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APPROACHES TO SPACE IN PHILOSOPHY AND GEOSCIENCE: COMPARATION AND APPLICABILITY OF THE METHODOLOGY IN REGIONAL DEVELOPMENT THE CASE OF SZABADKA

Theses of the PhD dissertation

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INTRODUCTION OF THE TOPICS

The unusual topics of this research calls for some explanation. The exploration of the applicability of Feng Shui in the field of geography originated not from the knowledge and research of geographical theory and methodology, but from a ten-year long practice and continuous research of Feng Shui. This practice evolved from evaluation, interpretation and harmonization of individual spaces to the realization of impact that the symbolic, structural and functional aspects of space have on the patterns of organization and functioning of larger groups of people, as well as on the values they entertain. During the analysis of one of the most complex scenes of that practice, the City Hall of Szabadka, significant structural, functional and symbolic features appeared, that seemed to be very characteristic not only for the building itself, but described the internal qualities of the institutions – organizational patterns, modus operandi, internal relations and decision-making - of self-government (which occupies the building). The same patterns carried an impressive resemblance to the patterns characteristic of the local society, as manifested in the social perception of space, choices of values, decisions, realizations, local prejudices and commonplaces. The original objective of the research thus should have been to establish the impact that the spatial structure of the City Hall has on the space and society of the city. During the research into the spatial and social changes of the city through time, a recursive, decisively geometrical pattern appeared, that led to the conclusion that the building is not the source, but rather the end-result of these patterns. It became obvious that the local society is not reflecting the spatial structures of the City Hall, adversely, it seemed more likely that the building is the materialization of the local set of values and organizational patterns of the local society (as shaped by the place). Therefore, the objective of the research has shifted from the societal impacts of the building, and has broadened to become an experiment to discover and interpret the patterns defining the place. In this sense, the place is perceived as a complex natural-social system existing simultaneously at mutually interacting and intertwining physical and abstract levels. Since this notion of place can be considered primarily geographical, the research had also adopted a geographical, rather than architectural perspective.

The system of Feng Shui seemed appropriate to conduct such an experiment, despite its usual applications in the west as interior decoration, because by origin and tradition, Feng Shui as a science observing, evaluating, interpreting and prognosticating the interactions of space and society, can be treated as equivalent to geography. In such capacity, Feng Shui had its important role in

governance, strategic planning and spatial development (or the historical equi-valent of it) during the Chinese history. The methods, rules and terminology of Feng Shui, and its logic that compresses complex non-linear intra- and interdimensional interrelations, values and phenomena into symbols and the meaning-relating geometry of symbolical relations, could be perceived as "magical" from the viewpoint of western science, but overcoming the terminological peculiarities and differences, the logic of the complexity theory, widely adopted in the western science can be discovered in it. "Complexity theory has also been adopted by cultural geographers as an analogical and metaphorical tool: as the 'cultural turn' emphasized the importance of difference, contingency and context, so the various concepts, models and terms within mathematical complexity theory provided useful language and metaphors with which to examine space and society. Within human geography, this use of complexity theory outnumbers the mathematical applications. A welldeveloped example is provided by Urry's study of 'global complexity' (Urry, 2003), in which complexity is used to link together local and global, the emergence of global 'order' from regional 'disorder', the role of feedbacks and path dependence in how regions engage with global society, and the challenge for how social theory is constructed." (R.J. Johnston, D. Gregory, G. Pratt, M. Watts, eds., 2000, p 106.).

The basic line of concordance between geography and Feng Shui is that both are investigating the phenomenon of the place in its most complex sense. Despite the expectations implied by the ideology of globalization, the social and spatial reality and relevance of the place has not diminished. On the contrary, due to the inequalities and asymmetries (re)created by the globalizing economy and society, more and more attention is drawn to the place in geography itself as well as in other social sciences, in order to offer an explanation for persistent appearance of spatial inequalities. Lately, in attempts to explain the inequalities, the intangible assets, the locally-bound effects and interactions play a growingly important role. (B. Dettori, E. Marrocu, R. Paci, 2009.; B.R. Smith, C.E. Stevens 2009; T. Zick, 2005.).

The contemporary currents of social geography, and within it, of the cultural geography discuss the concept of place and its importance from various angles. The strain that focuses on the perception of space approaches the place as the meaning-conferring frame of perceiving the collective-cultural and individual-experiential identities, wherefrom this strain explores the meanings contained in the place through its representations in literature, painting, etc. (Cosgrove and others). Starting from place as meaning-filled, another stream of

research (Cresswell and others) sees place as expression of the relations of social order/disorder or proper/improper as contained in social and cultural rules that makes the spatial relations and distributions within the place the identity-related determinants of belonging or exclusion.

The also human perception-based postmodern approach to place and space, as suggested by E. Soja, treats the space (and place) as a socially constructed (perceived, conceived and lived) entity. Based on that, he distinguishes three layers of spatiality. The perceived space (Firstspace) consists mainly of concrete spatial forms, things that can be empirically mapped, but at the same time it contains the social construction of these forms as contained in human activity, results behavior and experience, as well, as the complex spatial organizations of social practices. The conceived space (Secondspace) is space constructed in mental or cognitive forms. Conceived space is expressed in systems of "intellectually worked out" signs and symbols, in which the representations of power and ideology are located. The lived space (Thirdspace) is the space of actual social and spatial practices that overwrites the physical space making symbolic use of its objects. It tends to be expressed through a system of nonverbal symbols and signs. According to Soja, this space contains the physical and mental spaces of the perceived space and the conceived space, but extends well beyond them in scope, substance, and meaning.

