Incorporating Spontaneity in Urban Disciplines

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Abstract

Spontaneity is a term with a wide range of meanings in the architectural and urban context. In principal, two predominant stereotypes of spontaneity have emerged, one related to "informal" architecture, recognized as a condition of material scarcity, and the other to urban actions performed without premeditation, which have been commonly identified as "unplanned". In many disciplines such as sociology, art, music, literature and natural sciences, spontaneous behaviour is largely viewed as a positive quality, identified as a natural process or act. In an architectural context, however, spontaneity is often associated with poor, deprived and dilapidated urban environments. Therefore, the objective of this paper is to determine the significance of spontaneity in the architectural and urban realm as well as its incorporation in the development of the urban landscape. The first part of this paper will focus on the definition of the term and its recognition in architecture, whereby spontaneity is portrayed as a dynamic, open and unmediated concept. Additionally, taking into account the stereotypical interpretations of spontaneous architecture as informal or unplanned, an epistemological paradox will be revealed in the interaction between the architectural project and its realization. By considering the practical example of Skopje, spontaneity is interpreted as the carrier of the city's genetic material and hence incorporated in the methodology for the urban development of Skopje city.

KEYWORDS

spontaneity, informal, paradox, Skopje, sustainable urban development

1. Introduction

The term paradox, meaning a statement or context that is contradictory to an existing belief or opinion, is often used to provoke critical and innovative thinking. For example, in the late 1500s, Miguel Cervantes used this tool in his famous novel "The Ingenious Gentleman Sir Quixote of La Mancha" to illustrate with charm and humour an extraordinary world that is, in its essence, sad. The metatheatrical adventures of the main characters, the pitiable yet sweet Don Quixote and Sancho Panza, who are physically and verbally abused during their adventurous journey, challenges the reader to be amused and entertained by events that are in fact malicious and cruel. Similarly, the phenomenon of spontaneity may engender a comparable experience in the urban context. Spontaneity is a phenomenon that is simultaneously desired and rejected in planning practice. Already in the 1950s, Giedion (1954) recognized two different architectural schools, one in favour of and the other against the notion of spontaneity. The debate on this subject continued during the 1960s and 1970s with many theoreticians, such as Jane Jacobs, Christopher Alexander, Kevin Lynch and Robert Venturi, arguing that the planning principles of modern architecture tend to disregard the cultural and social circumstances of neighbourhoods. In their opinion, such principles were rigid, monotonous and indifferent to the complexity of the urban environment. Over past decades, studies on informal settlements have also tackled the paradoxical subject of spontaneity to reveal different theoretical positions. On the one hand, viewing informal urban areas around the world as an open concept of material practices and forms, we can be amused and charmed by the openness, immediacy, colourfulness and vibrancy of their life. Yet, no matter how appealing these interpretations are, there remains a bitter feeling in regard to the development of these urban phenomena. Is it enough to simply make such areas safer, aesthetically attractive and infrastructurally functional? Or is it possible for these neighbourhoods to take part in the "formal" city milieu? Because the current meaning of the term *informal settlements* seems overly narrow[1] and does not cover many of the

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1 Derived from United Nations. (2016). Habitat III Issue Papers. Issue paper 22: Informal settlements. Informal settlements are residential areas where:

a) inhabitants have no security of tenure vis-à-vis the land or dwellings they inhabit, with modalities ranging from squatting to informal rental housing;

b) the neighbourhoods usually lack, or are cut off from basic services and city infrastructure;

c) the housing may not comply with current planning and building regulations and is often situated in geographically and environmentally hazardous areas.

In addition, informal settlements can be a form of real estate speculation for urban residents at all income levels, whether affluent or poor. Slums are the most deprived and excluded form of informal settlements; often located in the most hazardous urban land, they are characterized by widescale poverty and large agglomerations of dilapidated housing. In addition to tenure insecurity, slum dwellers lack a formal supply of basic infrastructure and services, public space and green areas, and constantly face the threat of eviction, disease and violence.

phenomena present in the contemporary urban context, the term *spontaneity* appears even more legitimate and worthy of deeper study. Hence, spontaneity as a feature and characteristic recognizable in both "formal" and "informal" urban environments can be additionally regarded as a common value and overall framework for future sustainable urban development.

