

# AGGLOMERATION: A NEW ALTERNATIVE FORM OF SETTLEMENT NETWORK DEVELOPMENT

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In this age of complexity and accelerated changing, too many special and intertwined problems emerge simultaneously in different fields to be weighted and handled adequately at a short notice, without the risk of confusion, inefficient but "fashionable" highlighting, or inadvised measures.

Neither did urbanology escape this danger, it being expected to give an immediate answer on how to resolve contradictions between reflection of instantaneous social demands in the settlement network, the historical settlement network and the settlement structure. Under such circumstances it is not surprising if the solution is hoped to be found by overstressing one or the other problematic picked out at random. Sometimes industry and industrial areas come to the foreground, another time housing, agglomeration or environmental protection, etc., become subjects handled isolated and therefore get unilateral emphasis to become so to say clichés, making one indifferent, unable to look unbiased, with differentiated objectivity, at these real problems.

Agglomerations are doubtless an important element, a trend of development of that maze of questions named urbanization. Analysis of this subject has to start at how justified it is to consider agglomerations as a problem of special emphasis, thus, not only as a phenomenon, integer part and stage of continuous development but as something basically and qualitatively new, with fundamental constructive consequences and impact on design and realization.

Just as it is inexcusable from the urbanologist's view to disdainfully neglect (or to superciliously discard) the continuity with, and reliance on, the past, — wasting thereby previous social experiences, efforts, impoverishing the human environment —, it is as well a mistake to choose cautious evolution where regional development consequences of accelerated changes require radical measures for the sake of managing social energies and of creating a human environment coping with new demands.

The existing structure, establishments and social atmosphere of our settlements mean not only restrictions or obstacles of development, but are

economically, historically, functionally and psychologically, even emotionally valuable. These assets help harmonic integration of new dynamic and mobile elements, necessary to development, providing the society the feeling of continuity and comfort.

These two, conflicting, different needs are a steady topic of — sometimes heated — debates between specialists, and even the wider public is kept constantly aware (through mass media).

Some aspects assert themselves, however, both in time and space, in an indirect, complex way, not easy to survey, bothering, therefore, primarily a restricted group of specialists, without eclipsing their social importance and the analysis of perspective effects.

The two demands seemingly in conflict are not rigidly in contradiction to each other: acknowledgement and respect of the importance of both, the attempt to meet them with compromises leads to more economical and, at the same time, human solutions.

Space we are living in is increasingly populated, it being the source of variegatedness, infrastructural comfort, a wealth of impressions, but also of inconvenience (environmental pollution, mental stresses etc.). From our aspect, the strive of man to mobility in space and way of life has to be emphasized. Rate, mode and time demand for movement in space is one of the fundamental problems in the actual society's life, an important factor of social cohesion, determining mobility in one's way of life, possibilities to switch over rapidly to different functions (work, home, rest, recreation), to freely select between different activities.

Mobility is manifest by the widening of the world: by the development and domestication of mass media, besides, however, the demand of man for special, regular and occasional mobility increases; greater mobility is manifest by frequent removals, summer "migration", accelerated transformation of the settlement network, etc.

Dynamics of mobility development is reflected in characteristics of consecutive great social periods determining the way of living.

Economy caused the agrarian society to organize in small communes — *villages*; the family was an economic unit. It resulted in an autarkic community, in a homogeneous culture and a strong village group awareness. In this population there were no individuals (in the actual meaning), and neither was there leisure: working and leisure times were not sharply distinguished. Use of time was determined by the position of the sun and the change of seasons, diversified from time to time by festivities and cultural events. A minimum of time was utilized for mobility, its only importance being to determine the range of the daily activities of the community.

Typical areal communities of the industrial society are *towns*. The function of towns in the agrarian society is mainly political, trading and ad-

ministrative, in the industrial society primarily economic-productive; recently a cultural, scientific, organizing role being endorsed. Transports-traffic (spatial mobility) is becoming a major factor in societies' lives; working time and leisure are sharply divided, with its important consequences on town fabric and function.

A decisive factor distinguishing development of the present society is the scientific-technical revolution, having as concomitants the spatial and organizatory concentration, increased expansion and interdependence of enterprises and institutions. With the improvement of communication, part of the industry and many enterprises are resettled outside the town, but their head offices and accessory establishments remain or even arise in town centres.

Because of the regional reorganization of functions, categorically isolated, confined towns or villages are gradually vanishing, replaced by industrial, trading, administrative, residential, agricultural and green belts, etc., organized to integer functional units. This mosaic of urban region is a result of labour division and reflected in the socio-economic stratification.