Another attempt to understand the place as a complex entity is based on the non-representational theory (N.J. Thrift, K. Hetherington), and sees the place as a process of immanence, as an "already ongoing assemblance" of geographically associated, ontologically co-constitutive elements and relationships. According to this approach, the cultural geography should surpass theoretizing on representations and interpretation through the human subject, and focus on actual practices taking place at the locale, to examine what the human and non-human agens "does", and the influence the re-production and change of real occurences and processes exert to meaning and through that, to the occurrence and existence of interpretation. Thrift suggests that the focusing of attention to real, individual appearances and occurrences could relieve the insensitivity to individuality of the theory-based research. (R.J. Johnston, D. Gregory, G. Pratt, M. Watts, ed., 2000).

The need to explain the underlying mechanisms of creation, or more likely re-creation of inequalities had also called for a more complex approach in modern economic geography that explores the concept of place as an entity affecting the local appearances and the possibilities of spatial "rootedness" of the global processes. Following the "cultural turn" that took place in the economic geography during the '90-es, the research into spatiality of the economy has overstepped

the limits of investigating exclusively the quantitatively accessible aspects of economy. The "relational turn" of economic geography is concerned with estab-lishing the reasons, rules and ways of re-creation of a "power" that can not be linked directly to the economic subjects, networks, hierarchies nor social structures, but exists and flows through the continually reshaping network of horizontal and vertical power-relations, and manifests in different forms, mo-dels and levels of development, depending on local or regional *relational assets* it is coming upon on its course. Thus, the spatial differences of economic deve-lopment are defined by such non-economic characteristics as local rules, reflexive knowledge, contexts, sets of values, etc. These factors are affecting the possibilities of groundedness and embeddedness of global processes

Of the less recent complex notions of place and space, the time-geography concept of Thorsten Hägerstrand, dating back to the '60-ies seems to reactualize, though not so much in the field of geography as in the field of management studies, where the budgetary logic of treating time and space, and the concept of constraints of human actions has a certain appealing quality for exploration of mechanisms of relation-building and in modeling of the economic, organizational and social results of embeddedness. (B.R. Smith, C.E. Stevens, 2009.).

The paradigm of Feng Shui, contrary to the bipolar and therefore distinguishing western scientific paradigm, is circular, and therefore can be considered unifying, wherefrom it is unsusceptible to the difference between the being and the consciousness, and therefrom to unsurpassable gap between the materialism and idealism so overwhelmingly present in the western philosophy and consequently in western science. On this discourse, Feng Shui interprets the being and the consciousness within the same complex system as the static and dynamic aspects of phenomena, in which the two aspects are mixed in different proportions according to the essential nature of every phenomenon. The circular paradigm does not contain the notions of "endpoints" and does not differentiate between the immanent categories of western philosophy belonging either to "being" or to the "consciousness" (physics-metaphysics, environment-man, place-space, etc.). The absence of this differentiation in the philosophy and space perception of Feng Shui allows for all the above mentioned geographical concepts to be present simultaneously: it breaks down the space and society to its constituent elements, regardless of the scale and layer where the element comes from, interprets these elements according to their assigned symbolic value, and simultaneously interprets the interrelations of these elements, and

in this approach every place can be considered space at the same time, the symbols equally encompass the physical space and its perceptions, and the perceived space with its physical and mental dimensions, as well, as the interactions of all these. In a simplifying manner of speech it might be said that the Feng Shui analyses the locus-specific appearance of Soja's Thirdspace in a non-representational approach. Even though, the Feng Shui can not be considered a postmodern approach, given that the symbolic interpretation of real phenomena is not based on the individual perception, but on the accumulation and integration of individual observations and interpretation during two and a half millennia that formed into an absolute (universally human) philosophical frame. The deconstruction of real elements is essentially abstraction and resyntetization, since the Feng Shui aims to reveal the totality of experience and influence, and as such, it lacks the postmodern individual indecisiveness, the presumption of *á priori* fragmentarity of cognition. The concept of "power" conceived in the relational turn of economic geography as unbound to economic actors, networks, social structures and hierarchies, existent only in flow, and its supposed behavior reminds very much of the concept of Qi in Feng Shui, and the description of workings of Oi/Form relation, (so far) without the cosmogonic aspects of the latter.

On the other hand the abstraction process of Feng Shui, that does not make difference in values and priorities among the elements of being, nor even between elements of being and of consciousness, exposes this applied philosophy to the accusation of belonging to environmental determinist line of thought, or even of being a practice of magic rather then philosophy, since it apparently holds the influences of the physical surrounding more important, than the influences of the human agens. Nevertheless, this cannot be considered equal to environmental determinism, since this system does not function in mutually exclusive man vs. environment or idea vs. matter dualities, but analyses the complex system integrating the human and non-human aspects. Within this system, differentiation is made between dynamic and static phenomena. Measured on the scale of time, the elements of the physical surrounding can be considered the static, long-lasting and slowly transforming elements that exert the same influence over a long time¹, while the man, as physical, social, intellectual and spiritual being, along with other fast-changing phenomena can be considered the dynamic component of the system, influenced in its movement by the restraints posed by the statical elements of the system. Therefore, the Feng Shui analysis starts with mapping the restraining frame, and advances towards the evaluation of actions of dynamic component within this system. The above mentioned

concepts of social geography basically have no doubt that the physical surroun-ding has a great influence on organization of production in the society at the place, through which it influences the mode of using the space, the ways of life, which comes down to influencing the organization patterns of the society, the behavioral patterns and systems of values. It is just the synthetic qualification not distinguishing man from all other existence, which provokes this criticism.