To determine the significance and underline the potential of this phenomenon in an architectural and urban context, the present paper reports on the following aspects:

–Defining and recognizing spontaneity: By contrasting research in urban studies with that of other scientific fields, spontaneity will be highlighted as a dynamic, open, unmediated concept that can be recognized in both formal and informal urban structures;

–Understanding and interpreting spontaneity: The relationship between the process of design and spontaneity will be addressed by means of a literature review. The "project" in an architectural and urban context will be observed for its spontaneous aspects and, vice versa, spontaneity will be observed in the same context as planning. Hence, instead of relating it to the stereotypes "informal" and "unplanned", spontaneity is interpreted as the realization of an unwritten project;

–Incorporating spontaneity: By applying operational methodology for urban development in the case of Skopje, settlements with spontaneous characteristics will be incorporated within the planning process using interlacing scales, underlining their potential role in overall city development.

2. Defining and recognizing spontaneity

What is spontaneity in an architectural and urban context? Certainly, it has many meanings depending on the circumstances and the theoretical position one might take. Nevertheless, due to its etymological root signifying an unplanned action or natural phenomena, natural impulse or tendency, or in a wider sense 'growing naturally' (Oxford dictionaries 2019), it is usually associated with *unplanned urban phenomena*. While such phenomena predominantly have a negative connotation in urban disciplines, in other disciplines such as sociology, art, literature or the natural sciences, spontaneity is mostly viewed as a positive characteristic.

Psychologists see spontaneity an important feature of social relations between humans. Specifically, spontaneity allows us to perceive the naturalness of an individual's character by emphasizing its true inner-nature rather than by presenting "artificially" intended or premeditated action. Furthermore, in the field of sociology, spontaneity is often interpreted as the engine of progress in social structures. According to Jacob L. Moreno, "Spontaneity

and creativity are the propelling forces in human progress, beyond and independent of libido and socioeconomic motives [that] are frequently interwoven with spontaneity-creativity, but [this proposition] does deny that spontaneity and creativity are merely a function and derivative of libido or socioeconomic motives" (Moreno 2011). Many interesting examples can also be observed in art, especially the paradigm known as reverse or Byzantine perspective (Dergowski, Parker & Massironi 1994), which was commonly used for presenting biblical scenes in Byzantine painting. Although the perspective of the space was inaccurately constructed in a geometrical sense, the observer becomes aware that the spirituality of the illustrated scenes is intended to be experienced and perceived spontaneously. According to the Russian theologian, philosopher and electrical engineer Pavel Florensky the reverse perspective is the most direct pathway for man's spiritual eye to look at or meet the eye of God (Florensky, Misler & Salmond 2002). Indeed, may artists continued to ignore the development of linear perspective in painting in order to construct geometrically "incorrect" space, which, however, offered an imaginary "space in-between", a world at the intersection of reality and possibility (Tagliagambe 2008). Finally, one of the most profound and accurate definitions of spontaneity is provided by physicists, who interpret it as a state of determinate chaos (Prigogine & Stenger 1984). Spontaneous behaviour is described as a condition of local instability and global stability, as demonstrated in the Lorenz attractor (see Fig. 1). Although the trajectory of a particle is unpredictable, globally the behaviour is recognizable. In other words, while each drop of the wave is moving chaotically and turbulent, together they create perfect order.
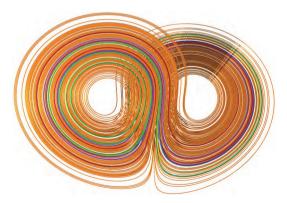
Figure 1. The Lorenz attractor.
Although each trajectory is unpredictable, globally the behaviour is recognizable
From: The Lorenz Attractor, a Paradigm for Chaos, Etienne Ghys

Similarly, spontaneity in an architectural and urban context can be defined as a dynamic, open, unmediated concept which, while unpredictable at the small scale, produces typical or recognizable figures at the larger scale. Such figures can be observed in many informal urban forms. They are usually composed of recycled materials and articulate various expressions and styles, commonly proliferating on a territory following a set of informal rules. The nomad settlements that appear in various forms around the globe, such as in the Far East (Ebrahim 1984) or the Romani nomads in Europe (Commissioner for Human Rights 2012), are only a few examples. One particular case is that of cross-border areas, especially between countries with disparate socio-economic conditions. The recycled transfer of building material and immigrants between the Unied States and Mexico has been extensively described in a study on this so-called "political equator" (Cruz & Boddington 1999). As conceptualized by Cruz and Boddington, the study takes a comprehensive look at the cross-border cities of San Diego in the USA and Tijuana in Mexico, arguing for the development of socio-economic relations rather than focusing on traditional architectural projects as a pathway to urban development. Furthermore, there is currently a global debate on slums, shanty towns or favelas as informal settlements representing a "set of conditions withsocial, political and cultural effects, which resist the fixing of their values by fiat" (Rao 2006) (see Fig. 2).