These phenomena are by no means ineffective on the social response, tending to influence them. In earlier centuries of "slow maturing", sciences followed practice, primarily with the intention of cognition (not for some practical scope), based on experience. In the actual period of "rapid change", this is not enough. Solution of great many social problems is conditioned by a certain foresight based on the knowledge of regularities and relations, prognosis of the likely, and planning of the desired, future. In the concept of the scientific-technical revolution, it is not accidental that "science" precedes "technique", practical scope or practice, but it is a functional antecedent, preparing the latter. This is especially correct for social activities where long-term planning seriously restricts possibilities of experimenting and awaiting, evaluating the results. Such a typical social activity is the general development of settlements and settlement networks, where — in spite of an extreme complexity and difficult supervision — a paramount significance has to be attributed to scientific foresight, and within it, to fundamental research, of no direct use but perspectively rewarding.

The scientific-technical revolution grants technical conditions of foresight; under the actual circumstances, spontaneity of settlement network development may be disastrous, its avoidance is bound to important tasks:

— The world, our environment both in its wider and narrower sense, has "shrunk" in space and time with the rapid extension of our knowledge, interactions grow evident, demonstrable and mensurable. Hence, before making socially important decisions, it is imperative to open up and theoretically prognosticize realizable alternatives, decisive for the development.

— Settlement network development is closely connected with planning

for the whole society. Economic, regional, cultural etc. development cannot be limited to particular segments but must be understood as complex social processes.

— Up to the scientific-technical revolution, human-social development was essentially characterized by acclimatization to Nature, not only in the biological but also social and historical meaning. Man, even if sometimes meddling with Nature to his own disadvantage, his interference retained a relative local character, without endangering the world-wide harmony between Nature and society. At present, however, natural (virgin) environment is an exceptional reserve, an area needing special measures to be preserved. Man created himself a “second”, artificial environment difficult to acclimatize to; he increasingly launches dangerous procedures, risking his very existence, the consequences of which he does not try or cannot appreciate. Perception of these consequences is often too late to be eliminated else than at the cost of unproportionately severe efforts.

Under such circumstances it is expedient to emphasize three facets of the development of agglomerations, of their different types, and their significance:

1. The tendency of agglomeration is an objective reality.
2. Agglomerations are a new form of settlement.
3. Agglomerations are a new “possibility”.

### **Agglomerations as objective reality**

In the course of history, economic and political forces have brought about new towns and agglomerations or the decline or ruination of existing ones, but the fundamental, decisive base was always the existing settlement network structure. The attraction of existing centres could be effectively counterbalanced by creating new centres at relatively short terms, or even displacing and changing the gravity point by such at longer terms. Though, the historical settlement network structure, its gravity points and agglomerations proved to be features of great inertia, of lasting subsistence, but slowly changing and modifying, often following the trend of accelerated demands only at great sacrifices.

On the basis of the settlement network already developed at the time of the scientific-technical revolution, the concentration tendency increased and accelerated.

In the last forty years (according to UNO data) the number of towns with more than half a million inhabitants grew to the threefold, and there

are four times as many towns with populations over 2.5 millions. It is also a UNO forecast that in the forty years from 1960 to 2000, rural population will increase by 1.5 times and urban population by three times.

The pace of growth in developed countries with a more definite settlement network is relatively slower; in developing countries faster (in East Europe faster than in West Europe). The population of big agglomerations has increased faster than in other settlement categories, attributed to enhanced concentration, promotion of settlements and settlement groups of lower population.

All these show regional concentration — whether liked or not — to be a reality to be faced in the future, not as a tendency to be stopped but one to be sustained between adequately restricted and managed boundaries. Concentration of the agglomeration type is manifest in interdependence, labour division between settlements that developed earlier relatively isolated, delimited. Problems common in countries and regional units with different historical backgrounds demonstrate the inevitability of labour division and functional coordination extended over isolated units. Conscious support and realization of this coordination is regularly in a phase lag behind the recognition of necessity, rather than a question of good will. Effective social and official, positive or negative response following perception or even acknowledgement is hindered by several circumstances such as:

- severity of negative syndromes due to lack of co-ordinated development becomes manifest only after having caused great troubles;
- responsible organizations and institutions are not equally interested in eliminating or preventing troubles;
- environmental disturbances are striking others than those who induced them;
- solution measures are often very costly and energy consuming, requiring organization, actuation and control of an intricate system of regulations, etc.