However, neither positioning the apllied philosophical system of Feng Shui in relation to the theoretical framework of geographical science, nor the detailed comparation of it to geographical schools of thought, theories and fields of research, can be done in present work, since it should require a long and detailed detour into philosophies and cultural history, as well as an also detailed comparation of the eastern and western world views shaping the respective scientific paradigms. In this research I have not compared the results of the different fields of geography, but was making an attempt to reveal the combinations and interactions of the results and observations of various fields, the way they organize into a palpable, living and functioning social-spatial individualization of the place, in order to contest the philosophy of Feng Shui as a basis for developing geographical methods, the need for which, in order to gain a more complete picture of phenomena, was pointed out by Hägerstrand. He called for developing methods of geographical research that: "...are more advanced than the structural formulae of the chemist, and probably closer akin to the score of a composer. The purpose must be to 'freeze' the events into graphical pattern, or more likely into chains of symbols, thus converting them into a convenient form which can be viewed from various angles and which do not elude the observer while he is analyzing the message. More penetrating analysis comes after these patterns have been established, and here mathematics and statistics are surely ready to help." (T. Hägerstrand, 1973., p 77)

To this end, based on the already available data sources, the existing literature on the locale and the personal knowledge of the place, I have used the system of spatial interrelations of the philosophy of Feng Shui to establish whether, and to which extent is it appropriate to condense the complex place-specific social-spatial interaction system, poetically referred to as *genius loci*, or in other words the system of local restrictions that shape the appearances of global processes in locus, the local socio-spatial *differentia specifica*. Such a system, in case of its being functional and applicable, should enable the

¹The effects of the environment are interpreted in a similar way in the field of vulnerability studies: "Places have longer existence than people. People come and go, immigrate and emigrate, live and die, in places that have longer histories than those of people's occupancies or people's lives." (Lewis J., Kelman I., 2010)

worldviews and social organization. The already ongoing scientific researches of other disciplines into the philosophy of Feng Shui are all based on the possibility of exploration of different paradigms that is opened by the need of developing a complex, metaphoric approach that could treat and model the space-society relation from a system sciences angle.

The cultural turn and the convergent tendencies among the social theories, social sciences, the philosophies applied within those and the geography, as happens in the west, insofar have had very little influenced the geography in Hungary, though the thematic turn that helped evolve the previously existing subfield of economic geography into the present social geography that, instead to the subsystems, shifted its interest to the spatiality of the society as whole (Tóth J., Tímár J., in Boros L., 2008.). Originating from this altered views, a number of specialist geographies have been born. During the '90-es, beside the traditional morphological, historical and human-ecology approaches in settlement geography (Mendöl T., Becsei J., Tóth J., Beluszky P. et al.), the critical currents of social geography, mostly related to conflict theory, also have been presented (Tímár J., Kovács Z., Boros L.). The appearance of the critical thought in geography had formulated the need to make geographical research socially relevant (Tímár J., 2004.).

Still, of the contemporary currents in geography, the reception of the postmodern and the theories of more recent origin is very weak in Hungary, but supposedly it can be said about every scientific discipline that defines itself as objective, for in those disciplines the methodologies based on interpretations are per definitionem unacceptable due to the necessarily individualistic character of such methods. It is understandable, considering that the postmodern worldview as defined and evolved in the west can be interpreted as a social answer to the individuality- and community-destroying mechanisms of western consumerist societies. In Eastern Europe, those mechanisms have not reached the level of intensity needed to prepare grounds for the dispersion and widespread acceptance of such answer. Therefore the postmodern approach in Eastern Europe is more characteristic to the explicitly individualistic fields, such as architecture, literature and visual arts, while the society (and hence the system of research grants) focuses on the development of the western economic and social mechanisms, hoping to catch up with the more developed parts of the continent, but at the same time narrowing by it the fields of researches for objective sciences. These restrictions are even more likely to affect geography, given that in the reality the spatial development policies are restricted in their possibilities by the system of EU funding. This system of grants and subsidies as defined on the

system of values of the western part of the continent is not necessarily correspondent to the realities of the eastern part of the continent, but limits the possibility of revealing local realities to very narrow margins. That is the most plausible reason for investing very little attention (and financing) to the researches of the place as a complex entity regarding its complex internal system of possible realization-limiting restraints and the place-specific social consensus of values that shape this restraints, regardless that these questions are deemed increasingly important in the western scientific world.

Still, Enyedi claims that: "Long-term competitive position of a region is determined by three factors: natural resources, geographic location and human resources. These factors are modified very slowly, so the resulting inequalities also persist. In practice, of these three elements, only the human element is able to change, therefore the regional differences in developmental processes and the different realizations of the same concepts in different places can be assigned to geographic differences of human resources. The knowledge pool and the system of values by which the society of a region can be characterized is able to transform, to accept new values only very slowly. Therefrom, the bigger the divergence of the imported categories from the regional system of values, less is the probability of reception, and the the creation of various conflicts more likely. " (Enyedi Gy., 1996.). From this angle, the very desire to "catch up" should stimulate the researches aimed to discover the capacities of the places, the systems of internal barriers within the places and the possibilities for altering those conditions. Consistently with the military-strategic roots of Feng Shui and the practical origin of this research I could argue that the rationale of contesting the Feng Shui philosophy that treats space and society as a holistic complex system, is the possibility of establishing better connections between the strategical and tactical levels of spatial and social planning (using the already existing pools of data), since the better understanding of local restrictions enables feasible strategic choices.

