## Dossier Editorial: On space syntax and architectural design A story of the suitcase

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A person carries some suitcases in the short life. I may define the suitcase here as the person's interest, involvements, bringings or accumulations. I suppose the theory of Space Syntax has been one of my suitcases that I have been carrying more than seventeen years. It is interesting that the subject of Space Syntax has always attracted me as a magic suitcase.

I noticed this subject, it was many years ago, it was an article, probably the first one of Bill Hillier's, titled as same as the theory, "Space Syntax". In fact, I was really in trouble about understanding this article at that time, however it was telling me about another but unknown face of the architecture. It was a kind of unusual face of my profession. I noticed that Hillier and Hanson were mentioning about something as a latent discourse like an iceberg under the sea. I thought, maybe it was reflecting something as a magic side of our professional duties. The subject that I confronted was reflecting another face, which I did not know before.

Architecture in general, design as specific was my daily routine, either in teaching or in my professional projects. What was Space Syntax and what was it telling us? What was it explaining as a structure? How could it be linked to our life and spaces?

I started working on Space Syntax in 1998, and I seriously began reading about it. In that time, some researchers were doing their researches by UCL based softwares, the others like me, "poors" were making calculations by hand.

The publication of the bible book titled as "Social Logic of Space" was the only one comprising many discussions; it was proposing the linkage between societal and syntactic values from macro, meso and micro scales.

I participated to Space Syntax Sym-

posium 2, Brasilia in 1999 with some syntactic formulas modified from this book. During the conference, participants were taking the depth values as inclining numericals, but I was doing reverse. I noticed my values were reverse, and they were opposite. However, my reverse model also was clearly working, like being depth values as reverse of the integration values as a constant acceptance. So, the paper that I presented in Brasila was about searching for the existence of the central hall concept of Turkish houses between 16th and 19th centuries. My accidentally emerging reverse model was working out and it was explaining the truth between these centuries. The true story was not descriptive, but it was using mathematical aggregates, more cells, depth levels, formulas and numericals.

By time, the journey for Space Syntax motivated many students around me, and there was an increasing motivation among the students. The architects liked to work with space syntax softwares even for testing the design schemes and proposals. I noticed their motivation in these investigations. They liked to insert design layouts in their personal laboratories and they were checking, if the schemes were working or not due to integration and depth levels as reverse. They were searching for the result that the design is working out or not.

Space Syntax rather than as methodology or tool, it was helping the researcher or the architect. The classical question was very simple and it was concentrating on the qualities of the design, was it working out or not? Was it exposing a low performance and where?

Architects were testing the design schemes with softwares, and they liked to involve in figures. They were reinventing the figures but this time through the architectural field, and they were travelling in the latent and magic discourse. The architects were inventing the latent discourse based on mathematics that they lost this straightforward strategy in their past, maybe in the former school years. By the help of new feeling, students are settled for a new confirmation system

for their design strategies not only based on descriptive models, but also based on ratios.

On the other hand, the series of symposiums as once in two years have been continuing, after Brasilia, London, Delft, Istanbul and Stockholm. My former PhD students Erincik, Mehmet and me were talking about something was missing in conferences. The first thing was apparently the difference between as high attendance for urban planning issues and small demand for architectural design issues. The ratio of architectural design issues considered in continuing series of conferences in general was less than 30 percent of whole accepted papers. This emerging case has reached to the upper limits in Santiago and Seoul. The ongoing symposiums were densely concentrating on urban issues and the architectural subjects seemed to be neglected and participants were tended to be declining.

By the time, the segregation or division during the ongoing symposiums, the reasons behind the subject have become more clear for me. The urban dynamics seemed to be as concrete dynamics, whereas the building dynamics are tended to be more subjective, more human behaviour based. Of course, we may not separate the environment as place vs. space, whereas there are many similarities in both sides. We may also identify both of them as more formal, but if we may consider that the nature and the essence of the dynamics in the positivist world, the content for both sides seemed to be more reversible. That's why the contribution from the architectural side to the space syntax was so limited. The planning issues and urban design issues were more appropriate as part of the immanent essence of research dynamics, on the other hand the architectural design issues were more based on emotional issues, in other words, they were more as transcendental interpretations which it might be more powerful than positivist explanations.