Today 828 million people live in slums, with this number projected to rise in the coming decades (UNDP 2019). It is estimated that 95% of urban expansion will take place in the developing world, and by 2050 the majority of the world's population will be urban residents (United Nations, Department of Economic and Social Affairs, Population Division 2014) (UNDP 2019). In addition, some forecasts suggest that large areas of cities will be informal (Burdett & Sudjic 2011). Other kinds of spontaneous informal urban phenomena are reported such as "abusive urbanism" (Vöckler & Schweizerisches Architekturmuseum 2008), described as an emergent state of architectural voluntarism.

Figure 2. **[above]** 23 de Enero district, Caracas
Grahame Shane also recognized specific kind of informal processes which emerge as a disadvantageous outcome of the typological approach to instruments of planning. In the case of Caracas, Shane discerned a third typological shift in cities, where informal settlements eradicated in the past once again invade free areas between the typological blocks. (Caracas growth maps © Alfredo Brillembourg and Humbert Klumpner/U-TT, 2003, aerial view of 23 de Enero © Pablo Souto/U-TT). From: Urban design since 1945: a global perspective. David Grahame Shane, 2011

[below] Typology planning and proliferation of informal settlements. The example of Caracas, Venezuela Diagram by Igor Noev

Then we can observe areas of morphological discontinuity defined as "urban cracks" (Clemente 2005), while contemporary "urban sprawl" as the widespread incursion of buildings into the landscape often contains unplanned residential quarters following one another without any sense of continuity (see Fig. 3). Nevertheless, the general condition by which such informal settlements can be recognized is the predominance of the private over public space, the ambiguity of public space, the impractical dimensions of road systems, insufficient infrastructure and intermittent public services (Conde & Magalhaes 2010).
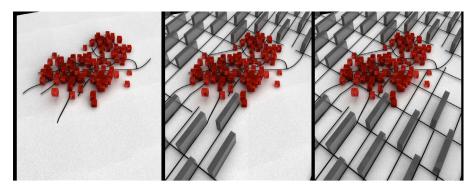
Figure 3. Urban cracks

Historic fabrics embraced within city growth. Phases of the planned city that accommodate historic fabric to create vague connections. Diagram by Igor Noev

Interestingly, there are other instances where certain formal urban figures have been regarded as spontaneous. For example, "unsigned" architecture (Rudolfsky 1964), defined as various architectural and urban settings of timeless value created by ancient unknown authors. Correspondingly, historical "traces" such as old forms of land ownership appear within the formal urban fabric as "path matrices" for generations of new buildings (De Rubertis 1998). Additionally, urban phenomena of supermodernity such as "non-places" (Augé 1995) and "placeless typologies" scattered over a territory with locations chosen for banal motives (Gregotti 1990) are the end result of individual projects with no concern for the urban whole (Secchi 1991). Finally, there are transformations and actions caused by "informal urban actors" such as citizens, emerging from a non-planned, spontaneous "urbanity" (Groth & Corijn 2005) to participate in all phases of realization and transformation of the project. Hence, transformations such as adaptations, appropriations, modifications, additions, advertisements, overhangs, laundry, etc. represent spontaneous individual actions that shape the environment as well as the human process of perceiving the urban landscape.

3.   Understanding and interpreting spontaneity

Beyond the stereotype of being *informal*, or not-formal, spontaneous urban phenomena are often interpreted using other dichotomies. The *un-planned* is one commonly used notion to tackle the design process and the complex relation between the "project" and its realization. This undoubtedly includes many spontaneous aspects. In fact, in previous decades many theoreticians have argued that any "project" related to architectural and

