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Articles and Statements

Variegated Dynamic Functions as a Blend of Architectural Design and Contemporary Integrated Conceptualization

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Abstract

Fluid structures, dynamic, and organic architectural forms, presents a structure accompanied with functions as a fastening performance which have technologically evolved recent decades in perception of contemporary architecture, resulting with architectural structures that somehow challenge the perception of gravity? Currently, it can be argued that the contemporary dynamic integrated structures can be considered as a 'urban block' in itself, in which we encounter the condensed functional activities that contribute to the social sphere of human activities. The research objective of this paper is to address conceptual design strategies that relate to the multifunctional architectural structures in relation to urban density, variegated dynamic functions as a new style of urban living. The research methods consist of empirical study through spatial planning of Prishtina, and we argue that there is a great potential for further advancement of contemporary trends for the future architectural structures. In this paper, we conceptually conclude that the multifunctional building structures, represent a future methodical architectural design challenges, aiming into a creative process which blend in with many specific varieties, which are both possible and desirable.

Keywords: architecture, design, multifunction, contemporary, urban.

1. Introduction

Fluid structures, dynamic, and organic architectural forms, presents a structure accompanied with functions, a fastening performance which have technologically evolved recent decades on a fundamental ladder in perception of contemporary architecture, resulting with architectural structures that somehow challenge the perception of gravity? Architectural design concepts which result with functional symbiosis, even more, thorough contemporary coupling of totally different functions and elements, bringing constructive stability of structures! This merge, this symbiosis and variegated dynamic functions hybridization generates a new notion of architectural identity features, some different features which evolve and exist at new certain levels, linked to each other in a new conceptual form. Form and functions which originate a new style of living of urbanites in a future megacities.

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Integrated contemporary structures, does not have an authentic scale rate, their recognized organization and composition is directed to multidimensional evolving design concepts, allowing expansion of functions, not just limited to extension or abbreviation of functions. Phenomenon, which results in the dynamic fusion of functions, structures, programs that naturally flow into each other.

"Architectural structures and buildings, especially huge shopping mall structures must prerequisite a more hybridization of functional interrelations in contemporary structures. There is a huge traffic of potential customers in between shopping malls complexes, and urban regional communities, accompanied with different types of functional services such as hotels, airports, and mega terminal structures. The emphasis is on a consistent circulation, a mass movement and circumference." (Bajçinovci, 2016), and there is a difference between mixed-use and hybrid buildings (Fenton, 1985).

2. Material and Methods

Currently, it can be argued that the contemporary dynamic integrated structures can be considered as a 'urban block' in itself, in which we encounter the condensed functional activities that contribute to the social sphere of human activities, environment, and city day to day activities. Hence, those multifunctional contemporary structures represent a fundamental point of interest, common like, visual perception of high structures with vertical and horizontal dynamic features and attributes. Nowadays, the concept of value, the new trends for the city, we seek a new style of living with a new interpretation of architectural concepts. Variegated dynamic functions of architecture re-establishes a new symbiosis between architecture, urbanites and the city in a special way.

3. Results

In the Figure 1 and 2, are presented the possibilities of functional complex and dynamic compositions, variegated functions in terms of flexibility where functional zones and volumes of the structure can be added or removed as dynamically needed.

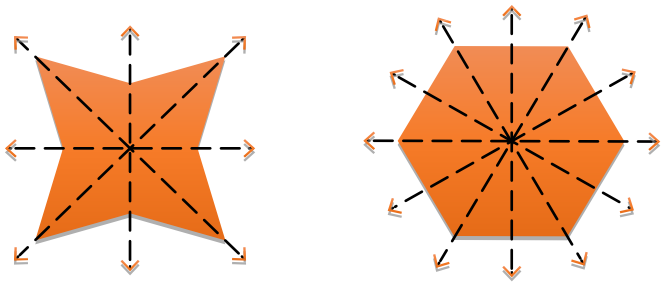


Fig. 1. Composition of surfaces in one spacious zone (Bajçinovci, 2017)

