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## CITIES IN TRANSITION: THE 21ST CENTURY CHINESE CITY AND ITS MORPHOLOGY AMONG TOPOGRAPHY, TYPOLOGY AND TECTONICS. A WORK PROGRAM

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### ABSTRACT

*The aim of the paper, written in the context of the Joint Research Unit "Transitional Morphologies", established in 2018 between Southeast University Nanjing (China) and Politecnico di Torino (Italy), is describing the new phase of a work program that wishes to study topographies, typologies and tectonics of the Chinese contemporary settlement with a specific focus on three different areas in Nanjing. Keywords: Chinese cities, topography, typology, tectonics.*

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### INTRODUCTION

What we are missing is the dynamic of urban form in Chinese cities' fast development: in which ways street networks, urban fabrics and building types are changing their form? Which are the causes that stay beyond the nowadays metamorphosis? According to which rules that metamorphosis is happening? We should find a way to describe the transition from a form to a new and different one, passing from a simple taxonomic use of urban morphology to an operative consideration of morphological urban studies.

Using the conceptual tools of the Italian urban analysis, and overall its being grounded on the idea of "topography", "typology" and "tectonics", it is possible to open a new season of studies on the Chinese cities in order to better explain their transition from the socialist geometry to new neocapitalist configurations, that means in order to establish design processes and criteria for the future decade.

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### BACKGROUND

The state of the art about the topic "Chinese city" is showing nowadays three different approaches. A first group of texts are about cities in China as the theatre of a new society or better a society in transition (Visser 2010, De Kloet and Scheen, 2013, Roggeven 2017). A second group concerns the texts of a "classical" morphological approach to the Chinese cities with a specific interest for their traditional and historical parts (Whitehand and Gu, 2006 and 2007, Liu 2014). Recent works are watching at the shape of the Chinese contemporary cities in term of "urban form" (Hassenpflug 2010, Rowe 2011 and 2016, Chen and Thwaites 2013).

The urban survey of Chinese cities (the Southern part of the historical center of Nanjing is a relevant study case) is showing how the city changed during the last 120 years (passing from the Qing Dynasty to the Republic and then from the Modern China to the China of the "reforms").

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### METHODOLOGY

In such a complex context, in order to better describing and understanding the Chinese urban settlement, the use of three western concepts could be initially useful: Typology, Topography and Tectonics.

The idea of studying and classifying the recurrent figures of architectural forms and spaces (Typology), the idea of describing the features of the places in which settlements and buildings were born (Topography), the idea of showing the deep relationship between architecture and its constructive nature (Tectonics), they could all together investigate the intimate formal features of the urban settlements.

Nevertheless, those three ideas come from the European culture between the mid of the XVIII century and the end of the XIX century. It is the period between the Enlightenment and the Positivism, when the western idea of "model" has been focused: the model is an abstraction of reality, capable to avoid a number of surrounding circumstances and to isolate a single question in a very schematic way.

Typology, Topography and Tectonics followed, at their rising, exactly that idea of "modeling" reality. Typology immediately found the "catalogue" as the outcome of its taxonomic operations, Topography became the technique to create the "map" of any place, in a conventional way and forever fixed in time, Tectonics expressed its fundament of construction as assembling's action in the "decoration" of building.

But the Chinese urban settlement of today is hard to be modelled: catalogues of urban buildings and spaces typologies, updated maps of entire cities and descriptions of buildings' decoration are almost entirely useful in approaching the urban morphology of the Chinese city.

In fact, traditionally, taxonomic catalogues, maps and decoration are out of the Chinese cultural horizon. The traditional Chinese idea of "catalogue" is not systematic in a western way, but more similar to a long list of objects of different natures ("ten thousands things"). The traditional Chinese idea of "maps" doesn't show buildings, but streets (sometimes water canals), city walls and gates. The traditional Chinese idea of decoration is linked to the truth of the assembling process.

Comparing the objects in a Chinese garden and a western (Italian garden) one, comparing the map of an European medieval city and a Chinese city during the Tang Dynasty, even comparing the classical orders (abstraction in stones of an ancient wooden constructive system), can illustrate the difference between the two cultures.

The Chinese garden is a place to be walked in a kinesthetic way (with a surprising events in any moment and in any corner), the Chinese maps don't care buildings because of an ancient consideration of their ephemeral nature (they can burn for a fire, or quickly changed by their owners and their families), the Chinese "dougong" can be dismantled and rebuilt in its own technology, while the Doric order is fixed forever in an eternal material (stone) without the possibility of a cutting.

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## FINDINGS

The Chinese urban settlements follow a dynamic idea of form, as well as the Chinese culture always did. It is not only in question the features of contemporary cities (they all are quickly -even if not so strongly- developing and changing either in Europe or in the States), but the features of Chinese urban culture itself. Nevertheless, finding a way to describing and understanding the Chinese urban settlements can become a way to interpret the other Asian urban settlements and maybe the cities in all over the world.

It is not a novelty. In the Italian tradition of studies on urban form, the great masters as Saverio Muratori and overall Gianfranco Caniggia were already engaged in studying the metamorphosis in time of buildings typologies and urban settlements' configurations and also urban fabrics. In written essays of Sixties and Seventies, the idea of a transition that can be described in urban centres as well as into the landscape (because of anthropologic actions) is already evident and well explicated.

The "Transition" paradigm comes from paleontology, where has been normally used in order to determine the incrementally changes of an organism in time, so that is possible to put in evolutive sequences the rests of prehistoric animals lived in different periods. What's interesting in this process is the opportunity to add the dimension of time in a "morphological" research, identifying some time thresholds and their links. Furthermore, theoretically we can assume that one of the time thresholds be into the future.

The "Transition" paradigm, that in such a way links Past, Present and Future, got overall in last decade important theoretical fundaments by philosophical and epistemological studies.

In urban morphology studies, the "transitional morphologies" paradigm can become a tool to transfer typologies, topographies and tectonics at the level of the generic city in the world, starting from the Chinese city as the iconic "City in transition".

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## CONCLUSIONS

The aim of this paper (here just in draft and to be completed) is figuring out a work program, starting from some experiences done in China and particularly in the former capital city Nanjing.

The "Transition" paradigm, linking the Past to the Present and then the Present to the Future can get (and already has) a great role in practices of urban designing and urban management. Of course this must happen not in a deterministic way, but using protocols that must still be figured out, checked and evaluated.

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