

Interaction of the City Integrant (on the Example of Northern Kazakhstan Cities)

Yevgeniya M. Khorovetska

Candidate of architecture, senior lecturer of The Kazakh agrotechnical university of S. Seifullin

There were considerable changes in town-planning of the Northern Kazakhstan cities at the present stage. New social and economic relations, transferring of the capital from Almaty to Astana, transferring of the regional centre in Kokshetau entailed considerable changes in settling, development of all inhabited localities of the North Kazakhstan region and their integrants. Dynamics of a city space structure as a whole, and also its separate parts and elements is diverse, and it contains a grate number of the aspects and depends on different factors [1]. On the example of the Northern Kazakhstan cities (Astana, Kokshetau, Petropavlovsk, Kostanay, Pavlodar) the most essential changes in dynamics of their development are considered. And the generalizing theoretical model of the city's integrants interaction is developed which has universal character and reflects the most essential valid principles. At the same time it is necessary to underline, that generalization possibility follows, first of all, from universality of the action of the urbanization process in various territorial scales and town-planning situations.

The model is not static; it is dynamical; it can become complicated and be modified, be flexible, that gives the chance its usage in the field of designing, in the field of the cities development management, in town-planning practice under various social and economic, natural-climatic and national-historical conditions, but at their careful examination and account [2]. It is possible to present graphically theoretical model in the form of cone-shaped developing spiral symbolizing constant movement top of which is nucleus of the city centre. Investigating cities of Northern Kazakhstan and analyzing their regional features of the organization, development and formation architecturally-planning structures their general and private principles and formation methods were revealed. In this connection, dynamics of city structure is considered on three time conditions:

- on a city level of development — depending on degree of its architecturally-town-planning environment formation;
- on level of new town-planning formation occurrence;
- on level of the established city formations.

Meanwhile, it is necessary to notice, that each of the mentioned levels at the same time can be considered both in separate cities, and in one large city, differing from other considered cities by degree of its development. In this case first two levels were considered on the example of intensively developing capital of the Republic of Kazakhstan — Astana. The third level is considered on the example of Kokshetau, Pavlodar, Kostanay and Petropavlovsk. Besides, in the same cities the second level was partially considered in areas with the town-planning structures which appeared for last 10–15 years.

It is known, that for development of each separate city it is characteristic vicissitude its formations. Correspondently, interaction of space structure parts of the city is assumed under working out of theoretical model which is the integral part of its development and passes consistently a number of stages.

So, active development of the central areas of the left-bank part of the river Esil (a new part of the city) and occurrence of new serving complexes on the district (Astikzhan, Metro, the Gross, etc.) is characteristic for Astana at the present stage. It is necessary to notice, that at the stage for which is characteristic presence along with the central area and concerning district formation, active formation of new large areas begins on the remote district possessing free territories. At the same time also the district zone nearest to the centre constantly becomes stronger. Interaction of the central and district structures is realized directly and has rather polarized and relatively simple character.

The analysis of world experience of town-planning development allows establishing, that as the further adoption and district development its interaction with the centre becomes more difficult. The common zone with the general functional-space characteristics is created from separate formations on a remote part of district, increasing the pressure upon city centre [3].

On this stage the process of differentiation, allocation of new elements of building and space increases in the centre. The intensification and complication of interaction of the centre and city district stimulates formation zone of the nearest district structure, it gradually reveals and strengthens its role in the general development of a city organism [4].

Peripheral functions of Astana concentrate mainly in remote areas while the nearest district is transformed to a median zone. In this zone formation of the new building goes rapidly saturating with a considerable proportion city-wide specialized, first of all of trading-household functions. In the centre there is crystallization of the central nucleus itself and concerning the rarefied, district zone adjoining it. At this stage agglomeration starts more actively prove out and the development putting primary pressure upon the central area of the city.

Formatting and strengthening of area adjoining to the centre, intensification of its role in mutual dynamics of the central and district elements is characteristic for Astana at this stage. It is supported also by increase of pressure both upon it, and on a district zone of the city of developing agglomeration. Specialization process is in intensively progress among central and district elements themselves in each part of space structure of the city. All of it finds the space expression in development of wider system of the city centre as a whole which counterbalances city-wide communications in increasing degree. It is observed falling of the development of district inhabited areas dependence from communications directly with a centre nucleus in process of transition from less developed city environment to more developed in Pavlodar, Petropavlovsk, Kostonay. This part of communications increasingly «switched» to other areas, in particular, adjoining to inhabited formations. Results of the sociological researches spent in these cities specify that more than 50% respondent, living in district areas, prefer the nearest centers of service. At the same time it is necessary to notice, that new inhabited formations on district of Astana represent one of the most dynamical parts of the city structure, their interaction with the central nucleus requires in constant reorganization and central structures. It is a special case of more general regularity which is well traced in development of inhabited formations.

It is possible to assume, that further in process of formation of the developed city district, its saturation and the strengthening of the area adjoining to the centre

in greater measure will undertake functions of the centre. It is proved by behavior of inhabitants; certain independence gives to know in their preferences and orientation, self-dependence in relation to the valid, real-life centre, especially to its central nucleus. This fact was noted by more than 40% of the interrogated residents of Astana. At the same time, development of area adjoining to the centre demands strengthening of the center functions, saturation of it with new elements that actively influences on formation of the established central nucleus, along with growth of district areas.

Quasi balance comes under city formation. On the one hand there is a differentiation of functions of the central area, specialization and delimitation of social and cultural and trading-household spheres, their strengthening and at the same time development of new structural formations on district of the centre which become a basis of area adjoining to the centre. On the other hand, in process of these formations development, they become attraction focus, both for inhabitants of district, and for inhabitants of the centre.

The conducted investigations, sociological researches and public inquiry in cities of Northern Kazakhstan and also the analysis of the collected data shows that development of city functions and structures is rather difficult, it cannot be imagined as a chain of continuous changes. Complexity of interaction of the dynamic tendencies becomes apparent here — on the one hand, and specified stability, traditions — on the other hand.

Thus it is necessary to keep in mind, that interaction of various zones and areas with city centre, its nucleus, it is impossible to take word for word as constant general movement in a certain single point. Influence of the centre and perception of this influence have the most difficult, flexible character. Depending on the educational and culture level, the saturation of the city environment, the concept of «centre» for different groups of the population, for inhabitants of different areas and intensity of their attendance of the central nucleus and the nearest areas can be changed, that, in turn, will affect on character of internal processes and activity of using various elements of the architectural environment.

It is necessary to underline, that process of integration of the city structures and functions, integrity of the city as socially-space organism assumes constantly supported and increasing interaction between various elements of the space environment and transfer of specific functions from one element to another.

Summary

On the example of Northern Kazakhstan cities the most essential changes in dynamics of their development are considered and the generalizing theoretical model of interac-

tion of cities integrant is developed which has universal character and reflects the most essential valid principles.

References

- [1] Kornilov, A.A. "Theoretical bases of transformation of architecturally planning structures of Northern Kazakhstan villages". Doctoral thesis of architecture. Astana, 2004: 271.
- [2] Khorovetska, E.M. "Theoretical aspects of light decorative organization of the architectural environment (by example of the Northern Kazakhstan cities)". Candidate's thesis of architecture. Almaty, 2008: 91–114.
- [3] Krashennikov, A.V. "Town-planning development of a apartment block (research of the western countries experience)". *M. Architecture — S*, 2005: 112.
- [4] Kogan, L.B. "Social and cultural functions of a city and the space environment". *M.*, 1986.