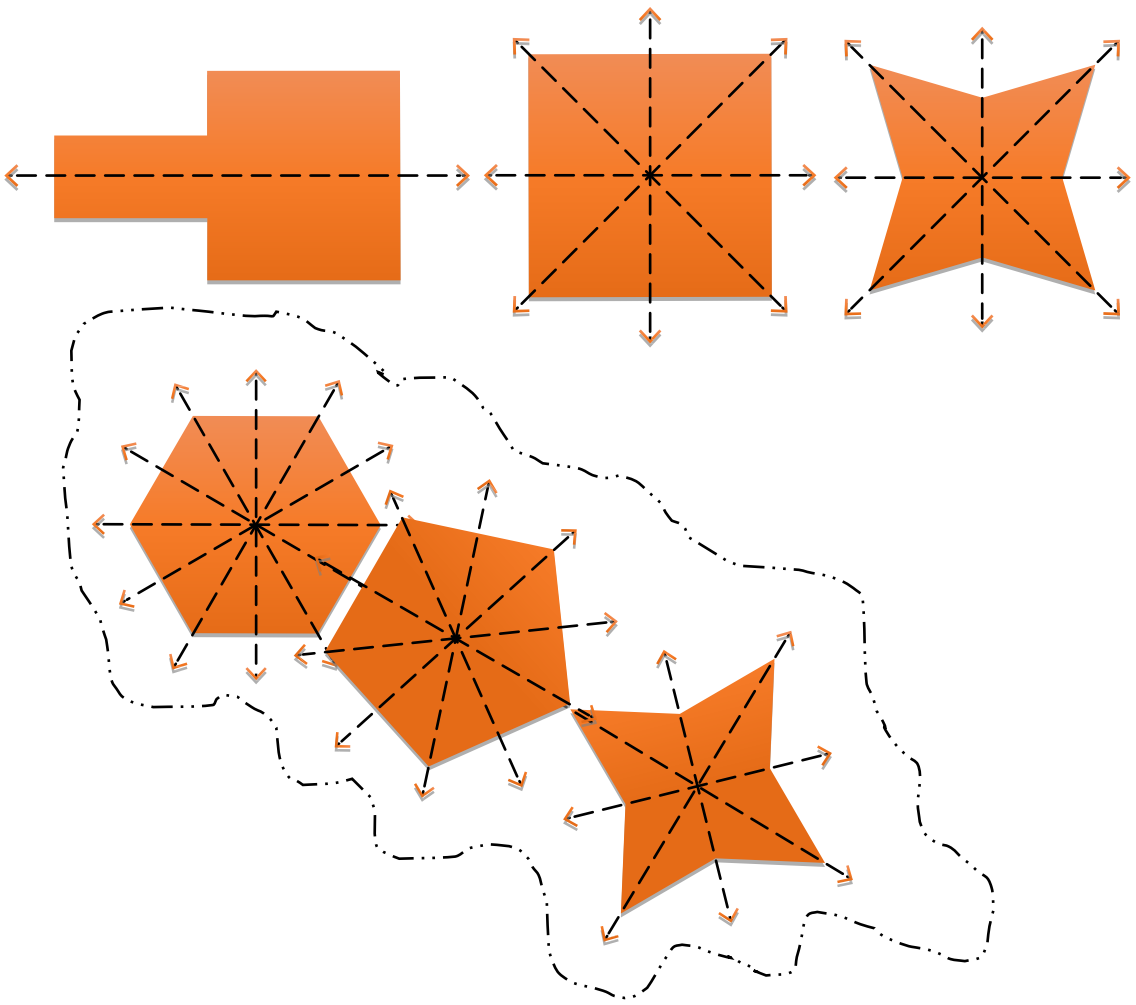
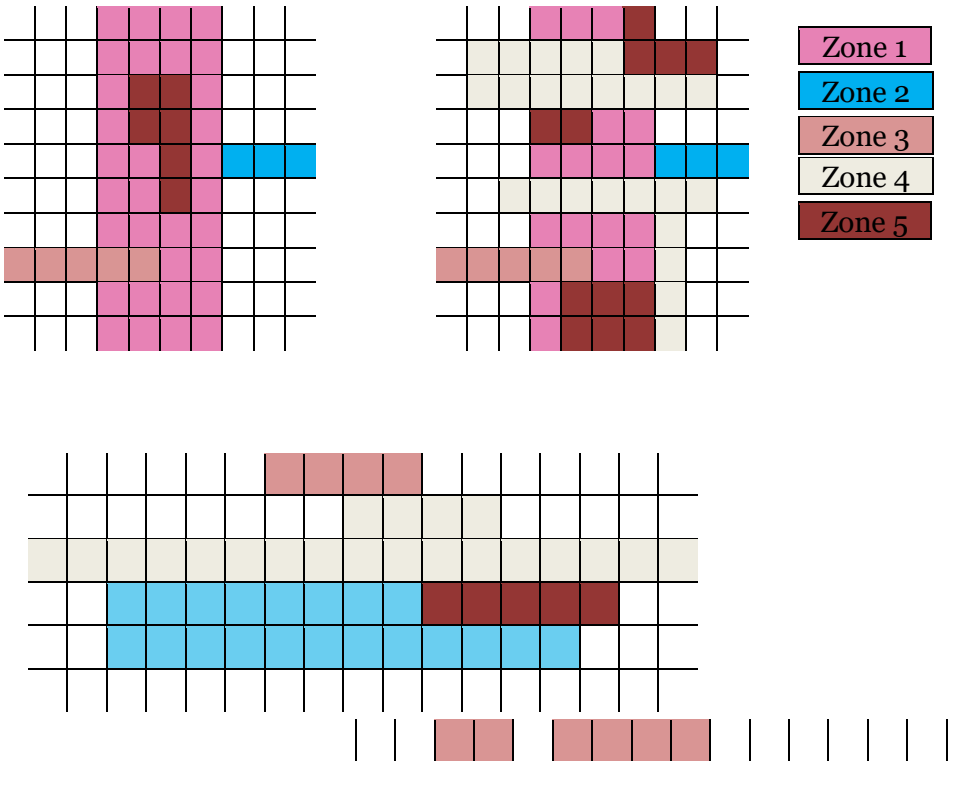