At the basic scale, the immanent structure was determining the research strategies of urban and architectural spaces, but the lack of transcendental situation in critiques was the important issue in the architectural design field. The issues held in space syntax symposiums were mainly criticized based on these augmented problems.

The lack of transcendental strategy is not solely a critical discussion for architectural spaces, but this is also a debating issue for space syntax symposiums like 2001 Atlanta. The famous philosopher and urban geographer, David Harvey addressed this issue in SS3, where he pointed out the lack of this issue in his critical conference. He annotated the space syntax as turning to be a vain subject in urban geography. Many thinkers commented that the space syntax theory is a part of immanent thinking and it is isolated from phenomenological interpretations. Latterly, David Seamon in SS6, Istanbul, criticized the lack of phenomenological approach in space syntax. His paper "A Lived Hermetic of People and Place: Phenomenology and Space Syntax". Seamon's paper, rather than being as segregating, it was promising for constructing an integrative model between differing opinions.

By the effect of these debating considerations, space syntax theory has been continuing to influence us. By time, we are driving into another debate that it might be resulted more effective research and strategies at the future. In architecture, specifically at the design field, this is my guess that all discussions might be derived from the essence of the professionalism and the ongoing debates eventually may lead to the design strategies and methodologies as feedback. All these debates underpin the new methodologies of the architectural design field.

This special dossier has been prepared under these considerations. Our main aim is to extent the debating issues and to convey them to the architectural design field and the profession itself. So, the title of this dossier is selected as "Space Syntax and Architectural Design" that is prepared to shed a light for the occurrence of human activities specifically in the buildings or in the vicinity of the buildings, how they are acted, by whom and where. The selected subjects due to buildings in this dossier are many. In the dossier, there are recently completed researches

on libraries, exhibition halls, shopping centers, elderly institutions, hospitals, gated communities, educational areas and houses.

The first article by Daniel Koch is an invited one and the title of his article is "Architectural Works as Material Discourse: On the spatial formulation of knowledge and ideals in four public library extensions". Koch evaluates four buildings in his article and exemplifies his ideas through Malmö City Library, Växjö City Library, Stockholm City Library and Gothenburg City Library. He argues the idea of library in the contemporary life and continues his discussion with the essence of knowledge and literature emerging through architectural programme. He extends his focus on collections, activity and library visitors. Koch mutually tries to find out answers linked to the architectural form and aims to discuss through these examples. He tries to find out new architectural principles and ideals of "new library design". The results of his scrutinized works on these buildings bring out that appropriation and inhabitance are empirically related to the spatial organization in modern and digital life. The term of appropriation in here, rather than being an activity or Barker's famous "milieu" term, it is much more spatial and cognitive issue and a more behavioral issue. Koch points out the complicated sides of architectural programming and behaviour based protocols in the design process. The space what we concentrated is how beyond of its pragmatic nature and how it is more media transacted meanings and values. Koch argues his considerations around this theme.

The second invited article belongs to Kerstin Sailer. Her article is titled as "The Dynamics and Diversity of Space Use in the British Library". This article also concentrates on another case study of the library. Sailer elaborates the dynamics of library in her article, and concentrates on diverse user behaviors and temporal order in the British Library. Her aim, through the cases, is conveying deep analytical explorations about spaces and their usage, where she presents a detailed picture of usage in the building. Sailer elaborates usage patterns, points out varia-

tions in behaviors, adds up temporal order in her approach, and tests the affordance of the configuration. Sailer presents elaborated spatial potentials of the building. She shows how physical environment is coexisted and presents behavioral modes and tendencies. By this way, she criticizes the architectural programming and beyond this, syntactical assumptions and how they are modified by new behavioral modes and patterns.

If we start from blind reviewed articles, continuing from micro to meso and eventually macro scale, the third article belongs to Erincik Edgü and her article is "Success in basic design studios: Can seat selection be an advantage?" This research interestingly brings out the series of observation and syntactic data of an educational space, specifically the Basic Design Studio of the architectural school, CIU (Cyprus International University). Edgü explores students' preferences of seating and she criticizes success of the student, in terms of social interaction and movement pattern based on the arrangement of rows and columns that is far from being the ideal scheme. Edgü takes a case of educational scheme in the architectural school and she argues physical layout, syntactic visual field and potentials. By the effect of these arguments, she extends her discussion around the essence of social communication, and mechanisms that are emerging social pedal or social fugal identity in the educational space.