METHODOLOGY

Since the research has not started from theoretical questions, but from practical experience, its aim is not to compare theories and methodologies adherent to them, but to contest the compliance of results, the verification of the hypothesis formulated according to the practical observations of one science by the tools of other science. Accordingly, the hypotesis of relevant organizational patterns was derived from the shape, position and internal structure of the City Hall of Szabadka, using the methods of Feng Shui. Thus, outlined patterns were

then contested to the formative processes of the city and the recurring social manifestations.

The research was primarily concerned with the literature related to Szabadka, comparing and unifying the data found in that literature. During the research, the studies of Szabadka generated in the past 120 years, approaching the city and its development from different angles and different time horizons were analyzed. The first relevant work on the subject was Iványi's history of the settlement that describes the emergence and the development of the city from legal, economic, architectural angle and describes the movements and the composition of the population from the beginnings to 1880. The latter studies written from aspects of economic geography, settlement geography and urbanism, were used to check and prove the validity of the patterns recovered from Iványi's work. The patterns were sought out in sectorial-territorial analyses of different times too.

The first group of data taken into consideration was the data attainable by analysis and comparations of the development plans and strategies conceived in different times, regarding the recurrence of states, goals, solutions and patterns. Another important group of the data was deduced and interpreted from the statistical data available in statistical yearbooks and different publications published by local self-government. Within this group of data some, like the population numbers were interpreted through the temporal changes that took place, while the data for which the temporal comparison within the place seemed unreasonable or impossible, the interpretation was carried out on a short timescale in relation to another place comparable to Szabadka, in order to thus outline the local differentia specifica. The third group of analyzed data was deduced from analysis of the maps of the city originating from different times, and the comparison of the changes detectable on these maps to the patterns contained in the hypothesis. The maps were digitalized from the maps published in the processed publications, the maps issued by the local self-government and the use of basic layer of GIS, and processed with Adobe Photoshop CS2 and CorelDraw14.

The data was evaluated through the dynamics- and information quality-differentiating set of symbols of Feng Shui. The steps of differentiation applied were: the Yin-Yang proportions of polarities expressing the dynamics-statics ratio of phenomena; the Wuxing ("five elements") that expresses the intrinsic information quality of phenomena related to the cycle of transformations, and the Ba Gua (eight angles) projecting the dynamic proportions and the transformational phases to the eight directions and thus connecting and relating abstract and concrete, conceptual and material contents of place.

OBJECTIVES

The basic aim of this work was to try demonstrate that the structure and system of values of a society that exists in a place (consciousness) is influenced by the properties of the physical environment (being), and on the other hand, that the society that is therefore locus-specific, tends to influence the environment in accordance with the inherent patterns of environment, and re-create those patterns in the built environment. Thus, the society through the alteration of the natural environment expresses its own organizational patterns (shaped by the natural environment) and creates the restraints of development on both the level of ideas and matter. Since the public buildings are the material expressions of communities existing on the level of ideas (city, country, nation...), in them the peculiarities of related history, culture, set of value, social organization, in other words the locus-specific spatial-social differences (relational assets?) are taking material forms. The spatial and structural relations of these symbolic buildings therefore are describing and re-creating the characteristic organizational patterns of the space in a lower dimension.

Furthermore, this work is trying to present a holistic point of view, that could possibly contribute to the simplification of the scientific research in social planning allowing the reduction of the quantities of analytical observation needed, analyzing the phenomena through a highly-sophisticated system of symbols, in which system all things, whether tangible or intangible, can be interrelated and evaluated.

RESULTS

1. The natural-physical space and the basic character of social organization

The examination of applicability of the system of spatial-social-temporal relations of the Feng Shui philosophy through the case of Szabadka in the first step has established the basic patterns of the natural space, the basic character of space. Treating these patterns as information structured in space, and the social movements as information structured in space and time and comparing the two sets of information, the time of appearance of the initial city-forming impulse was established as the period of concurrence of spatial and temporal energies at the place—the era of wars of liberation against the Turks—which was confirmed by the examination of the abstract-symbolic qualities connecting space and time at the place in a specific time-segment.

The most characteristic features of the natural space:

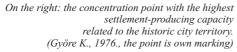
- The northwest-southeast flow direction of energies as shown in general watercourses and dominant direction of winds,
- The line where the different relief-energies of sand and chernozem meet, curve
 in a bay-like accumulation form in an orthogonal direction to the northwestsoutheast energy flow,
- The initial forming point of the city is the highest point in the accumulative area formed by the collision line of relief-energies. This "castle-mound" is surrounded by negative surface forms enhancing the capacity of the initial point,
- The division of the space of the city on the northwest-southeast axis by the Nagyrét-Mlaka valley-system and orthogonal division by the Gat creek and a system of swamps extending on a northeast-southwest axis.

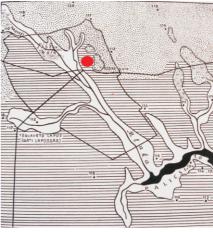
<u>The temporal-social and symbolic impulses that triggered the</u> development of the city:

- the direction of the social movements coincided with the northwest-southeast spatial energy flow direction during the 18th century liberation wars against the Ottoman empire.
- the Tisza-Maros military frontier-territory was established as the result of these wars, the essential information quality of this military territorial organization authoritarian organization carries the same value as the



Up: the collision line of a loess and sand in the city and around it (Szabó Zs. 2002.)





