Plot Based Urbanism:

A roadmap to Masterplanning for Change

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Recent data and predictions on the forthcoming rate of urbanization make cities the most common living environment of the future by far, with the current 3.8 Billion inhabitants - which now make up for over half of the global population - set to increase to two thirds by 2050. Over 3/4th of these new urbanities are predicted to locate in informal settlements, and the effectiveness of governments in building, developing and managing the homes of new and existing urbanities is set to decrease (Campbell, 2015; UN Habitat, 2013).

One could see the prospect of having less money and less control to deal with more pressures as a scary proposition – many do in fact. Others may see it as an opportunity, following on from Jane Jacobs' notorious lament for the malicious effects of "cataclysmic money" on cities (Jacobs, 1961), which necessarily and restrictively ties development to large scale decision-making, financing, coordination, and management, be this institutional or corporate. The subject is too great to take either position, but in this short paper we aim to show that the prospect is not doom and gloom and in fact, a lot is being done already and is available to embrace our urbanizing future with a degree of optimism.

Much of it boils down to defining what is failure and what is success. Whilst interpretations depend on what profession and angle we examine them from, we shall from now on focus on urbanism and cities, and relate success and failure to how our cities cope with change over time; change, and time, are consistent conditions across which cities develop. On one hand, we are greatly affected, at local level, by global dynamics, from climate to markets fluctuations; on the other hand, we impact on the global level with the accumulation of local dynamics, to the point that a new geologic epoch, called Anthropocene, has been identified to describe the 'Great acceleration' of human activity on the globe since the 1950s (Steffen, Broadgate, Deutsch, Gaffney, & Ludwig, 2015).

Jack Ahern (2010), looking at cities from a landscape ecology perspective, made the distinction between 'fail-safe' and 'safe to fail', to indicate two fundamentally different ways to think of the environment and in a sense, our relationship with control. A 'fail-safe' attitude is one which, in a system, plans to minimize the risk of failure, by maximizing its stability and controllability. This implies being able to fully understand, anticipate and design for situations, control for eventualities. A 'safe to fail' attitude on the other hand is one which values primarily the capacity of systems to recover and reorganize after a shock, without changing in their essence; the strength in this case is not so much the capacity to prevent disturbances, but to be able to react to them, and when possible turn these into opportunities.

The city's relationship with disturbances and change then are fundamental characteristics, because of the scale and pace at which these two are now manifesting themselves.

Resilience and form

Resilience, as an essential property of places, is inherently linked with the prosperity of cities (Habitat, 2013). Places that are resilient show a high capacity to undergo change, to assimilate transitions, without having to renounce what gives them character and structure. Resilience can be used across many scales in the environment. As our interest is in urban design, we shall think of resilience primarily in relation to city *form*. For too much time the design professions have lived in a creationist mindset according to which the designer's task was to create the final product of the city, or what we can ultimately *see*, its form. Had we understood that cities are an evolutionary phenomenon, and that diversity does not come by design, we would have focused on the permanent and universal structure of cities to *inform the process of change* rather than trying to create and fix its final result from the start. There is not such thing as a final result, in cities as much as in life. As designers, in an evolutionary approach, the structure is our focus. We should be interested in those components, and their relationships, that survived through time, recurring across different scenarios: what remains through change, has resilience.

The form of resilience is made of relatively small components which can adapt, assemble and reassemble. It is a malleable urban tissue whose minimal unit of development can generate structures *substantial* enough to embed meanings for their users, be these individual, groups, or societies; structures *complex* enough to support modern life as an efficient, interconnected, multifunctional system; structures *adaptable* enough to withstand and react to change - be this significant or small, occasional, or recurrent; structures *versatile* enough to respond in different contextual and cultural manners to similar pressures.

Resilience then depends on a system of units that maintain their own identity even when combined into greater wholes, and wholes that accrue their own character and identity whilst increasing, or changing, in complexity and functionality (the city as organized complexity, Jacobs 1961).

