role. For example, in Lviv, when planning the micro-districts of the 1980s, the block-section method was used, which allowed architects to design semi-closed yards; while, the use of the dotted-row system in the housing of the 1970s, led to the creation of uncontrolled passage areas around the buildings.

The character of greenery also affects crime rate. Too heavy tree and bush cover in the housing system from the 1970s and 1980s can serve as a shielding for malefactors. By contrast, in the 5-storey housing system, the crowns of trees rise above the level of the fifth storey, so the space adjacent to buildings can be controlled from both flat windows and the pedestrian level. Well-arranged greenery zones encourage residents to stay longer outside, which means that they simultaneously supervise the area adjacent to buildings.

Another aspect linked to social as well as psychological comfort and safety are social strata, which themselves are related to segregation on the level of housing types. In any society (independently of its social and economic formations), people are categorized into social strata based on, among others, their wealth and income: the poor, people with average wealth (the middle-class in the economically developed countries), the wealthy, and the rich. Every stratum has a specific set of ideas regarding a preferable housing type and comfort level. Most frequently, upward mobility in the social hierarchy has the consequence that a person develops the need to change the car, school, kindergarten, and the housing unit.

In today's Ukraine, the housing business in order to meet these aspirations follows the tendency of constructing based on the social strata and their wealth. Moreover, this tendency is largely stimulated and supported by developers via advertisements in the media. Thus, today, elite residential buildings and complexes of closed type, in which individual security and service infrastructure are provided, are built. On the other end of the spectrum, there are also plans to build complexes of social housing. If these tendencies continue, the housing stock in Ukraine will vary, leading to a differentiation between urban housing districts. Housing types and districts will be constructed adequately to the financial participation of future residents at the stages of planning (taking into consideration the needs of consumers and simplifying the planning process, construction financing, setting, etc.), construction and exploitation. This, on the other hand, will

result in the concentration of the same type of families in the housing types and districts adequate to their social status.

A positive side of this tendency is that such a concentration creates preconditions for the activation of social contacts. In the case of better of strata, residents are provided with a sense of safety and psychological comfort. Their aspirations to prestige, exclusiveness, self-affirmation, and affirmation of their new social status are fulfilled. They are an example of success for everyone. Such a fulfillment unifies them and provides with safety. By contrast, (over-) concentration of families from the poorest end of the social spectrum separates them from the rest of society, resulting in their psychological discomfort and awareness of being segregated based on their lack of wealth.

However, the global practice shows that such a segregation of housing types and districts into prestigious and second-rate ones, in fact, dissimulates the threats to a harmonic and constant development of cities and societies in general. Canada and the USA of the 1950s-1960s witnessed the development of social housing, i.e., the uncommonly large housing complexes for the people with very low wealth, built by the government. All these projects turned into a failure. The residents vandalized their housing buildings and units, so the costs of technical service and maintenance were high. As criminality in these complexes increased, they transformed into social ghettos or even crime centers over time.

An illustration of this can be the housing city-block 'Prute Ihovu' in the USA in the 1970s. Within two decades of its existence, this housing complex turned into an urban ghetto and a crime hub, so even the police were afraid to enter it. As a result, in 1976, all the residents were forcibly evicted and the complex itself demolished (Dzhenks 1985). Similar examples can be multiplied. Finally, since the mid-1970s, a new approach to social segregation and integration through housing has been outlined in Western countries. Some directions have been particularly emphasized, namely the shift from large projects to small ones, as well as the concepts of dispersible settling and socially integrated (mixed) micro-districts or buildings. Dispersed settling is contrasted with the concentrated one. It envisages buildings with many flats intended for various social and demographic types of families. Obviously, it is not problem-free: it can generate loneliness and does not support the development of social contacts, as the heterogeneity of residents results in various perceptions of these contacts. However, dispersed settling has been void of segregation and it can ensure anonymity to residents, which is appreciated by all family types (Soen 1974, Tabor 2000; Gausa, Salazar 2002).