- northwestern direction from which the energy comes, and thus the territorial unit made the energy accumulation possible. The direct governance of the territory by the Emperor (highest authority) in Vienna (northwest) represents the activisation of the accumulation capacity at the symbolic level.
- The secondary accumulation point was conceived within the accumulation territory. The first City Hall was built outside the primary center, the "castle mound", thus separating the material and spiritual centers. The material one the City Hall, representing the point of secular power was built facing northwest, constituting a stopping point for energy flaw, which made the concentration of matter houses and inhabitants possible. The primary concentration area is in the northwest segment of the city, showing the City Hall as an "energy dam", precipitating matter upstream.
- The secondary concentration point broke the spatial bonds with the primary concentration point, pushing the "castle mound" in spatial isolation. The spatial structure isolating the mound that remained the spiritual center (temple and monastery) denotes the aspiration of material-mundane power for self-legitimation.



Formation of the secondary accumulation point: the dissociation of the material and spiritual legitimation. The position of the southeast-facing Franciscan church and monastery, and the pozition of the first City Hall on the contemporary plan of the city. (Own marking on the GIS layer)

The basic characteristics determining the space and the society of the city from Feng Shui angle:

- The shape of the sand-chernozem collision line at the territory of the city can be considered as a matter-accumulating feature, consequently related to the qualities of earth, while formation of the primary accumulation point depicts a fortification, the essence of which is exclusion which is correspondent to the qualities of metal.
- The spatial and social currents enabling the formation of the city are coming from northwest, thus carrying the quality and values of metal. The correspondent notions of metal are the father, the patriarchal order, the authority, the law, the concentrating, inward-turning movement, the borders, exclusion.
- The accumulation of energy results in accumulation of matter therefore can be related to the qualities of earth. Other things corresponding to this concept include land, fertile soil, nourishment, the precipitation-type downward movement, the agriculture, matter, walls, real estate. The precipitation gradually builds pressure, which is an inward-movement, increasing density, which can be related to metal
- The secondary concentration point the City Hall activated this accumulation capacity described by earth and metal qualities, resulting in intensive accumulation and the forming of the city.
- The isolation and decreased accessibility of the primary concentration point depicts the strict division between the material and spiritual, earthly and heavenly aspects of existence, which favors the material aspect, pushing the spiritual aspect and movement like its inherent quality to background. The static-dynamic balance is thereby permanently shifted towards the statical forms, which excludes the dynamic aspects change, movement, flow, transformation from the physical and mental space. Therefore the increase in amount of the qualities defining the space-society segment (earth and metal) can not lead to the transformation, to change of quality. The basic patterns describing the character of place and society are permanently governed by these two qualities, outlining static, materialistic and conservative local social organization schemata.

2. The manifestations of the basic character of the place in the structures and processes of built environment and the society

The character of place defined by earth and metal manifests in many forms and structures of society and built environment. The pattern of favouritizing matter over spirit manifests in the spatial formative processes through growing gabarites of subsequent City Hall buildings, strengthening the point of material-secular power, while the accumulation of matter was used to create a spatial structure isolating the center of spiritual power. The spiritual center was further weakened by contra-posting the first church by other equally distantiated and spatially secluded churches, and later the other institutions linked to the mental-spiritual plane of existence were positioned in equally distant and less easily accessible places compared to the City Hall. At the level of society this pattern manifests in the personal and social legitimation based solely on the ownership of arable land and houses (which are in their perception different from the meaning contained in the term real-estate), which according to Feng Shui are expressions of non-movement. The society thus prioritizes non-movement over movement (flow, communication, capital, knowledge, etc.). The same pattern characterizes the priorities influencing the social decisions over time. The need for preservation of existing forms always overrides the needs of modernization (increasing movement) during the whole history of the city. The local society's self-image tends to take into account only the indicators of quantity and neglects any inquiry into quality matters. The pattern of materialism can be detected in continual accentuation of the central position of the City Hall by expanding its dimensions through time. The same pattern can be traced in the processes of the development of the city, where the processes of concentration increased the population and housing density of the initially scarcely populated area which was considered the city area over some 200 years. The basic grid on this area did not change, only the number of houses was increasing continually through time within this area, while the initial fast growth of population of the city has stopped and is stagnating since the first third of the XIX. Century. In the XX. Century the process repeats itself at a larger surface. The territorial expansion of the city did claim some outer areas. The whole new territory was instantly loosely populated while the density is gradually increasing during the time. The same pattern manifests also in the overextended proportion the real estate market holds in the employment structure or the local self-governments policies that are construction-focused and neglecting the development of infrastructure.

By the domination of material (non-movement) over the spiritual (movement, flow) aspects of existence, the preservation, the neutralization of changes or in other word the conservativism comes into the focus of social values. The social perception of space is a factor restricting the possibilities of changes in spatial forms. In Szabadka this perception is continuous in time, hereditary. The new-arriving population easily adopts this perception, resulting in the preservation of higher social standing of the XVIII century city area, recognized as "the real city", separated from the larger, recently populated areas by the railway network which acts as city wall, the road-passes across the railway performing the role of city gates. Thus the secondary accumulation center that triggered the formation of the city reproduced the spatial formation surrounding the primary accumulation center, with its fortification-like quality. The preservation of social organizational forms can be recognized in the system of weekend-houses concentrated in the northern and northwestern segment of space. Namely serving the purpose of leisure, in fact those are the modern forms of the traditional two-hearth organization of the basically agricultural society, where the small-scale agricultural production and large parts of life take place at these outer premises, while the family holds a house in the city, proving their status.

