Imprecise Joints

The Mixed Construction-Scape of Semi-Industrialised and Semi-Urbanised Cities – Wangcang as an Example

The concept of Imprecise Joints is an approach to conceptualise the mixed construction-scape of semi-urbanised and semi-industrialised cities into perceivable patterns. In this essay, the author presents her hometown Wangcang, a city at the northern edge of Sichuan Province in China, as a specimen of such an urban landscape. Here, the rapid urbanisation process of the recent thirty or forty years has glued originally scattered parts together, creating an entity with loose cohesion and little continuity, allowing imprecise joints to develop anywhere between the different structures.

Imprecise Joints are not only present in Wangcang. In fact, they appear as a universal phenomenon in semi-urbanised and semi-industrialised cities all over the world. Like strata of history they develop over a long period of constructional interactions yet remaining nameless and unappreciated. As they are often considered temporary, they tend to be overlooked, ignored or neglected.

The essay argues that these Imprecise Joints, considering their inherent identity and the conditions and questions behind them, should not be treated as ephemeral subjects of temporary in-between phases of development. They should rather be recognised and interpreted as reference points for a contemporary architectural practice which aims at resonating with sustainable local cultural identity and everyday life.
Wangcang is a small city in the mountainous northern area of Sichuan Province in China, adjacent to Shanxi Province. Together with three other cities ranked as capillary ends in its hierarchical tier, they subordinate to the larger prefecture-level city of Guangyuan. Located in the valley of the East River and surrounded by the Micang Mountains, Wangcang has been a hub for the surrounding villages and towns spread in the mountains for hundreds of years. Before factories and modern institutions began to settle in the region, old town streets and rural dwellings populated the pre-industrial landscape. Now, these settlements are loosely connected through new structures built in the second half of the 20th century. Today, a population of up to about 120,000 people lives in the city.

As a result of governmental planning, Wangcang used to host a national-level banknote mill between the 1970s and 1990s. However, due to the change of policies, these factories were gradually pushed to the suburban areas of Shanghai leaving behind only a single coking plant. Besides its administrative functions, Wangcang’s economy has been stagnant for several years. Thus, Wangcang is currently an example of a semi-industrialised city: it lacks a thriving industry and likewise hardly attracts any tourists — or in other words: it has a low economic vitality and dynamics.

Compared to similar Chinese cities that are subject to a fast-changing cityscape due to a steady flow of economic development based on industry or tourism, Wangcang runs at a different speed.

Maybe due to the stagnant or slow regeneration, the cityscape of Wangcang has three corresponding characteristics:
1) Here the rich historical strata and rich variety of urban forms have not yet been erased or homogenised. 2) Because few real estate developers would come to invest, there are fewer large-scale development projects than in cities with better economic conditions. Vice versa, more spaces for local small-scale bottom-up constructions managed to survive. 3) Its cityscape was not re-sculpted to cater to the stereotypical imagination of tourists but maintained its primitive properties based on spatially productive local forces without much definition and homogenisation brought in by capital or developers.

Having been born and raised in Wangcang throughout the first half of my life, I have observed a set of Imprecise Joints in this semi-industrialised and semi-urbanised cityscape. I will use this term below to describe the mixed, semi-, in-between or co-existing status of the observed phenomena. These observations are neither parallel, analogous nor hierarchical, but rather made from various viewpoints.
Constructions originating from different levels of industrialisation — from pre-industrial and mid-industrial to post-industrial — are highly mixed and merged together here. Some are constructed with high-tech tools, some with low-tech tools. Some are built within a precision of centimetres, some are only loosely controlled. Handcraft, traditional and industrialised techniques are used at the same time. This, on one side results in a juxtaposition of various physical tolerances that naturally generate physically Imprecise Joints. On the other side, construction forms of different industrialised levels would have had visual and spatial properties that are difficult to harmonise, thus generating visually and spatially Imprecise Joints. Generally speaking, they are unpolished mixed constructions. Industrialised material dealt with pre-industrialised construction techniques and various misuse of materials also generates this type of Imprecise Joints.

Streetscape with juxtaposition of traditional and contemporary buildings.

1. **Imprecise Joints between construction forms or techniques**
Houses conglomerated together to form a larger entity merging different forms and materials.
Merged traditional and contemporary constructions.

Traditional houses built with preindustrial construction techniques and having been updated with industrial material.
Symbolic forms and non-symbolic forms coexist side by side. Forms that carry historical and cultural meaning and those that signify nothing are mixed together, just as the attempt to deliver symbolic meanings and the attempt to diminish or ignore any meaning overlap. Some contemporary buildings follow traditional precedents while others follow more pragmatic templates. In other words, buildings that carry aesthetic or cultural ideas are joined with others built only to accommodate the minimum of utilitarian standards. This kind of Imprecise Joints often overlaps with the one described earlier. For example, a building of authentic traditional style can be joined to a cheap contemporary shed made of steel and plastic — thus it presents Imprecise Joints of construction forms and of symbolism at the same time.