The fourth article is about the main exhibition venue of 2013 Istanbul Biennial, which is a former warehouse just as the building next to it, Istanbul Modern, where both buildings are altered as exhibition buildings in the last decade. The authors are Mehmet Emin Şalgamcıoğlu, Fitnat Cimşit Koş, and Ervin Garip. Their article is titled as "Tracing a Biennial Layout: Experiencing an Exhibition Layout through the Syntactic Analysis of Antrepo No. 3 at the 2013 Istanbul Biennial". The authors explore syntactically integrated or segregated locations of exhibition spaces, and how spatial layouts influence visitors' explorations in gallery spaces. It means, which spaces are more or less visited. Eventually, authors scrutinize the predominate path that is depending on the number of visitors during a specific period of time. The authors try to find out the importance of coexistence cognizant and syntactically integrative spaces in accordance with the flexibility of design spirit of biennials. By this aim, authors discuss the impact of the morphology of space on exhibition visitors.

The fifth article brings out and discusses the double aspect of the architectural space. The authors are Nilüfer Kozikoğlu and Pelin Dursun Çebi. Their article is titled as "Thinking and Designing with the Idea of Network in Architecture". This article focuses on the idea of networks in architectural design and discusses the use of "graph theory" based on tools in the design process. Authors take the architectural layout cognitively as a mapping scheme that is accorded with spatial elements and they emphasize that these relations are highly cognitive and brain based. The mapping has dynamic essence and it is contrary to preliminary assumptions in the design process, which is non-hierarchical. Kozikoğlu and Dursun takes two examples, one from an academic setting-a mapping from the university, the other is elicited from practice-a hospital building. The first one describes a workshop on systems thinking that is demonstrated with a game and the second one is an iterative hospital campus design scheme. The aim of authors is to draw attention of the readers to the importance of cognitive mapping and cognized nodes; and how these dynamics are segregated from the immanent graphs.

As continuum of the series of specific buildings, the sixth article's subject elaborates an elderly care institution. The authors are Esra Özsüt Akan and Alper Ünlü. Their article is titled as "Behavioral Responses of the Elderly Regarding Spatial Configuration: An Elderly Care Institution Case Study". This article elaborates a case study, an elderly institution in Istanbul, and authors define a scrutinized observation for behavioral occasions in the elderly institution. The authors draw the attention of the users to how designated spaces are used by the elderly, and the how segregated syntactic spaces are

transformed as sociopedal or sociofugal spaces.

The seventh article belongs to Ervin Garip, Mehmet Emin Şalgamcıoğlu and Fitnat Cimşit Koş. The article is titled as "The Influence of Architectural Configuration on the Pedestrian Network in Büyük Beşiktaş Market". The authors in this article take a specific building as the center of pedestrian movements, and exemplify their considerations through the "Büyük Beşiktaş Market" in Istanbul. The building is a distributor and connection of the pedestrian movements. The article tests an urban building that is continuously treaded by the pedestrian almost in every second. The authors question how syntactic pattern plays a role in this specific planning. They also test outcomes of their search as availability and usage of courtyards and open spaces regarding as possible design criteria in the creation of specific and private areas in public buildings.

The eighth article belongs to "Fitnat Cimșit Koș, Ervin Garip and Mehmet Emin Şalgamcıoğlu as their second outlook to the exhibition spaces with a title of "A Syntactic Analysis of Social Interfaces in Istanbul Biennial Patterns in Case of Biennial Buildings In 2013". This article is different than the first one and it comprises activities and behavioral patterns in the urban scale. The authors question both the biennial spaces and buildings, and how they are preferred or not in the urban scale based on space syntax parameters. Their evaluation covers the history of biennials and the authors search for the importance of performances and they evaluate how they are interacted with syntactic values and visitors' activities.

The ninth article belongs to Nevşet Gül Çanakçıoğlu. Çanakçıoğlu summarizes her main theme as the question of the title "Can Cognitive Maps of Children be analysed by Space Syntax?" Çanakçıoğlu implements cognitive mapping in two different housing areas and she gets the responses from children aged 11 living in two different socioeconomic status levels. The analysis orients to be focused on cognitive mapping and syntactic graph outcomes. She establishes an interesting methodology between mapping

outcomes and interpretation of them in the syntax language. She finds out important clues about gender and social status level of children and the cognition of their home environments that is the primary subject of the article.