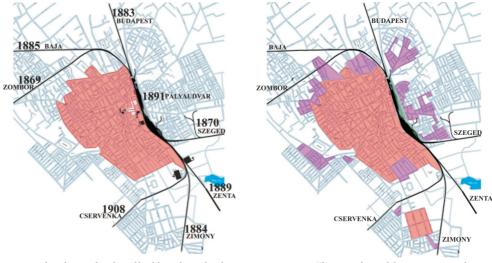
The strengthening of earth quality according to the rules of Feng Shui leads to the strengthening of metal, which did lead to the **strengthening of inward-orientation of the space-society segment, along with the exclusion of external movement** typical for fortification-like basic formation. The most characteristic spatial form of appearance of this feature is the monocentrical-radial transportation structure, that restricts the movement, through condensing and slowing down the traffic in the city center by the lack of transversal traffic routes, since the movement would endanger the stability-based local identification. The same pattern is shown in the fact that large-scale social upheavals like revolutions or world wars usually have minimal and delayed effect on local society of Szabadka. In the employment structure this pattern results in the large number of low-radius small family businesses, which goes with low social and spatial mobility. The self-image of the society avoids comparison, in evaluation of progress and change refers only to internal data, therefore it can be considered inward-focused.

The flow of energies that made the formation of the city possible and the **authoritarian** organizational model of the military frontier-territory both predestine the local society for authoritarian organization, which value is also

contained in the monocentrical-radial spatial structure and the structures supporting such spatial organization, every path leading "to" and "from" the city center, or to be precise to and from the City Hall. Even the neighboring peripheral units can communicate with each other only through the center. In the social organization this produces pyramidal hierarchic forms repeating the model of the classical patriarchal family with the undisputed pater familias at the top. These informal organizational forms are present in the politics, economy, public life and culture. The network-like organizational forms based on equal standing and communication rarely appear, and if so, quickly disappear.

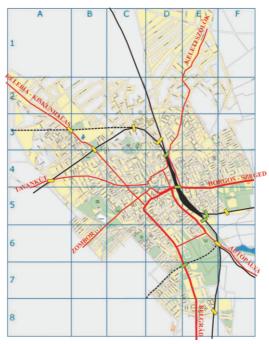


The unchangeability of the structure of built environment. Maps of Szabadka dating from 1778. and 1884. (Source: Hovány L., 1997 and Iványi I., 1892)



The temporal and spatial order of building the rail-infrastructure (Own drawing)

The spreading of the city - zones of accumulation between the World Wars (Own drawing based on data by Györe Kornél)



The re-creation of the initial forms of the natural space. The contemporary traffic structure of Szabadka.

The red lines mark the major transport routes in the city, the black lines the functioning railroads, t
he dashed black lines mark the inactive railroad lines (which are still active constraints to movement).

The yellow rectangles show the functional in-level railroad passes, while the green rectangles mark
the overpasses and underpasses. (Own drawing on the 1983. city map.)

3. The sublimation of the space-society segment: the City Hall

The characteristics of the space-society segment are present in a sublimated form in the City Hall, the architope that is most tightly linked to the formation and development of the city, and therefore carrying the totality of space- and society-defining patterns. The building is twofold linked to the reproduction of these patterns in the built environment and in society. Firstly, it expresses the social characteristics and values in material form, and secondly it is the central point of social identification and the central decision-making spot.

The space- and society-reflecting quality of the building

The building was built at the same place three times in ever expanding dimensions. The contemporary building is a very important identification point for the city, the importance of which is emphasized by the fact that the changes in the spatial or social structure of the city after the completition of formative period occurred while the central decision-making function was dislodged from the building, while the reconstitution of hereditary forms coincides with the return of the central decision-making function to the City Hall. The solitary placement of the large building separated from its environment by a system of squares that isolates the primary center, the "castle mound", which is weakened by low traffic-accessibility too, shows the pattern of favouritizing matter over spirit. The forms of the building demonstrate the same characteristic by eccentrical placement of the universal symbol of spiritual legitimation – the tower. The materialistic set of values are most prominently depicted by the wide square block of the building, but can be traced also in the use of space – the ground floor of the building is occupied by exclusive shopping objects that provide the material foundation for the authority of the local self-government, illustrating the real-estate based social set of values.

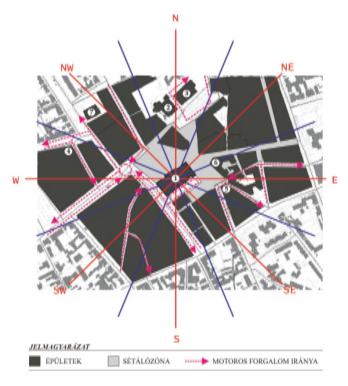
Forms of appearances of the basic character of the place in the position, shapes and structure of the City Hall

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The shape, proportions and the internal structure "thickening" towards the street fronts of the building along with the hidden main entrance and the obstacles restricting the communication of the exterior space with the interior of the building revoke the image of a fortification that was the typical formation of the initial accumulation point.

The conservativism resulting from the materialism and the exclusion of movement appears in the shapes of the City Hall hand in hand with the expressions of authoritarian organizational forms, confirming the pre-modern basic set of social values closely intertwined with the classical patriarchal family model. The most obvious expression of this model is the part of the building surrounding the main entrance, where the asymmetrical towers stand for the parents – the high tower for the pater familias, the much lower for the dependent and obedient mother – while the Town Hall stands between them on pillars, above empty space symbolizing the children lacking the grounds to become independent. The authoritarian model can be traced at the cross-section of the building too, where the rooms at the front of the building are much higher, than at

the rear, depicting the social standing and importance of the people occupying each part. The original division of the physical space of the city by negative forms that is the basic pattern of ethnical and religious divisions inside the society is repeated in the internal structure of the building by which is communication along the central axes of the building is made impossible, the building is divided in four quarters according to the original division of the physical space.