2. Imprecise Joints of symbolism
Public veranda along the edge of the Lower City. Its beautifully constructed traditional forms have once served as an entrance sign for this town, now they are connected to new buildings for commercial use. (see also previous photo)

Traditional family house with a wall remodelled into a gate for the use as a store.
3. Imprecise Joints between natural, rural and urban contexts

Nature, rural areas and urbanised areas intermingle with each other, leaving the boundary between each other hardly defined. Primitive topography and buildings are tightly intertwined. Walking on the street, you may often get a glimpse of unprocessed wild among dense developments. A busy street might naturally turn into a narrow path that leads you into the mountains, and dense real estate developments might connect with conditions of sporadic houses scattered across fields. It is a loosely connected whole formed by heterogenous pieces of old settlements, nature and new buildings.
This kind of Imprecise Joints is generated from the encounter of different spatial planning principles.

In a semi-urbanised and semi-industrialised condition, people do not share continuous consensus on the principles of spatial planning, thus the principles are also spatio-temporally inconsistent. The cityscape generated by such a complex pool of different ideas shows corresponding complexity.

For instance, in its original conditions, a house located in a low-density village once had a spacious area around it where the tombs of family members could be loosely placed next to the house. After this village had been urbanised and this domestic graveyard was built over by new constructions, the tomb is now located in the narrow space between the houses, contradicting the traditional laws of fengshui.

Such phenomena do not result from careful spatial planning based on consistent principles, but emerge where old and new principles meet, producing Imprecise Joints. Similarly, the cityscape is composed of buildings planned and designed by professionals, and others that result from the various needs and ideas of its users.

For example, a contemporary high-rise real estate development with its site strategy and spatial structure carefully adopted from cities like Shanghai might be inserted into a spontaneously formed dense low-rise local urban fabric. Since the end of the 1990s, such a juxtaposition has been created between large scale commercial developments and older constructions of smaller scale which are more suitable for individuals and old institutions.
Tomb next to a traditional house, surrounded by dense new building structure.
Imprecise Joints: Not to erase but to integrate

Imprecise Joints do not only exist in Wangcang. They are actually a universal phenomenon in semi-urbanised and semi-industrialised cities all over the world. They also exist in some parts of Beijing and Shanghai.

The rapid urbanisation process lasting barely more than 20 years has glued the originally scattered parts together, creating a whole of loose cohesion and little continuity and allowing Imprecise Joints to develop between the different parts. In Wangcang these parts are made up of areas hundreds of years old, large abandoned factories and living areas built in the 1960s with construction techniques from the Soviet Union, institutional and administrative buildings developed from the 1950s until today, large scale high-rise projects designed by real estate developers and numerous multi-storey buildings resulting from the recent spontaneous transformation of low-density rural villages into dense urban fabric by local farmers who suddenly became urban dwellers. These heterogeneous architectural and spatial typologies with different initiators, different construction technologies and different spatial characters have created a collaged and mixed construction-scape.

It is commonly assumed that the phenomena depicted above are temporary stages of architectural development, that they are all just part of an in-between process towards "complete" urbanisation and industrialisation. It is believed that through economic intervention and governmental empowerment, such conditions will soon advance into something more "developed" and more homogenized in the overall urban context.

However, these Imprecise Joints resulting from the described "semi-conditions" have their own value that is worth to be re-evaluated. What they present, is neither a nostalgic and strictly protected heritage, nor a homogenised cityscape determined by a single subject of capital or government. They seem to lack design and not to stick to any apparent ruling order, but they are results of a local generative logic. They signify the various ways of life that have not yet been unified by single values. They also signify the historical depth not yet erased, and a social and spatial status of diversity that has not yet been ruled by efficiency or consumption. They contain many possibilities for alternative paths of urbanisation. And they even could be the "antidote" to lots of conditions in highly urbanised cities as they might form a new reference point and inspiration for architects.

While Aldo Rossi based his theory and practice on his notion of the quintessential European city, we could base our interventions on these local realities, so that our interventions could be self-contained within them. The concept of Imprecise Joints is an attempt to abstract from the complicated conditions and concrete mechanisms behind them in order to turn them into perceivable patterns able to generate concepts for new interventions. These new interventions would then be merged into the flow between past, present and future and form a natural cultural continuity.
To let the concept of *Imprecise Joints* stimulate new thinking about how deal with them I would finally like to present three short statements:

1. *Imprecise Joints* can be described with the following keywords: fragmented, low level of integration; multiple coordinate systems; perceptual diversity, depth and contrast; weakly organised; fragile balance of temporality and permanence.

2. The diversity and heterogeneity they signify are valuable presences in an increasingly homogeneous and efficient society based on capital and consumption. They should be consciously responded, instead of being erased. The awareness of these *Imprecise Joints* should not evoke effort to erase diversity, but effort to integrate these diverse phenomena to make them precise.

3. *Imprecise Joints* are very fragile. Power of capital and government might erase the mixed state of diverse coexistence overnight. The architect, as an important part of social production, should be proactive in perceiving and integrating this hybrid state and the valuable "resistance to development" it contains, to make our cities an organic whole of diversity.

(Photos: Chenxi Gong)