planning disciplines is not a rigidly pre-determined figure. Instead, it includes a range of unplanned processes and experiences, and thus is liable to change, transformation, adaptation and mutation during the planning process and the timeframe of its existence. The first significant revision in the comprehension of spontaneity as part of the urban project was made at the 1951 CIAM VIII conference, entitled "The Heart of the City". The main subject of the conference was the "heart" – or "core" – of the city, and the idea of finding the right balance between the world of the human, as informal actors, and the world of the community. Due to their spontaneous character, historic fabrics such as the city's original core are interpreted as a carrier of the underlying genetic material. The conference also created an awareness of the existence of two different schools of architecture (McCallum 1954), one that fears "wilderness" or unregulated nature, and the other that is inspired by the significant feature of spontaneity within the historic fabric as a carrier of the city's genetic material (Rogers 1952). For the first time, the need was recognized to turn people from passive viewers into active participants (Giedion 1954). From this moment on, numerous critiques were voiced regarding the over-simplification and over-determination of the conventional planning process.

Taking postmodernism as a continuation and criticism of the modernist movement (Habermas 2005), the critique in the last century of the postmodern opposition towards the modernist viewpoint opens up a remarkable perspective on spontaneity. For instance, C. Rowe and F. Koetter presented two different postmodern approaches that addressed critiques of Le Corbusier's unrealized Ville Radieuse (Rowe & Koetter 1978). While the architectural practice Superstudio created a "free-from-object platform" intended to function as an open space for spontaneous improvisation, Robert Venturi proposed a designed picturesque surrealist stage-set and architectural project that defined something more than just a functional object. The background to this debate is certainly the relation between the *previsions* that are made within a design process and the inability to make precise *predictions* about the future. Hence, according to Gregotti, the reality of the architectural form is comprehended as an experience of modification (Gregotti 1986). In this respect, the project and the reality are two different, incompatible universes (Alexander 1965), considering both the formal and informal urban context. According to Alexander, the project (which is essentially a tree-like structure) is destined to transform itself spontaneously into a semi-lattice structure. Recently, introducing the concept of the "Open City" into this framework, Richard Sennett (2006) was able to gather together many ideas that introduced spontaneity as an answer to the "superficiality of urbanism", a subject recognized and profoundly studied by Jane Jacobs (1961). She passionately advocated the idea of the spontaneous city as an open concept, arguing

that deprived neighbourhoods are chaotic and unsafe, in contrast to ordered and planned neighbourhoods, which are deemed valuable and safe. In her opinion, social and visual forms mutate through chance variation in the open city just as in nature, enabling people to better absorb, participate and adapt to change. Therefore, opposite to the overdetermined "closed" city concept, Sennett suggests an "open" system that incorporates principles such as porosity of territory, narrative indeterminacy and incomplete form, that would allow the city to become democratic not in a legal sense, but as physical experience.

Returning to the dichotomy that sees post-modernity as modernism with additional acceptances, David Harvey (2008) offers a table of stylistic oppositions between modernity and post-modernity. This list of dichotomies can help us understand how spontaneity is related to its opposite, i.e. pre-meditation (see Fig. 4). In this consideration, spontaneity is indeed an antonym of the "project", which leads to the interpretation of being "un-planned". However, the accuracy of this interpretation in architecture is also questionable. Certainly, an architectural object or an urban structure cannot arise suddenly and sporadically, nor are these naturally self-growing organisms. Indeed, even a simple construction such as a nomad tent must be planned at some level. Therefore, instead of describing them as "unplanned", spontaneous phenomena in an urban context can be comprehended as the materialization of an unwritten project. This statement, however, implies another contradiction, namely the epistemological paradox of planned spon-taneity (see Fig. 5). Nevertheless, the rule and the model are integral to the materialized, built environment, and hence are still two principal spatial matrixes required for its proliferation (Choay & Bratton 1997). Therefore, if we explain spontaneity as a form of dichotomy, it is hard to contrast this with formality or planning; instead, we can turn to a model that for Chaoy and Bratton is understood as "a critical approach to a present reality, and the modelling in space of the future reality …". Accordingly, several distinguish-ing features provide a provisional characterization of spontaneity in the ar-chitectural context: Firstly, there is no signed professional author or referent space model determining its constructive form. Secondly, it is a materializa-tion of an unwritten project and thus not preceded by a pre-studied model. And finally, it is temporarily or permanently present at a particular location, and subject to the constraints of time and change.