Social pressure may also significantly influence the authorities in positive or negative sense (for instance, environment protection movements launched by the public, or mass demands for recreation possibilities leading to spontaneous, uncontrolled spread of some “recreation areas”).

### The agglomeration: a new form of settlement

A contradiction of the great social transformation of our age is the “group-wise” isolation, residing in tradition and past (features such as class, ethnic group, language, nation, culture, etc.), on the other hand, *integration* (economical, political and cultural), tendencies differently responded by

different (more or less homogeneous) units of society according to their innate traditions. This contradiction does not spare urbanism either, even, in the case of agglomerations there is a further, regional contradiction between:

1. increasing functional *concentration* of production and population; and
2. spatial "spread", *deconcentration* of urbanized areas.

Among agglomeration problems due to these contradictions, some deserve to be specially mentioned.

— Optimization in agglomeration development is a typical long-term job, and as such, generally contradicts tendencies of short-term, even mid-term plans, striving to a maximum, rapid exploitation of facilities and new investments. In this respect, regional development is actually overruled by a businesslike, short-term economic concept, hindering utilization of important social advantages residing in agglomeration development.

— Up to the present, towns were islands surrounded by agricultural areas. Development brought about a two-way change. With the advent of mechanized (automated) large-scale farming, the agricultural areas and their population got "urbanized", on the other hand, urbanization, spreading along communication lines, surrounds the decreasing but ever more intensified agricultural areas, that first become islands themselves, later integer parts of the already urban landscape.

— The economic driving force resulting in rapid establishment of new working places is an *urging compulsion*, often not differentiating between the prospective and the declining, only transiently prosperous production bases and technologies. Some "labour-consuming" industries established in agglomeration areas feature already the inherent danger of decline at short term, or of early and frequent rearrangements, exposing our generation, burdened with altogether too many changes, to useless economic, political and psychological loads.

Authorities — understandably — give preference to industries employing available labour in developing regions, whereas in developed regions, to capital-intensive but less labour-consuming ones. In latter case, however, the fact that these industries attract labour-consuming accessory activities is often disregarded. Efficiency of this policy depends on the comprehensive sectorial and intersectorial control. Obviously, such aims may be conflicting in regions or agglomerations strongly adhering to their traditional situation.

— Creation and operation of the technical-economic infrastructure is of course precondition of economic development and stimulation. To restrict the problem to the technical-economic infrastructure would be, however,

an oversimplification, simply identifying the demand for *quality of life*, arising at a given degree of economic development, with the *living standard*, ignoring thereby the specific, individual demands of inhabitants beyond urban "civilization", underrating both the attractivity of unique natural or artificial environment and the repulsion of a unified environment. This problem arises as soon, and at a rate, as the population masters elementary problems of satisfying fundamental amenities of life (food, clothing, housing).

— In the period of the initial post-war boom of regional planning, authorities and designers, both abroad and in this country, had exaggerated hopes in decentralization concepts. They underestimated the economic-political-infrastructural attractivity of the existing cities — in our case, Budapest — despite all their negative features. Experience of recent decades points to the importance of the existing metropolises, their role in the life of a country or a region. To a certain amount, decentralization or decentralized concentration of industrial employment is promising, although at the same time, the concentrational effect of decision-making and preparing tertiary and quaternary organizations was found to further increase, and is likely to do so.

— According to general experience, the later a society (a country) joins international development and endeavours to make up for historical retard, the faster its development (relying on available international experience and achievements), accordingly, also the change of settlement network and adjustment to new demands are likely to speed up. Neither Hungary is an exception, because of the rapid change and concentration of its scattered settlement network and population distribution inherited from the agricultural past but now transformed by industrialization. Comparison between the paces of agricultural population decrease in Hungary and in the USA shows equal decrease — though half a century later — in Hungary three times faster.

It is obvious that the settlement network of great inertia has difficulties in adapting itself to such a rapid pace of social-economic transformation. To make adaptation as fast and as co-ordinated as possible, and with the least shock to the population, the settlement groups and their most urban and concentrated forms — conurbations and agglomeration areas — are of a great importance.

### Agglomerations: a "new possibility"

Until recently, the town has meant chiefly a system of institutions, independency, separation from Nature, ignoring that also town-dwellers are integer parts of Nature. This meant no special clashes until the town size and activities did not impair the connection with natural environment or deepen ecology problems of the town.