The starting point for the sociological study conducted by the article authors was the hypothesis excogitated and exaggerated by realtors about the desire of wealthy people to live in the housing intended exclusively for them and to be separated from the people with low income. To test the hypothesis, the authors conducted an inquiry among the Lviv inhabitants residing in city blocks from the 1960s and 1980s in Lyubinska, S. Petlyura, D. Yavornutsy and A. Holovaty Streets. These city-blocks are, in fact, a model of mixed settling of families with different income levels. Observation methods and questions were used to classify the researched people into three groups: wealthy residents, residents with average wealth, and poor residents. The results of the study are described below.

The percentage of the wealthy residents who are satisfied with their flats was considerably higher than it was in the two other groups. This fact is explained by the ability of the wealthy dwellers to organize their living space according to their own needs and likings. They had 1.5-2 times fewer complaints about the flat area or design, but twice as many wishes concerning the elements that contribute to what is understood as 'highly comfortable housing', namely absence of noise caused by neighbors and lifts, high ceilings, a beautiful view from the windows, much sunlight in the flat. The percentage of the respondents with average incomes who were dissatisfied with their flats was also lower than that of the poor residents.

When it comes to the assessment of the buildings, the wealthy residents were the most satisfied (1.5 times more frequently than the poor residents were). The group most dissatisfied with their buildings were the poorest dwellers. Although the results of building assessment can be partially explained by the number of flats per building, it is necessary to note that the fact that the wealthy residents live in the same building side by side with the poor residents did not have any influence of the assessment of the building itself. Among the most frequently mentioned drawbacks were sanitary and hygienic problems with the maintenance of the rubbish chute and an indistinct building design. It is interesting to mention that among the negatives of multi-flat buildings 'bad neighbors' were mentioned by 5% of the poor residents, 5% of the wealthy ones, and by 10% of those with average wealth. Another drawback, namely 'dwellers' acts of violence against common premises', was mentioned by almost the same percentage of residents, i.e., 22% of the poor, 25% of the wealthy, and 22% of those with average wealth.

When it comes to the building surroundings, the wealthy dwellers' satisfaction with the space adjacent to the building was 3.6 times higher than that of the poor, and 2.6 times higher than that of the residents with avera-

ge income. Three-fourths of the researched were satisfied with their microdistrict, however, the rate of the dwellers dissatisfied with the district is 3 times lower among the wealthy than among the poor or those with the average wealth. All this despite the fact that 58% of the wealthy residents considered the district not to be safe from hooligans and criminals, and 14% of them indicated the danger of flat burglary.

Socially integrated housing consists in the fact that residents of different material status live and interact in the same building. The study results showed that the opinion of the wealthy residents on numerous aspects of housing coincides with the opinion of other dwellers. In fact, they even revealed a more tolerant attitude towards certain aspects than the other two groups of residents. Thus, the wealthy dwellers are 1.5% more likely to confide in their neighbors than those from the poor group. Moreover, from a different perspective, 14% of the poor and 14% of the wealthy residents do not confide in their neighbors. 12% of the wealthy respondents, 25% of the poor ones, and 6% of those with average wealth frequently communicate with their neighbors. This low rate of neighborly interaction is conditioned by a very low need of it: 30% of the wealthy residents have no need to communicate with other residents, and 98% of them do not wish to intensify neighborly interactions. However, when such interactions occur, they usually include: caking care of other neighbors' flat during their absence (among 48% of all the researched, and among 68% of the wealthy residents) and information sharing (among 19% of all the residents, and among 16% of the wealthy dwellers). Less popular forms of neighborly help are: fixing something, lending money and taking care of children. Still, about 10% of the residents do not liaise with their neighbors at all.

What is particularly demonstrative of neighborly relations is how the residents assessed them. Thus, not a single wealthy family characterized these relations as tense or bad ones; at the same time, twice as many wealthy dwellers described them as very good compared to the poor residents. In general, 62% of the wealthy dwellers considered their relations with neighbors to be neutral.