Modernism	Postmodernism	Premeditated	Spontaneous
Romanticism / Symbolism	Dadaism / Paraphysics	Project	Case
Form	Antiform	Hierarchy	Uniformly
(Conjunctive, Closed)	(Disjunctive, Open)	Concentration	Dispersion
Purpose	Play	Formal	Informal
Design	Chance	Meaning	Significant
Hierarchy	Anarchy	Type	Mutant
Mastery / Logos	Exhaustion / Silence	Regular	Irregular
Art Object / Finished Work	Process / Performance	Tree	Semi-lattice
Distance	Participation	Rule	Routine
Creation/ Totalization / Synthesis	Decreation / Deconstruction / Antithesis	Central	In between
		Multiply	Generate
		Empiric	Practice
Presence	Absence	Modern	Postmodern
Centring	Dispersal	Determinate	Hypothetical
Genre / Boundary	Text / Intertext	Prevision	Genuine
Semantics	Rhetoric	Simple	Complex
Paradigm	Syntagm	Art	Naive art
Hypotaxis	Parataxis	Order	Chaos
Metaphor	Metonymy	Made	Born
Selection	Combination	Plain	Metaphor
Root / Depth	Rhizome / Surface	Real	Surreal
Interpretation / Reading	Against Interpretation / misreading	Ordinary	Extraordinary
Signified	Signifier	Usual	Exceptional
Lisible (Readerly)	Scriptible (Writerly)	General	Particular
Narrative / Grande Histoire	Anti-Narrative / Petite Histoire	Method	Proliferation
		Design	Arrangement
Master Code	Idiolect	Desire	Impulse
Symptom	Desire	Hypothesis	Need
Type	Mutant	Plan	Urge
Genital / Phallic	Polymorphous/ Androgynous	Interpretation	Understanding
		Author	Origin
Paranoia	Schizophrenia	Monument	Temporal
Origin / Cause	Difference-Difference / Trace	Solid	Scarce
		Stabile	Variable
God The Father	The Holy Ghost	Professional	Voluntary
Metaphysics	Irony	Top-Down	Bottom-up
Determinacy	Indeterminacy	Utopia	Dystopia
Transcendence	Immanence	Either-or	Both-and

Figure 4. **[left]** Stylistic oppositions between modernity and post-modernity.
From: The condition of postmodernity: an enquiry into the origins of cultural change. David Harvey 1990

[right] Stylistic oppositions between premeditation and spontaneity.
Figure by Igor Noev

INCORPORATING SPONTANEITY IN URBAN DISCIPLINES

Figure 5. Le Baiser de l'Hôtel de Ville (The Kiss by the Hôtel de Ville). Photo by Robert Doisneau

An example of the intriguing nature of spontaneity can be noted in the case of the famous photo "The Kiss" taken by the French photojournalist Robert Doisneau near Hôtel de Ville in Paris. The reputation of this "most romantic photo in the world" was compromised when professional actors Françoise Delbart and Jacques Carteaud admitted they had been hired by Doisneau to do a "spontaneous" kiss (Poirier 2017). Although the photograph was staged (implying that the participants were acting), this photo is still hugely significant for the city of Paris.

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4.   Incorporating spontaneity: The case of Skopje

The urban development of Skopje, the capital of North Macedonia, reveals an interesting paradox that has placed the city in a "vicious circle". As the authors of the most significant urban development proposals drew up new urban narratives, they often ignored the local context as well as the legacy of preceding projects. These circumstances led the proposals to be only partially realized and even, in some cases, completely abandoned, turning the city's contemporary urban landscape into a collage of various incomplete models (Bakalcev 2011). Within the existing urban fabric, some historical neighborhoods are wedged between the fragments of realized urban projects, representing signs of memory and the resilience of spontaneous urban processes. The areas (shown in Fig. 6) are Novo Maalo, Madzir maalo, Krnjevo, Topaana and Dukjandzhik Maalo. They are examples of extraordinary urban phenomena with identities which cannot be simply defined as either formal or informal. On one hand, significant parts of these settlements are today "formalized", meaning that they are legally owned by their residents and formally considered in detailed urbanistic plans. On the other, dating as they do from the time of the Ottoman Empire (Kaceva, Hristova & Gorgiovska 2002), they are not designed and structured according to some formal urban plan but rather obey the "bottom-up" principle of urban structuring. Furthermore, since all the previous urban design proposals for Skopje envisioned the com-

plete eradication of such areas, they were disregarded and excluded over the years. Consequently, they appear as they do today, dilapidated and disjoined from the urban landscape. Nonetheless, the city authorities should take up the challenge to develop and to rethink these areas, thereby making the city more inclusive, resilient and sustainable. Inevitably, this means tackling the question of their identity and significance, especially considering the historical context.
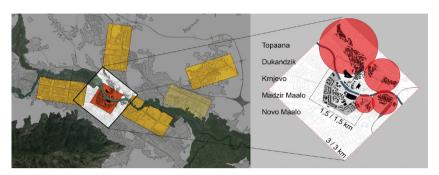
Figure 6. Fragments between fragments. Case of Skopje: Extraordinary neighbourhoods appearing between the planned urban fragments. Illustration by Igor Noev