Continuous and harmonious co-existence with Nature is the responsibil-

ity of future urban development. Because of the simultaneous demands to concentration (infrastructure), its effective solution depends on well-organized, large regional and functional units, super-systems. This recognition is essentially contradictory to our traditional concepts and practice to think in separate settlements. In the actual stage of transitory concept, transition will be as fast and as effective as clearly and consciously the objective future is construed.

While conscious planning reinforces ecological unity and interior balance of the town and its outskirts, of the settlement group, linear communication builds up links between national — and in the long run, international — population and infrastructure.

In this way a wider assertion of the agglomeration concept provides a new possibility to retrieve the lost harmony with Nature. Utilization and rational renewal of reserves of the natural environment are fundamental to the land use of agglomerations. This is not against deconcentration (on the contrary, often a support), but often contradicts the demand for a rapid transport to working place — home — services. Agglomeration development aims exactly at an optimum compromise between each of the mentioned demands and the environment, determining the possible trends and methods of development.

The agglomeration as a new settlement form, as a new functional unit, handled as a settlement group, facilitates reorganization of the old settlement network, conform to new demands; trouble-free transformation of settlement profiles. In many cases it can even overbridge development difficulties in some settlements, arising from stagnation or decrease of population, providing up-to-date supply of their inhabitants, developing living standards, improving their way of living.

As an approach to planning, agglomerations are the “missing link” between town and regional planning, concepts of technical and economic development. By connecting both, it is a constraint to integrate the different planning concepts, helping mutual understanding and intensification to apply complex methods also on other levels of regional planning.

Aims of the socialist planned economy being not limited to economic development alone, but comprising also political and cultural domains (although latter follow the former often with a delay), this circumstance has to be taken into account also in regional planning, usually ruled by economic aspects. It is expedient to pick out some of the above aims, the realization of which — not to be detailed here — could be furthered by the tools of regional — in particular, agglomeration — planning:

— Agglomeration planning striving to complexity may contribute to develop harmonious, versatile personalities, urban ways of meeting human needs.



— Agglomeration development involving gradual social advancement and equalization offers at the same time possibilities to differentiation and to constructive use of local assets and traditions. It also contributes to establish agglomeration organizations and institutions likely to embellish life.

— A new, marked tendency is the increasing separation between generations (conditioned by a system of retiring allowances, financial independence, housing, institutions for aged, children welfare establishments, etc.). The trend of zoning according to generations and other social-territorial problems (segregation or integration) are considerably determined by housing conditions and policy, referring to both blocks of flats and whole districts or even settlement groups. Housing policy to the scale of agglomerations creates an opportunity for the differentiated satisfaction of a wide range of housing demands (including generational ones) at an increased choice.

— Important changes in recent decades include the transfer of several functions from the private to the public sphere (also to agglomeration scale), thus increasing the forces of cohesion.

— With more leisure time, many new demands arise, tending from existential to social ones, with all their territorial, institutional and organizational consequences. These cannot be met any more within the definite borders of the traditional town, but depend on a wider territorial lookout.

### **Situation of agglomerations in Hungary, problems of approach**

To think to a scale of settlement groups or agglomerations represents a special transition between town planning and regional planning; a peculiar interlacing between the technical-functional approach of the town planner, and the economic-functional approach of the regional planner.

The early period when the two approaches ignored each other is over, in principle, the imperative of a close cooperation is mutually recognized. Practically, however, the cooperation is impeded by objective and subjective difficulties.

Although the final issues of regional planning are obviously overall social ones, thus comprising political, economic, technical problems, primarily spatial coordination of social development, it is nevertheless difficult to avoid that minor worries or everyday troubles sometimes eclipse long-term, fundamental aims.

Concentration and development of agglomerations are an international trend and lessons of international experience have to be carefully analyzed.

At the same time, development of Hungarian agglomerations is influenced by an actual period, an actual international surrounding, particular historical features and social aims.

In this country, no spatial entities to be considered as completely matured exist (including even the most developed "agglomeration" Budapest); there are only agglomeration areas on different levels of development. This lag is a particular hint to make best use of agglomeration possibilities without the still avoidable mistakes of spontaneous concentration with its grave consequences.