Fig. 2. Blending of zones into one multifunctional entity (Bajçinovci, 2017)



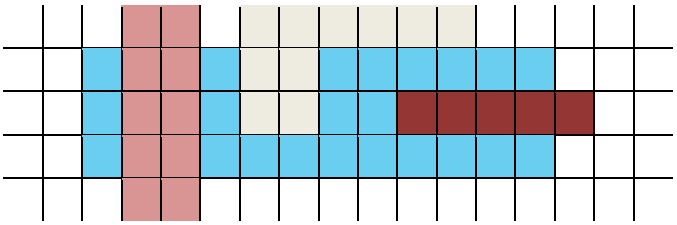


Fig. 3. Varieties of zones, forming multifunctional structures (Bajçinovci, 2017)

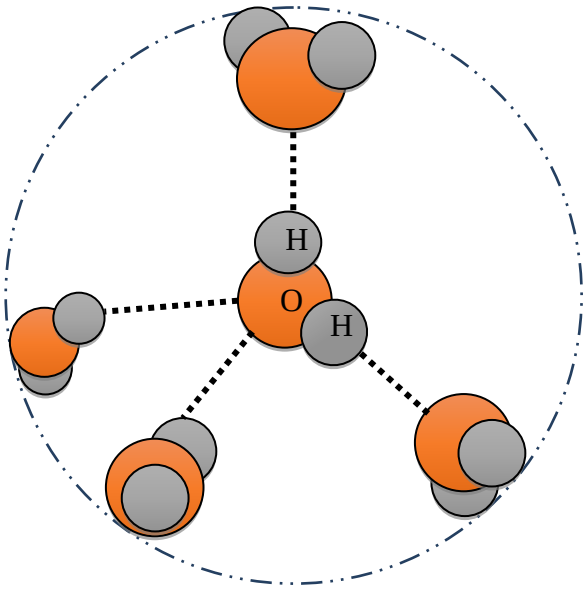


Fig. 4. Model of the hydrogen bonding, (water) (Bajçinovci, 2017)

Variegated dynamic functions goes beyond union functions, with contemporary structures really intended to respond three main concerns of the urbanites, and urban issues to the municipalities:

- Lack of land and their high prices, as a respond to high demands for land area and demands for greater urban density in order to establish a new structures and profit, also contributing to the regional development, community or city.
- Request for something functional specific, engaging architects in building structure programs which are tempting, actions and solutions trying to maximize flexibility of those multifunctional structures.
- Environment, build area zones, used land and existing structures with classic management approaches, also, costs for maintenances of community infrastructures, has forced many municipalities and private institutions to find new ways of building financing, or public private concessions.

Program shapes and forms as conceptual design (French, 1999) actions, nowadays are forcing many subjects to waive certain elements of their individuality? As multifunctional buildings now are being merged into the silhouette of the city together with a new urban life approach. Therefore, multifunctional structures are creating the symbiotic possibilities of having the 'city' within the city, with people at the centre of sustainable development (United Nations, 2011).