The plot as a reliable component of greater wholes

The *plot*, defined as the minimum unit of developable land, is a consistently recognizable feature of the built environment across time (Panerai, 2004) and as such, has attracted some consensus over the past years as a *meaningful unit* of development (Tarbatt, 2012) for the next generation of cities. The plot may or not coincide with ownership subdivision: it is of crucial importance in fact to distinguish the unit of development from the unit of ownership, as fine-grained development must – and can in fact – be made compatible with large land ownership in processes of urban regeneration (Rudlin & Falk, 2010).

With a continuing trend towards single-use, suburban developments on large plots, we are in the process of losing the diverse, close-grain urban fabrics that once served as the foundation for our most beloved streets and flourishing town centres and which we still

cherish and seek, as setting for both engaging, enhancing and practical ways of life. This has provoked urban designers and town planners, academics, community organizations and governments at all levels to rethink how to achieve more fine-grained, contextual, sustainable in time approaches to contemporary place-making (Campbell, 2011; Wolfe, 2013), capable to capture the everyday human experience of places (Thwaites, Porta, Romice, & Greaves, 2007; Thwaites & Simkins, 2007; Wolfe, 2013). Based on the fundamental importance of the plot in urban development, *Plot-Based Urbanism* (PBU) is now emerging as a viable approach to place-making, aligned with the growing role of the self-build and the right-to-build agenda in the UK and Europe, in the new financial scenario (Campbell, 2011), pursuing compact, sustainable urban design and masterplanning in an evolutionary perspective. PBU seeks to inform urban planning and design strategies in a way that is not only conducive to incremental growth and mixture of land uses and tenures, but is also resilient to economic risks, encourages informal participation, and respects local culture.

Things have moved since Cuthbert (2007) warned urban design that it needed a more established, precise theoretical basis to be effective in its role on the city. The quest for a new science of cities in the community of urban scholars is embracing the field of science of complexity and, generally speaking, a more evidence-based approach to cities and the built environment (Batty, 2013). PBU is a practice of place-making that takes advantage of this new climax, first of all by looking at evidence of urban form structure, what it is and how it works. As such, PBU has developed a specific focus on urban morphology, a niche of urban studies that has for long time struggled to find its way in mainstream urban planning and design and yet, since the seminal work of its founding masters (Conzen, 1960; Muratori, 1960), has been an integral part of the shift towards a more scientific, interdisciplinary and evolutionary understanding of cities which is now becoming more significant. Working across these two areas, is helping urban design strengthening its conceptual, structural and methodological principles.

Plot Based Urbanism and masterplanning for change

The Urban Design Studies Unit at the University of Strathclyde has invested almost 10 years of work to produce, catalogue and analyze some of this evidence with colleagues from a range of disciplines, clarifying the basis for a PBU approach to masterplanning and city design (Porta & Romice, 2014). Evidence comes at many scales: metropolitan (Sergio Porta, Crucitti, & Latora, 2008; Sergio Porta, Latora, & Strano, 2010; Strano, Nicosia, Latora, Porta, & Barthélemy, 2012), the main street network and sanctuary areas (Mehaffy, Porta, Rofè, & Salingaros, 2010; S. Porta, Romice, Maxwell, Russell, & Baird, 2014), street fronts (forthcoming), block, lots and their morphological profile (Remali, Porta, Romice, & Abudib, 2015).

Recently, the first Plot Based Urbanism Summit, an event organized by the Unit in Oct 2014 has gathered leading practitioners and policy makers, including the UN-Habitat, to discuss the meanings and challenges as well as the practice and policy-making attributes of PBU. The team emerged from this event, is all in some form committed to the advancement of PBU both in science and in practice, as the most viable development approach for our future cities (Rudlin & Falk, 2014). The PBU agenda is moving ahead with Sheffield University hosting the next event in April 2015, and a final event planned for late 2015 in London, when the principles of PBU will be discussed and presented to a

wider audience of professionals and academics, and the UDSU will present its developing work on '*masterplanning for change*'.

Watch this space!

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