The ancient city of Scupi (Colonia Flavia Scupinorum) was founded in the first century AD. During the turbulent ancient and medieval ages, which were afflicted by periodic war, the fall of empires as well as devastating earthquakes (Jovanova 2008), the city was ruined and abandoned several times. Finally, at the end of the 14th century, it became part of the Ottoman Empire. Topographical data and existing property lines suggest that it arose as a "traditional city" structured by irregular pattern of narrow streets following the "paths matrix" (Caniggia and Maffei 2008). The city was divided into several districts, generally reflecting the ethnic and cultural makeup of the local residents.

After the demise of the Ottoman empire, the urban landscape of Skopje faced three significant typological shifts in the 20th century (Noev 2013) (see Fig. 7). The first shift, which can be called "*de-facto to de jure*", appeared in the project proposed by Josif Mihajlovic in 1929, designed according to the 1914 masterplan of Dimitrije Leko. This project offered a new concept for the formation of public spaces (Korobar 2007), emphasizing an artistic approach to urban design aimed at achieving a picturesque city image. Accordingly, the significance of the spirit of the place was seen as a key element of the new city iconography.

The second shift refers to the project of Ludjek Kubes from 1948, which in contrast to that of Mihajlovic, proposed a new model for Skopje accord-

ing to the concept of the "functional city" as presented at CIAM IV of 1933 and Le Corbusier's model of Le ville radieuse (Le Corbusier 1935). At that point in time, Skopje abandoned the previous model that celebrated the idea of the "genius loci" (Norberg-Schulz 1980) and, following the principles of the modern movement, started to praise the spirit of the time. The narrative interpreted the city "as a machine" (Lynch 1981) and foresaw a new East-West axis of development. The city was divided into residential, administrative, industrial and recreational zones, while typological extensions mainly occurred along the riverside.
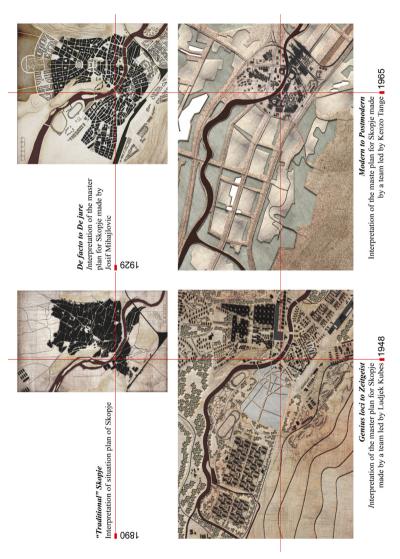

De facto to De jure
Interpretation of the master plan for Skopje made by Josif Mihajlovic
1929

Modern to Postmodern
Interpretation of the maste plan for Skopje made by a team led by Kenzo Tange ▪ 1965

"Traditional" Skopje
Interpretation of situation plan of Skopje
▪ 1890

Genius loci to Zeitgeist
Interpretation of the master plan for Skopje made by a team led by Ludjek Kubes ▪ 1948

Figure 7. Three typological shifts of Skopje. Although conceptually divergent, the development projects for Skopje shared the same idea, namely the complete eradication of traditional bottom-up urban fabrics.
Illustration by Igor Noev

The third typological model for Skopje appeared after the disastrous earthquake of 1963 that left nearly 80% of the city in ruins (United Nations Educational, Scientific and Cultural Organization 1968). Following the approval of a new masterplan in 1964, and in view of the urgent need to reconstruct the devastated city centre, an international competition was conducted by the United Nations (United Nations Development Programme 1970), leading to the winning concept of a team headed by Kenzo Tange. At this point, Skopje became oriented towards a third typological model, namely an ornamented megaform (Frampton 2012). Tange and his team proposed a futuristic model obeying the principles of Japanese Metabolism, whereby mega-structural urban elements dominate over socio-economic, cultural and artistic aspects (Arsovski 1989). Although some important historical sites were preserved in this model (e.g. the old bazaar was transformed into a historic landmark), it resembled previous masterplans in the poor adaptation to the preceding models as well as to the local urban context and cultural background. The city centre became even more detached from the typological extensions realized within the previous plans. Between these two defined urban entities, fragments of bottom-up enclaves remained, existing as a kind of parallel in-between universe.