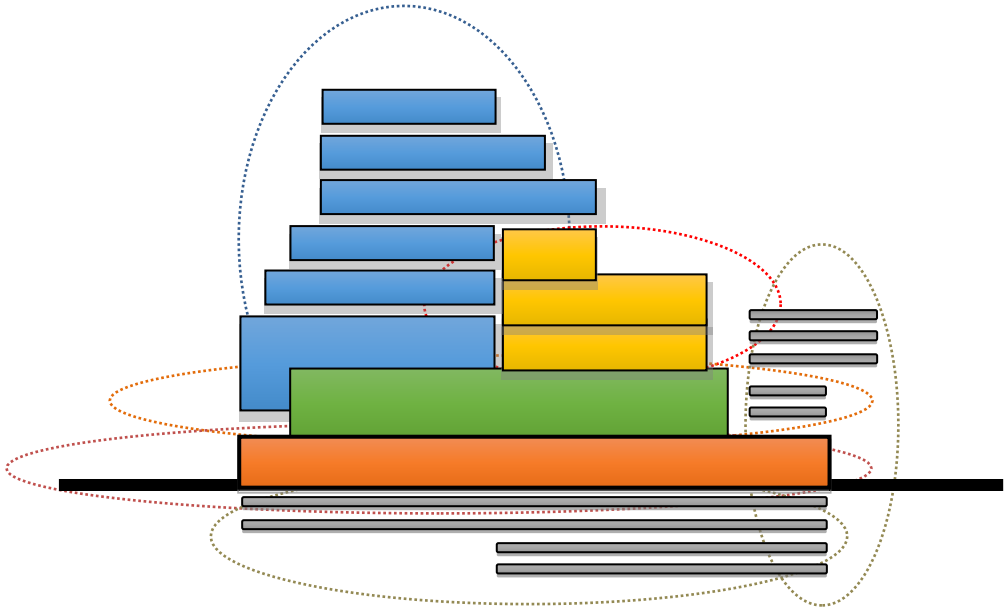


Fig. 5. Multifunctional structure, 'working' 24/7 (Bajçinovci, 2016, 2017)

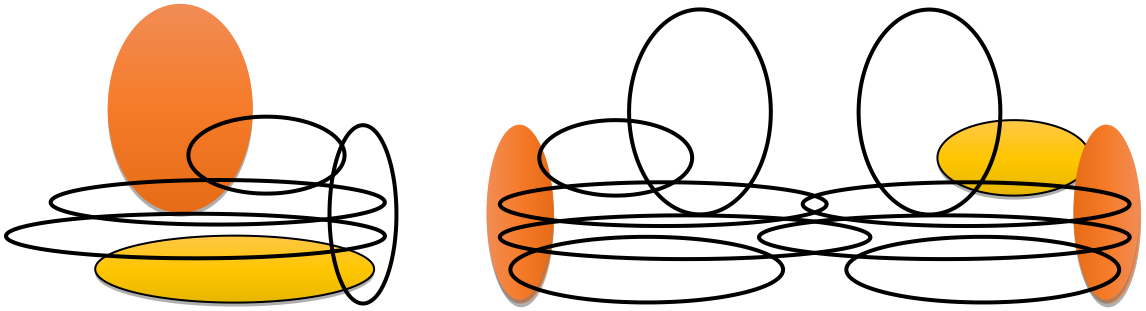
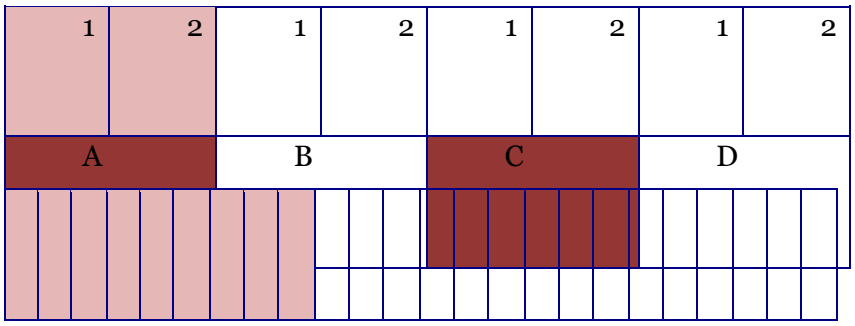


Fig. 6. Varieties of multifunctional concepts, 'working' 24/7 (Bajçinovci, 2017).