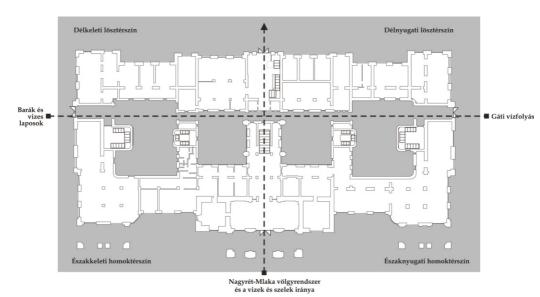
The position and orientation of the City Hall related to the city center.

The formation of fortification as manifested in the position of the building and the traffic structure strenghtening this character.

(Own construction on the basic layer of GIS).



The fortification character of the building in its visual appearance (Source: www.subotica.rs)



The fortification character and the model-level re-creation of the divisions of the natural space of the city in the ground plan of the building. (Own)

4. Possible courses of action

On the trace of these conclusions, naturally one should ask whether these patterns are fate-like or can they be altered? The answer comes from the I King: "...reality is always conditioned, and these conditions of time and space limit and determine it. The spirit, however, is not bound by these determinants and can bring them about as its own purposes require. (The I Ching, Princeton University Press,1997., II 297). The recongnition of the spatial-social-temporal patterns as the limits of the reality allows for "informed" decision to be made. Though the methodology of Feng Shui-based decision-making overpasses the frame of this work, the possible courses of actions should be illustrated by a few remarks.

Since the space and the society of Szabadka can be described by the patterns of fortification – collection – exclusion, and accordingly by the qualities of earth and metal, according to the teachings of Feng Shui, the interventions can take two directions. The eastern way of thinking, shared by Feng Shui, considers liberty as recognition of the necessities, which leads to the idea that changes can be made by reinforcing the positive aspects of the diagnosed patterns, and the preservation and gradual increase of the low momentum of mobility. Based on this logic, the aspects of element earth related to care, nutrition and medicine should be initiated and supported in such way, that it should mobilize the organizational capacities of element metal. Some of such possibilities in short:

- establishment of the horizontal and vertical linkage and organization of agricultural production (earth) into some sort of territorial agro-industrial complex, in which the local self-government could use its central role in organization of territory and providing a wider market access to the products brought to a higher level of processing, thus expanding the access radius of the products and increasing by it the place's internal momentum of movement.
- the forms of care and medical activities are already appearing at the territory as self-organizing initiatives. Szabadka has the highest number of private retirement homes in Vojvodina province, the zone of attraction of which function extends to the whole province and even to the capital, Belgrade. A smaller number of drug-rehabilitation centers already exist in the zone of farms surrounding the city. The local self-government could support these initiatives by the organizing and shaping quality that its

inherent metal has, supporting the enlargement and diversification of these businesses.

- the fortification—collection qualities in their positive aspects could be interpreted as the perfect grounds for enlargement and diversification of storage capacities, which, in the long run, should enhance the trade-related traffic and by that the internal momentum of movement.
- at the symbolic level these contents could be represented in the social focal point, in the center of the city, for example by information points or open-air artistic installations, thus altering the self-image of the local society towards a more positive image.

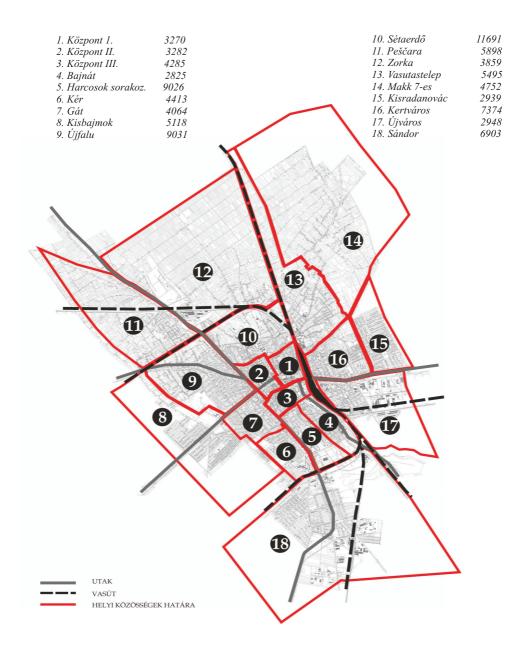
The western way of reasoning is usually more inclined to the actions aimed to change the existing conditions, from which reasoning the introduction and strengthening of the deficient qualities – water and wood – is advisable. Some actions to this end should be

- the traffic accessibility of the eastern and north-eastern segments of space should be increased along with measures aimed to alleviate the traffic jams in the traditional city center. However, as the history of the city shows, such plans usually lose the battle against the self-conserving mechanisms of the spatial structure of the city
- therefore the plans and decisions should be aiming towards the gradual alteration of the social perception of space for example by dislocating some of the central functions of the local self-government to the "across the railroad territory", and making the railroad increasingly and easily surpassable.
- along with the previous, in the center of decision-making, the City Hall, the contents related to culture, learning, knowledge and innovation (wood) should be increased, and the internal communications through the building on the longitudinal axis should be opened.
- at the symbolic level, as many decorative water surfaces and green areas should be built in the city, as possible. These would introduce the deficient qualities and gradually lead to the change and modernization of the local community.
- at this symbolic level, naturally, the amount of the deficient qualities should be increased in the identification center of the local community – the City Hall – by installing gardens and water features in the courtyards for example.