Simultaneously, everyday conflicts occur between residents as well. The wealthy residents have problems with their neighbors 1.5 times less frequently than the poor dwellers (16% and 25% respectively). On the other hand, 25% of the wealthy residents and the same percentage of the poor ones did not have any conflicts with their neighbors. Moreover, 15% of the wealthy dwellers said that in the last 5-10 years the relations among residents had improved, 84% were convinced that their relations had not changed at all, and only 2% described them as worse.

Yet another question concerned children in the buildings. 56% of all the polled residents had positive views of the fact that their children communicate with the neighbors' children, more than 29% were indifferent about their children's company, and only 15% spoke mistrustfully or negatively about contacts between their and the neighbors' children. As for the wealthy residents specifically, the poll gave the following results: 50% had positive opinion of the fact that their children communicate with the neighbors' children, 35% were indifferent about their children's company, and 15% spoke mistrustfully or negatively about contacts between their and the neighbors' children. Some 50% of children from the poor families were on friendly terms with the children from the neighborhood (28% have friends from the same building, 15% from the yard, 7% from the city-block), 35% have school friends, 15% are befriended with the family friends' children. In wealthy families, the situation is diametrically opposite: only 25\% of the children have friends from the neighborhood, 30% have friends from school, and 45% are befriended with their family friends' children. In fact, most children from the wealthy families have friends from outside the neighborhood, despite their parents' generally positive attitude to communication with other children in the building. In other words, in this particular case, a selective model is still the reality.

The residents were also asked about the level of satisfaction regarding the housing and whether they were willing to change the place of residence given the potential increase in their social status: 40% of the wealthy residents noted that their social status had increased in the last 5-10 years, 25% of those with average wealth, and 6% of the poor residents. But with this, only 12% of the wealthy dwellers were dissatisfied with their housing, 42% said that they did not feel any discomfort regarding the housing, and 42% stated they cared neither about how their housing looks nor about its quality. The dwellers wishing to change their apartment belonged 1.5 times more frequently to the group of wealthy than poor residents; and the other way round, among those who did not want move out, they were 4.5 times more frequently among the wealthy residents than among the poor ones. What is more, in the group of the wealthy dwellers wishing to change their flats: 74% wanted a new flat in a new building but in the same district, 14% wanted to change the district, and 12% opted for a suburban zone.

Regarding priorities of the building security system, the study ascertained the coincidence of the options among the wealthy and the poor dwellers: about 60% of representatives of both groups preferred the coded lock or the intercom; about 6% had the same attitude to the effectiveness of the controlled entry into the territory as well as to the fence around the buil-

ding. On the other hand, 26% of the wealthy and 13% of the poor residents stated that no security system was needed. Thus, the results of the sociological study produced evidence that when it comes to providing psychological comfort wealthy people felt as safe in the environment of the mixed housing system as the residents with average or low wealth.

The sociological study of the residents living in the districts built in Ukraine during the past 40 years as well as the generalization of theoretical information and practical experience of multi-family housing abroad testify that creating the dwelling where the inhabitants of different levels of income can coexist without conflicts is possible. This problem is solved best in the case of the multi-format dwelling, namely, in the socially integrated housing types (city-blocks, residential buildings).

Constructing specialized types of dwelling for the families with the same income level (unlike their integration in general population community) is as inexpedient as the low-concentrated settling in small groups of flats (for 4-7 families of the same type) sited within ordinary apartment blocks (for example, a separate floor). However, such a type of settling turns out appropriate in the cases when low income families willing to communicate with others face the partiality of other family categories.

Conclusions

- 1. The housing stock forming in a big city largely depends on the use of all the potential forms and means of a housing policy. The application of the key factors of a housing policy does not require any state or municipal financing and falls into the scope of organizing and regulating forms, but it ensures a permanent and conflict-free development of cities and societies as a whole.
- 2. Any city that wants to avoid crime increase and problems (also financial) with the fight against crime or vandalism, to reduce antisocial behavior in residential districts, and to attract investments, should (already at the stage of establishing urban planning conditions and housing project limitations) set the maximum allowable height of residential buildings up to 7 storyes, as well as encourage the construction of 4-storey housing. Setting such limits will promote the creation of a harmonious and safe housing environment.
- 3. Constructing higher buildings leads to territorial overpopulation (exceeding the density of settling), which also instigates antisocial behavior of the residents. This effect can be partially neutralized by providing every individual with a personal housing space.