The shape and proportions of the structure must be interconnected in a proper relation in the composition of architectural design solution as presented in Figure 6. Moreover, function and forms must be clearly visually stated on the artistic perception on the design programme of future architectural structure. Constantly we are in research process aiming that structural configuration can be realized as a symbiotic consequence of functional solutions, and artistic interpretation which further indicate city evolution (Alfeld, 1995). Function, the ratio of verticality and horizontality, compositional structure configuration must be as the findings and result of a scientific study, an integrated transdisciplinary design research of "techno-cities" (Kargon, Molella, 2008).



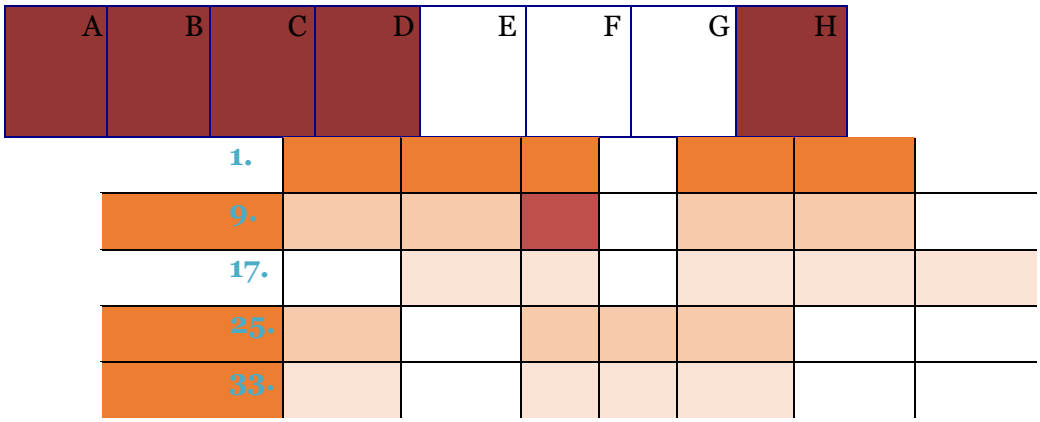


Fig. 7. Variegated of multifunctional zones, 'working' 24/7 (Bajçinovci, 2017)

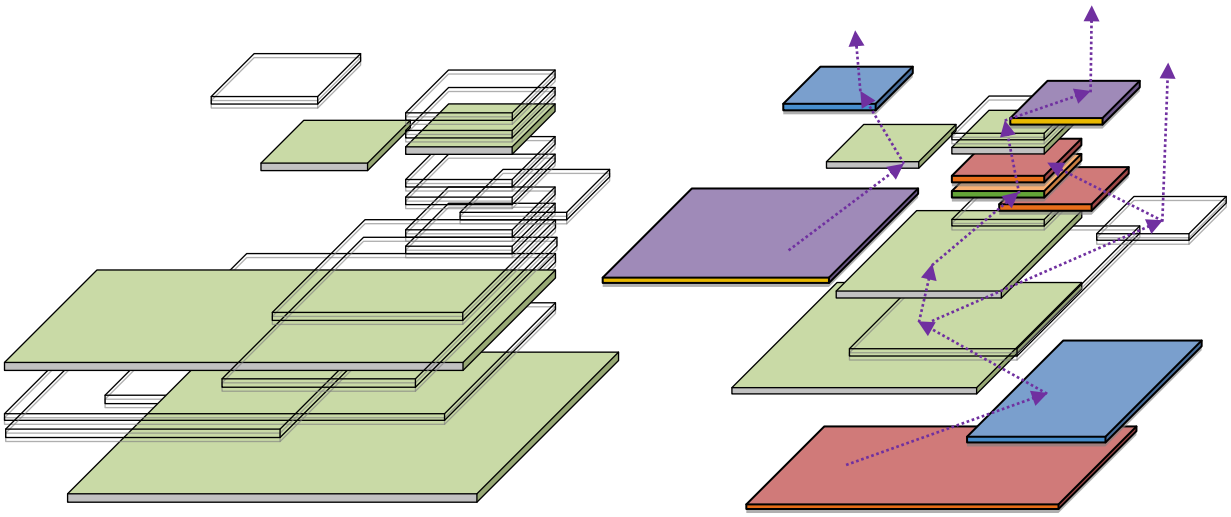


Fig. 8. Blending dynamic functions, 'working' 24/7 (Bajçinovci, 2017)
Fig. 9. Decomposition of functional zones in verticality (Bajçinovci, 2016, 2017)

The research objective of this paper is to address conceptual design strategies that relate to the multifunctional architectural structures in relation to urban density as presented in Figure 8 and 9, variegated dynamic functions as a fastening performance of architectural design and contemporary integrated structures, a new style of urban concepts, and environment impact in relation to the new contemporary design concepts. The research methods consist of empirical study through spatial planning of Prishtina, with significance to the upcoming decades on urban design and spatial planning, moreover, this research was accomplished through literature review.