Although the three major typological shifts originated from three conceptually divergent projects, they all shared the same idea, i.e. the complete eradication of the formally unplanned, bottom-up urban fabric. Interestingly, these ideas were incompletely realized, leaving a rich legacy of spontaneous urban phenomena (Noev 2013) recognizable even in Skopje's present urban structure. It is indeed intriguing that these neighborhoods, which were to be eradicated in all formal plans, still exist as witnesses of the inadequacies and failures of the so-called conventional planning methods, which were widely debated in the past century. Paradoxically, Skopje's urban planners continue to force through "detailed urbanistic plans" based on a conventional approach, namely consolidating lots to form large perimeter blocks, instead of introducing extraordinary methodologies of development that take into consideration all those settlements with their shared values. It is evident that, instead of the simple method of "unslamming" the neighborhoods by means of demolition (Jacobs 1961), the spontaneous character of this urban phenomena requires the incorporation of "open systems" (Sennet 2010), i.e. projects outside the box of typical and overly deterministic planning. Firstly, the integration of small- and large-scale projects would certainly enable those areas to develop together within the city, sharing and advancing their distinguishing spontaneous features. In that way, they would not be viewed as ailing areas in need of confinement and separate treatment from the other parts of the urban landscape.

Consequently, the following methodologies and techniques are proposed to help those areas develop and integrate within the formal urban environment (see Fig. 8):
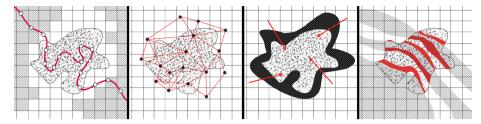
Figure 8. Diagrams of the proposed methodologies for inclusion. [1] Street as a project. [2] Creating new networks. [3] Developing the margins. [4] Urban recycling. Diagram by Igor Noev

The first is the concept of the "street as a project" (see Fig. 9). This originates with the idea that the street, viewed as a "void", is an important structuring element of the environment, not just in a physical sense but also as a definition of personal identities, e.g. the street where one is born and raised (Schumacher 1971). Therefore, in high-density locations or at a time when negotiations between the municipality and residents are not proving successful for development, the street can be a suitable subject for architectural and urban design. In this case, the void of the street corridor could generate new public domains, allowing the city to "enter" the settlement by "tentacles", thereby developing the existing structure without any obstacles from pre-existing units.
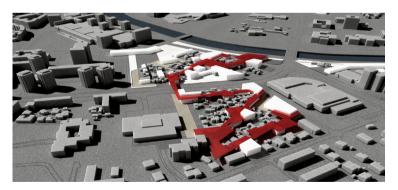

Figure 9. Method: Street as a project. Case Study: Skopje, Novo maalo. The void of the existing streets extends and becomes a source for new public domain.

In red: Potential street corridors selected for development by the project.
In white: Possible extensions of the corridor.
Diagram by Igor Noev

The second method, "creating new networks", considers an alternative understanding of the word "informal" to imply information or "to inform" as well as the standard meaning of "not formal" (Brillembourg Tamayo, Feireiss, Klumpner, Kulturstiftung des Bundes & Caracas Urban Think Tank 2005) (see Fig. 10). In this approach, developing the settlement does not just mean the transformation of its physical condition but also the larger-scale development of its contextual behaviour. Consequently, existing streets can be rethought as a network to reveal new connections with surrounding public spaces. In other words, in cases where the basic structure of the settlement is in a good condition, the idea of developing network lines (including nodal points) could promote new kinds of urban flow.
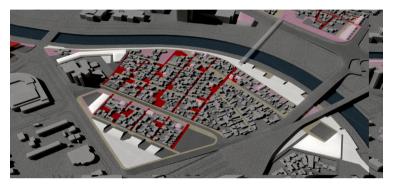
Figure 10. Method: Creating new networks. Case Study: Skopje, Madzir maalo. New network mediates the local scale by linking the newly extended "poché" piazzas as well as the large scale by connecting redefined large urban voids.