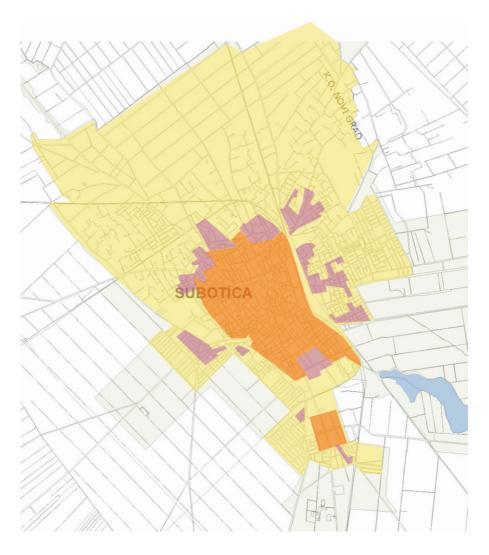
5. Geographical applicability of the feng Shui philosophy

The examination of the applicability of the Feng Shui philosophy conducted on the case of Szabadka reasonably substantiates the hypothesis, that the methods of Feng Shui have a certain interdisciplinary and interdimensional, or holistic quality that deserves to be examined in more detail and in depth. The abstract system of symbols can evaluate and correlate the phenomena on and interactions of different levels and dimensions of existence in a place in a complex way, which could allow for the simplification of scientific enquiries by concentrating the observation activity to a narrower dimension through which the understanding of the complex structures and processes of a broader scale is possible. Speeding up the cognition process of complex structures and processes should make the interactions of economic, social and environmental decisions and actions more transparent and understandable, and through it should accelerate and operationalize the practical application of scientific results, leading to more feasible strategic choices and a more efficient and viable local community.

By the methodology of Feng Shui through the examination of material and spatial shapes the dynamic, mental or spiritual quality of existence and the possibilities of temporal change can be perceived, while the research into the spatial and temporal dynamics makes the restraints of individualization visible, and give an explaination to the question why of all the possibilities exactly the things that happen are the only things that can happen at the particular place. Paraphrasing Hägerstrand it could be said that the relationships of Qi and Form (spirit and matter, movement and stillness, dynamics and statics) describes what people at a particular place "are in liberty to do", but also shows what they are really doing, why are they doing exactly that and how should these deeds be redirected. As the I King puts it: "Heaven and earth determine the scene, and the changes take effect within it. The perfected nature of man, sustaining itself and enduring, is the gateway of Tao and justice" (The I Ching, Princeton University Press, 1997., II 297).



Map of the local communities ant the nubers of inhabitants. The number of inhabitant of the "inside the rail" territory (1,2,3,4,5,6,7,9,10), seems to be almost constant from the first third of the XIX century. (Own markings on the basic layer of GIS, based on the data by the Local Self Government)

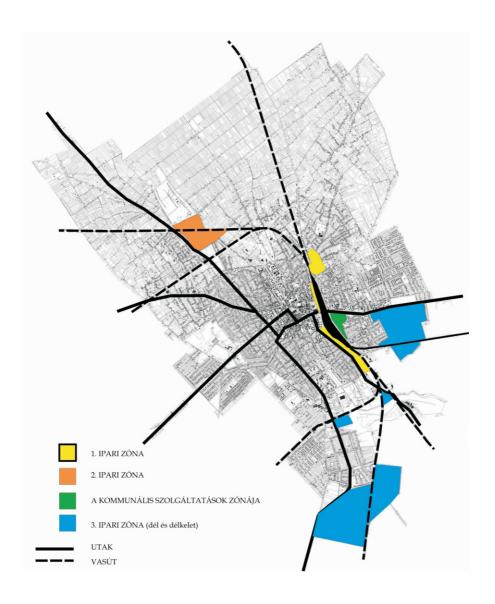


The spatial growth of the city. Orange zone represents the city to the end of the XIX century, the purple area represents the growth between the World Wars, the yellow area represents the growth after the WW II., but in practice the inhabitation of the area begun from the '60-es. The largest amount of growth, just like during the formation period, appears in the northern and north-western segments, where the development takes place in the form of traditional process - instant loose inhabitation, then long-lasting thickening of the fabric, without urbanistic plans and any regulatory measures.

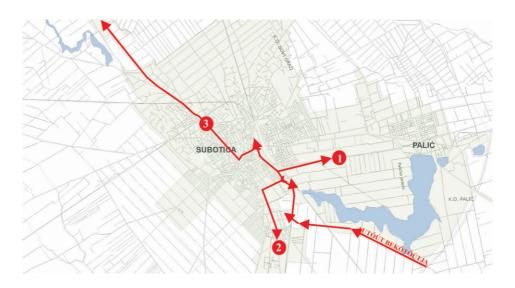
(Own marking on the basic layer of GIS, based on the map of Györe Kornél 1976, and the personal

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surveilance)



The spatial disposition of industrial zones - matter-accummulating processes along the railway - partial re-creation of the initial accumulating bay-form. Despite the largely decreased functionality of the railroads, the development strategies and plans still concentrate on this zones. (Own marking on the basic layer of GIS)



The self-repeating mechanism of the spatial structure and the hereditary character of the social perception of space – the connection of the freeway to the city had to be adjusted to the outdated railway structure, that was built as the last step to enclose the completely formed city at the end of formation period. The unchangeability of the hereditary structure.

1. southeastern industrial zone and the public warehouses 2. southern industrial zone 3. border crossing (Own marking on the basic layer of GIS)

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- **3.** Ana M. Plestović Pera Marković, 2009.: *Pruge i bicikli za održivi saobraćaj u Subotici Vasút és kerékpár: fenntartható közlekedés Szabadkán*, CEKOR, Subotica
- **4.** Markovic Plestovic Anna, 2010.: *Place, Statistics, Semiotics and Values as a basis for Sustainable Social Planning An Experiment*, TTEM Technics Technologies, Education, Management, Vol 5., No 2., Sarajevo, BiH, megjelenik 2010 június

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