4. Discussion

The architectural design in his original nature of artistic creative activity, represents the comprehension of intellectual creative process, which especially are attributed to this study, architectural design challenges presented in this paper. This paper is intended to facilitate understanding of architectural contemporary design and achieving functional efficiency in the process of the design, for multifunctional contemporary structures. Respectively, to initiate a scientific understanding of integrated transdisciplinary design strategies, and autonomous goals (Samuelson, 2008). The effectiveness of the architectural design evolution, are resulting on higher quality of research models, considering the implementation of dynamic design concepts for megastructures. We argue that those evolutive design strategies greatly reduces the possible errors in the design process.

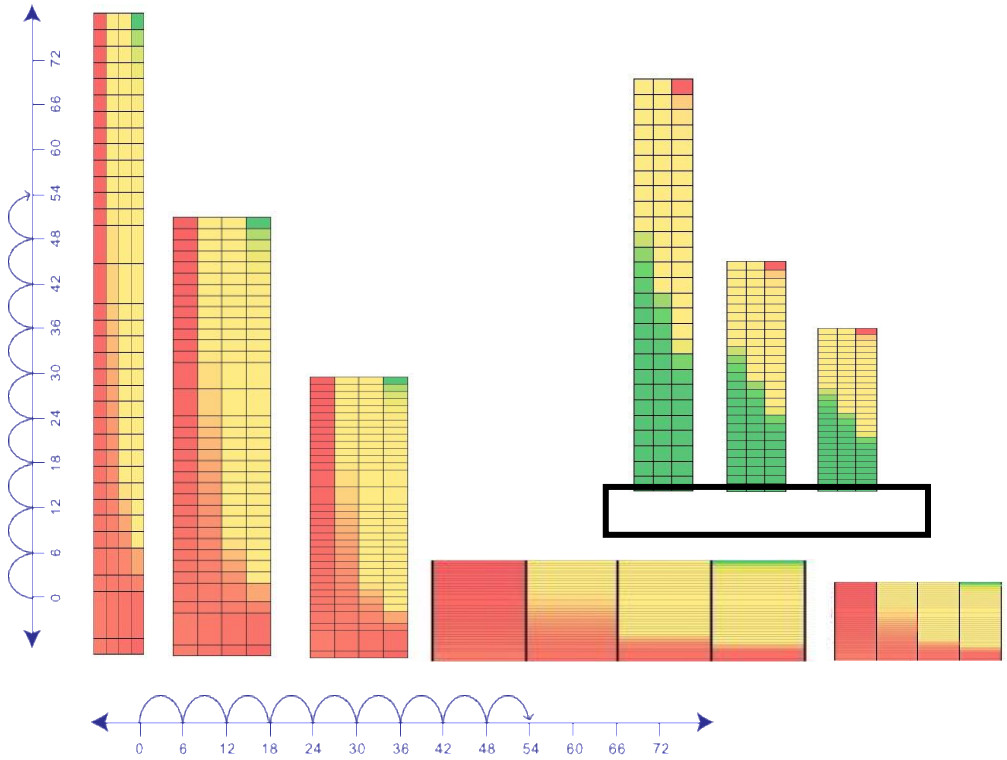


Fig. 10. Variegated dynamic functions, models of structures (Bajçinovci, 2017)

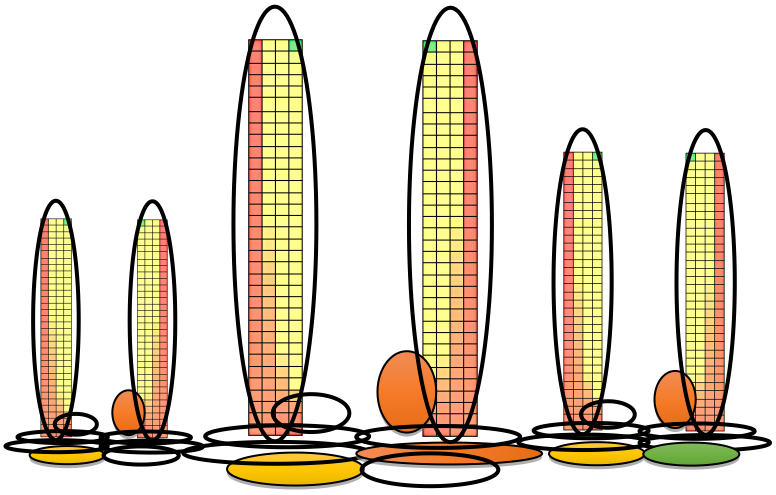


Fig. 11. Variegated dynamic multi-megastructures (Bajçinovci, 2017)