In red: Redeveloped street axes extended with small "poché" piazzas.
In white: Redefined large urban voids.
Diagram by Igor Noev

Another technique, called "developing the margins", proposes that the secret of the form is in the nature of its limits (Simmel 1979). Specifically, the development of the margin implies the development of the entire settlement (see Fig. 11). The limit can be understood as an interval of confrontation between two different structures, as a space "in-between", which at the same time belongs to both parties. Thus, the incorporation of those fragmented neighbourhoods can be achieved by revising the liminal areas located in-between, redesigning these as congested, porous, semi-porous or permeable inter-spaces, thereby creating new relations at scales that interlace.

Another important aspect of informal settlements is the use of recycled material. In fact, it is legitimate to consider waste as one of their resources. Therefore, the fourth method proposed here is "urban recycling", viewing the

reuse of space as a design tool (see Fig. 12). The need for recycling is a consequence of resource scarcity, and public spaces in such neighbourhoods are certainly subject to this constraint. This could be achieved by two important features: The first considers the transformation or recycling of the "formal" surrounding environment, while the second includes transformation of semi–private space, for example front yards, courtyards etc. as a generator of new public domains.

Figure 11. Method: Developing the margins. Case Study: Skopje, Krnjevo. The margin as a space "in-between" belongs to both conventional and unconventional planning. The liminal areas located in-between are correspondingly developed as congested, porous, semi-porous or permeable inter-spaces that create new relations at interlacing scales.

In white: Redefined liminal areas between the bottom-up and top-down urban fabric.
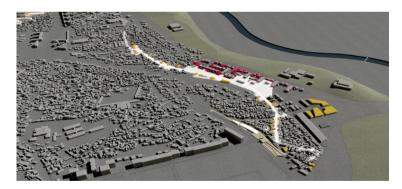Diagram by Igor Noev

Figure 12. Method: Urban recycling. Case Study: Skopje, Dukandzik and Topaana. In this context, the top-down urban structures in the vicinity are redefined to improve the complex bottom-up urban fabric.

In red: Redefined top-down urban structure.
In yellow: Possible extensions.
In white: Redefined main street "artery" that meanders and unifies neighbourhood to generate new public domains.
Diagram by Igor Noev

5. Conclusion

The phenomenon of spontaneity has not yet been closely studied in the architectural and urban context. It has many meanings and can be identified in various urban environments, scales and circumstances. Nonetheless, spontaneity in both formal and informal urban environments can be defined as a dynamic, open and unmediated process that is unpredictable when observed at the small scale. At the same time, it results in images that are typical, identifiable and recognizable at the large scale. Furthermore, spontaneity can be also observed as a self-referential paradox, both rejected and desired in the design process. On the one hand, even the simplest construction must be planned. On the other hand, even the most formal projects will undergo unpredictable transformations and modifications caused by formal or informal urban actors. Therefore, instead of assuming a dichotomy, and identifying spontaneity as something unplanned, it represents a realization of an unwritten project in the urban environment.

The case of Skopje revealed four extraordinary neighbourhoods with spontaneous characteristics located between the planned urban fabrics. As an outcome of the preceding planning procedures, today they appear disregarded and detached from the surrounding urban landscape. Methodologies and techniques for design as discussed above, namely *street as a project, creating new networks, developing the margins* and *urban recycling*, are aimed at including these areas within the urban structure. Furthermore, they imply that the development of such areas requires the creation of an open system, an approach that rejects over-deterministic planning. Hence, the presented results do not offer a final design solution, but rather a partial-figure, an illustration of one possible scenario.

As previously stated, a paradox will provoke critical thinking about an idea. Spontaneity in the architectural and urban context certainly signifies and reveals many paradoxical circumstances. Nevertheless, spontaneity emerges as an open source that can be used as a tool to enable cities and human settlements become inclusive, safe, resilient and sustainable, as outlined in the 11th Goal of the UN's 2030 Agenda for Sustainable Urban Development (United Nations 2015). In such extraordinary environments that are simultaneously dilapidated and charming, desolate and vibrant, as well as sad and humorous, spontaneity is a value that is shared along with the wider urban landscape. It appears as a link connecting both formal and informal urban environments, constituting – like music – a universal language. And as Don Quixote said in one of his adventures: "Where there is music there can be no evil".

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