- 4. Limits on building heights together with the housing system of cityblocks with yards intensifies social interaction among the residents, which, in turn, is a condition necessary to control the area adjacent to the building and to create favourable social and psychological comfort of the dwellers.
- 5. City authorities must prevent social segregation based on population categories in city-blocks. It is suggested that new housing designs follow the orientation at multi-format (socially integrated, mixed) housing objects, incorporating housing units intended for varied categories of urban inhabitants, namely those with different levels of income and belonging to different social strata.
- 6. Ukrainian housing policy must address the issue of enlightening and teaching the deep culture of urban dwelling to consumers. The so far accumulated knowledge concerning the mechanisms of forming and functioning of the housing environment, should be brought to the whole spectrum of the population.

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SPATIAL AND SOCIAL ASPECTS OF CREATING THE HOUSING ENVIRONMENT IN BIG CITIES

Keywords: housing stock, social safety, revitalization, multi-family housing, height, compactness, flat, rent, inhabitants.

Creating optimal conditions for individuals is essential in large cities. One of the factors promoting the balanced development of civilization is the attainment of social justice in societies, which is impossible if their members are not provided with an affordable and good quality housing. There exists a range of important parameters of the housing environment, regulated by project standards, that have a significant influence on the comfort, social and psychological health of inhabitants, housing safety, etc. It was determined that social safety results from a complex impact of several interconnected factors: height of housing systems – the intensity of antisocial behavior increases together with the building height, and the 4-storey housing system is recommended as safest; overpopulation of the area – exceeding the density of the housing settling provokes antisocial behaviors on the part of residents (overpopulation can be partially dealt with by providing every individual with, at least, minimal but personal housing space; city-blocks and the housing system with yards – they intensify social interactions among the dwellers and are a condition necessary for the control over the adjacent area and the development of social and psychological comfort in the housing environment.

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ASPEKTY PRZESTRZENNE I SPOŁECZNE W ODNIESIENIU DO KSZTAŁTOWANIA ŚRODOWISKA MIESZKANIOWEGO W DUŻYM MIEŚCIE

Słowa kluczowe: budownictwo mieszkaniowe, bezpieczeństwo społeczne, budownictwo wielorodzinne, liczba kondygnacji, gęstość, mieszkania, czynsz, miesz kańcy.

W dużych miastach niezbędne jest tworzenie optymalnych warunków dla ich mieszkańców. Jednym z podstawowych warunków dla zrównoważonego rozwoju cywilizacji jest osiągnięcie sprawiedliwości społecznej, która nie jest możliwa bez zapewnienia obywatelom dostępnych mieszkań o wysokiej jakości. Istnieje kilka ważnych parametrów środowiska mieszkaniowego, które nie podlegają regulacji przez standardy i normy projektowania, ale znacząco wpływają na komfort, zdrowie psychiczne i społeczne mieszkańców,

bezpieczeństwo zamieszkania, itp. Ustalono, że bezpieczeństwo społeczne wynika ze złożonego wpływu kilku powiązanych ze sobą czynników: liczby kondygnacji zabudowy mieszkaniowej – wraz z wysokością budynku wzrasta intensywność zachowań aspołecznych, a 4-kondygnacyjny system mieszkaniowy jest zalecany jako najbezpieczniejszy; gęstości zaludnienia terenu – przekroczenie gęstości zaludnienia osiedla wywołuje zachowania aspołeczne mieszkańców; sposobu zabudowy bloków i systemu mieszkaniowego z podwórkami, które intensyfikują interakcje społeczne między mieszkańcami.