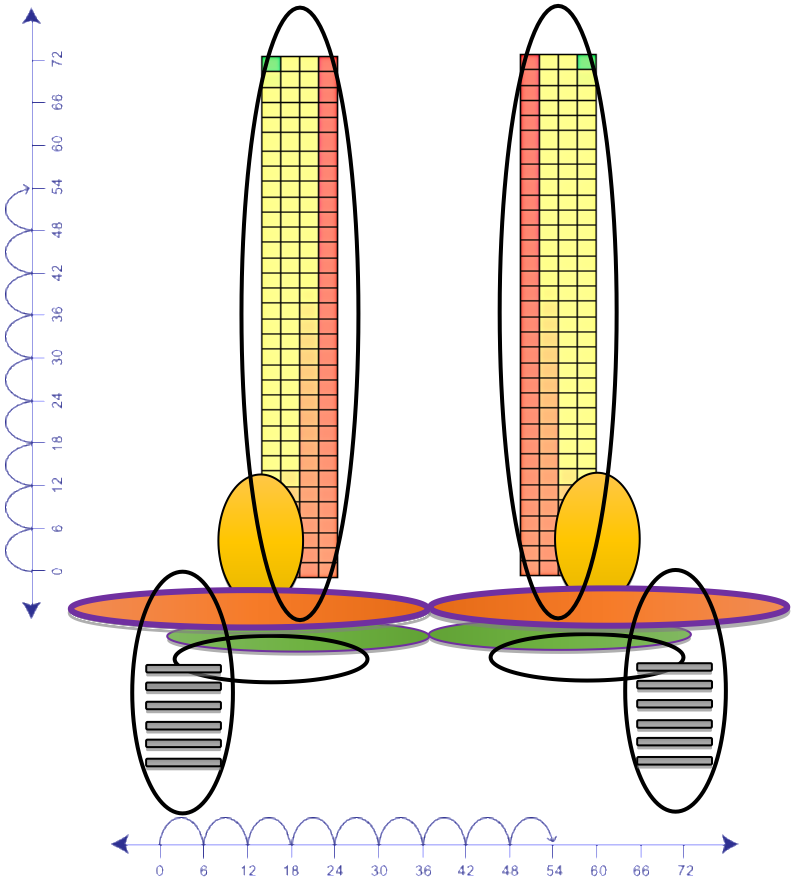


Fig. 12. Interdependence of variegated dynamic structures (Bajçinovci, 2017)