The tenth article comes from Suat Apak, based on the relationship between gated communities, space syntax and emergence of graffiti in urban areas. The title of this interesting research is "Disintegration of Urban Housing Areas: Districts and New Gated Housing Settlements". Apak takes gated community examples from different districts of Istanbul and observes these areas based on physical appearances, human movements and existence of graffiti. The author argues the existence of architectural appearance, existence of graffiti and syntactic outcomes; how they are interacted and what brings out to the urban life, and also how they are differed and why they are differed. Results show that the interaction within the existing texture gets weaker at substantial levels around the walls of the island, controversially the existence of graffiti increases, and sociologically existing users living around the gated communities turn to be as the author said "societies around / bottom the walls".

The eleventh article is derived from Michel Foucault's "heterotopia" and "heterochronic" terms. The authors are İlgi Toprak and Alper Ünlü, and their article is titled as "A Diachronic Approach on Heterochronic Urban Space". Toprak and Ünlü act from Foucault's term and investigate the urban and social morphology of a coastal town, Kuzguncuk of Istanbul. The scrutinized work aims to take out geographical layers, to conduct a diachronic approach, and to investigate the cases and situations derived from the Heidegger's "dasein" term. Toprak and Ünlü try to combine urban geography and space syntax terms in their paper. They evaluate the reflections of socio-cultural background of the historical neighborhood and they concentrate on the morphological and the semantic changes of its heterochronic elements throughout the history.

The following twelfth article belongs to authors Erincik Edgü, Meray Ta-

luğ and Nezire Özgece. Their article is named "Divided Shopping: A Syntactic Approach to Consumer Behaviour". The article focuses on the comparison of consumer shopping behaviour in a historical city centre, Walled City of Nicosia, the capital of Cyprus Republic and TRNC. Despite the political isolation and segregation, Nicosia has gone through different physical and social development patterns in terms of land uses and functional changes as a divided city. The authors try to examine syntactic hints underlying the physical development concerning in three different periods of the city. Moreover, they search for he preferences of the pedestrians emphasizing functional and spatial patterns. The highlighted issue in their search is that the divided city has consumer behaviors and patterns as an outcome of the physical environment that it might be interpreted as part of the syntactical definitions.

The last thirteenth article has come from the authors Ayşe Özbil, Demet Yeşiltepe and Görsev Argın titled as "Modeling Walkability: the effects of street design, street-network configuration and land-use on pedestrian movement". This study involves comparative roles of urban design qualities of the street environment and street network layout on pedestrian movement. In their comparative study, preliminary findings imply that not withstanding the significance of certain aspects of the street environment, but they relate to local urban design qualities. They also defend the syntactic basis of this comparison, where the overall spatial configuration of street network may be a concrete role and may prove to be a significant variable for the description and modulation of pedestrian movement.

Consequently, the presented articles reinforce that we may be still circling around the problem or hopefully we are close to the target/ core. This special dossier may be a small step, but it is an important one for space syntax family. I consider this step as a more specific and a more architectural one that mainly sheds more light to our problems.

The aim of this dossier is to help new generations and to motivate them by giving a reason for inventing new methodologies in the future. The updated considerations in architectural design as part of the dynamic relations of the profession have been going on as slightly aparted from the functionalist-immanent foundations. I may apparently see this problem. So, the architectural design field should gain new methodologies concerning more involvement on transcendental interpretations, and more creative solutions in the design methodologies.

As I indicated in the first page, this dossier will be unique and precious in my suitcase. My suitcase will be slightly filled with this, but there is still a space for being full. Sometimes, I call my space syntax suitcase and I label it as "hope chest". If I translate it directly into Turkish, it is called as "çeyiz sandığı" that means "bride's chest". In

other words, all suitcases in our lives partly seem to be as the "chest for hope". I think this dossier will be the "suitcase for hope", especially for new generations.

When I come to the end of very after very long introduction, presumably as a very long preface, I honestly admit that I should thank to my colleague, first Dr. Mehmet Emin Şalgamcıoğlu who is always showing high motivation and sincerity for the preparation of this publication, and solving our problems in hundred ways and always standing side by side in my life. My other gratitude is to Feride Şener Yılmaz who is always courteous and patient in the preparation of dossier for publication even for the typesetting and for being as a cordially representative of the editorial board.