Development in this country changes now from an extensive phase to an intensive one. Just as the inadequacy of infrastructure could not be avoided in the extensive stage, the intensive development phase is unimaginable without an especially expensive, investment-absorbing, enhanced infrastructural program. In the transition period it would be dangerous to have fast, spectacular results in mind, awaiting for "better" times until "sacrificial" measures can be made against negative effects of industrial-urban growth; by that time industrial, productional and urban structures, harmful to the environment and obstructing favourable possibilities of development would already be settled. This danger might affect the attitude of governmental, international coordinating organs, as well as the partial or supposed interests of lower administration, belated local dispositions, spontaneous, un-coordinated realization.

The actual process of agglomeration in this country is featured by the coexistence of extensively and intensively developed regions at lower and higher levels of the scientific-technical revolution, in a society endeavouring to equalize regional level differences. This "equalization" principle inevitably entrains an enhanced support to backward regions in the extensive development period, moderating the process of agglomeration, assuming now sacrifices in the hope of future advantages.

Another concomitant to our present development degree is the transitory attraction of unskilled, "trained" manpower and helps to advanced centres (lasting to the time of high-grade automation), exploiting the surrounding settlements also in forming and using up material funds of development. At the same time, in spite of similar living standards, ways of life become still more contrasting, increasing the suction effect of higher-level centres and the repulsion of lower-level settlements. With increasing general development, society reacts more sensitively to regional disproportions of development (of personal pretensions, education, "local possibilities", etc.).

Realization of agglomeration projects is hindered by contradictions between town planning and regional planning, not subsiding as desired, although both adhere to the same increasingly unified spatial-functional structure. This may be ascribed primarily to that:

— *town planning* is interested in concrete spatial concepts, at a high degree of precision, in realizability;

— *regional planning* features scheduled, long-term concepts, at a high degree of generality.

Extensive but not “continuous”, — in some places “unpopulated” — regional systems, reflecting interior regularities of agglomerations, surpass the usual scale of, and approach to, town planning.

This conceptual differentiation is all the more dangerous since interdependence grows increasing: regional technical interactions (demanding direct, immediate measures) strengthen. At the same time, development of agglomerations demands prognostic solution of increasingly complicated social-economical problems, formerly underrated in town planning.

Planning programs (either social-economical or regional) are mostly static, fixed to time and area, difficult to be adapted to the rapidly changing exterior conditions (out of their reach). Besides, the hierarchical, multi-stage feedback system of plans counteracts assertion of open, dynamic planning principles.

What is worse, frequent subjectivism of the municipal administration often hinders enforcement and coordination even of accepted decisions. Thus, efficiency of conurbation plans lags behind their niveau, stressing organizatory, “bureaucratic” impediments of the conceptual development of agglomerations. Drafting of long-term development and general planning aims is only possible on a central planning level with a comprehensive survey and adequate information. Because of the openness of a settlement system of agglomeration type, the central planning determined only elements essential for the system as a whole. Detached, rather closed sub-systems are under their “inner laws” and further on, their integration is decided by the skill and foresight of the local authorities.

The mentioned difficulties and problems indicate by no means underestimation of the achievements, they just point out the novelty of the tasks, and importance of their effects. At this initial stage of agglomeration development, possibilities of purposeful guiding of the future are still at hand, thanks to favourable conditions assured by the socialist system.

In general, however, a serious impediment to the realization of conurbation plans is the lack of an organization with a comprehensive survey over the entire field of planning to provide for a real and flexible development, with authority to decision and realization, keeping common interests in mind. The problem of agglomerations is an interdisciplinary one, open to a wide range of legal, technical, economic or other approach to the subject. Coordination between multiplicity of viewpoints and interests would rely on “social policy-mindedness”, striving, before all, to *social well-being*, spending scientific foresight optimally coordinated to realities.

## Summary

Agglomerations grow in importance for regional planning and development. Their advent and importance are strictly related to both evolution of an agricultural society into an industrial one, and to the advancement of the scientific-technical revolution, resulting in rapid and fundamental changes in the relation of society to nature, in the structure of social production, in shaping the standard and way of living. Agglomerations emerged and developed as reflections in space and on the settlement network, and as consequences of the mentioned social changes.

Thus, the process of agglomeration is an *objective reality*, which must be faced in future, not as a trend to be discontinued but as a tendency to be maintained between adequate limits.

Agglomeration — as a group of functionally coexisting settlements — is a *new form of settlement*, demanding to switch over to a new concept, opposite to the traditionally innate way of thinking about confined settlements.

Agglomerations are a *new possibility* to integrate society and nature, disintegrated in spontaneous development, to readjust the established settlement network, to meet new demands, at a cost of relatively few sacrifices.

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