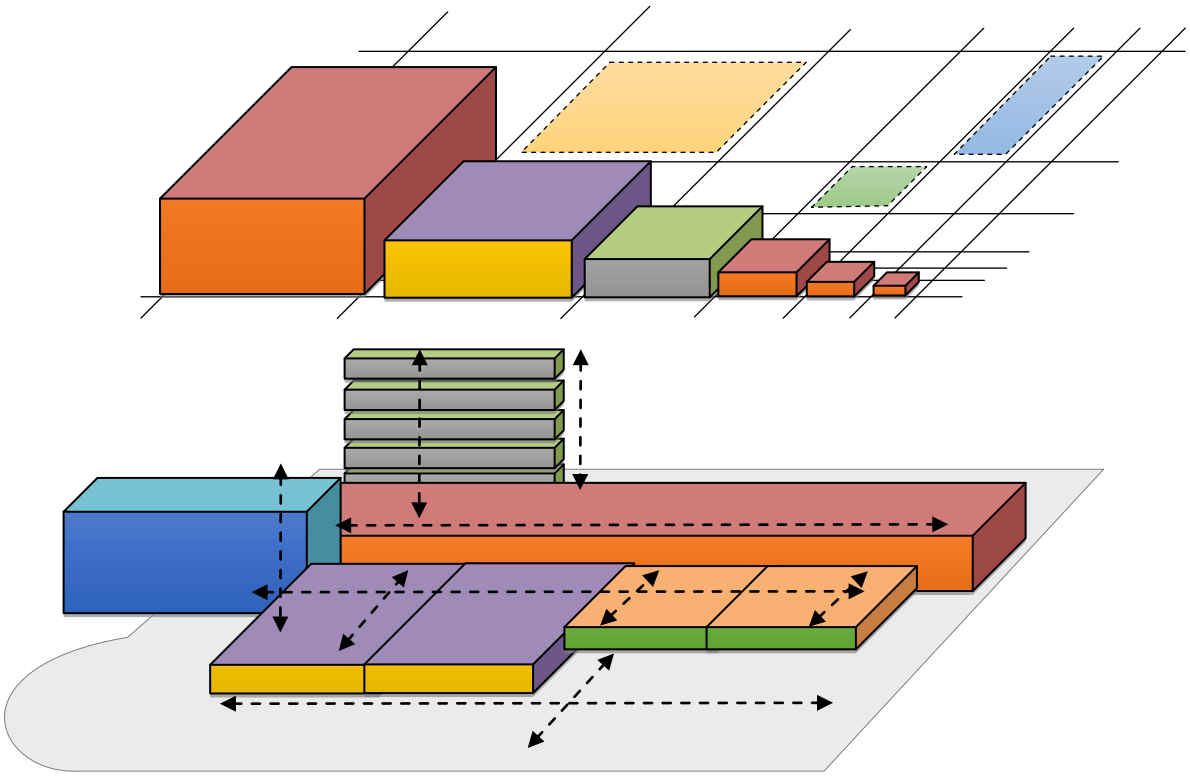


Fig. 13. Forming 3D variegated dynamic functions (Bajçinovci, 2017)

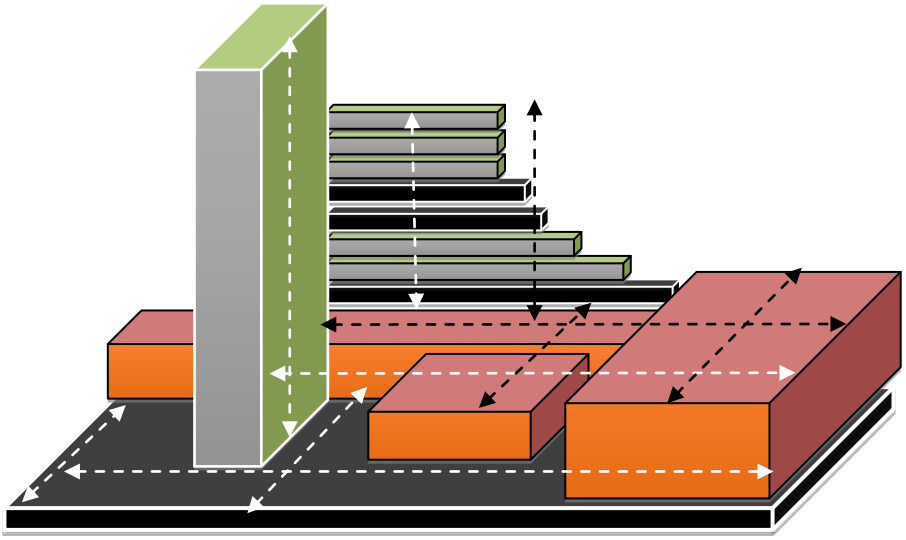


Fig. 14. Interrelations of forming 3D variegated functions (Bajçinovci, 2017)

Multi-functional structures are architecture and urban development that "blends residential, commercial, cultural, institutional, or industrial uses, where those functions are physically and functionally integrated" (Thrall, 2002), furthermore, "well-designed neighbourhoods and communities are places where people need each other" (Orr, 2002).

5. Conclusion

Variegated dynamic functions as a fastening performance of architectural design and contemporary integrated structures, represents structures which are the possible future of architectural design concepts. Hence, those contemporary functionalities of the new life style will be manifested with many social varieties, thus, we argue that there is a great potential for further advancement of contemporary new design trends of future architectural structures, with variegated dynamic conceptual objectives, mentalities, and urban habits? Therefore, we argue that the urban culture, and human development will need some new fundamental transdisciplinary findings, as a respond to the future urban issues! The preferred conceptual design findings presented above, are quite evaluative as to be used for further development, and as a new study. In this paper, we conceptually conclude that the multifunctional building structures, represent a future methodical architectural design challenges, aiming into a creative process which blend in with many specific varieties, which are both possible and desirable.

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