

READING PEARL RIVER DELTA

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1. Introduction

The ability to understand a city is believed to be a fundamental necessity of every urbanist. The multitude of scientific texts and theories that have spawned from this belief gives one little reassurance that this understanding is even remotely possible. Is it a problem of the theoretical discourse or a problem of nature of the city? Maybe it is a problem of subjectivity and different ways in which people perceive and read the city. Whatever the reason, the fact that the City has so far always managed to outgrow its theories will not change, at least for now. In this aspect we could assume it is no different with the reading of the city as proposed by Aldo Rossi in *The Architecture of the City*. This text will confront Rossi's theory with the new type of a city that has sprouted on the East, post-communistic and hyper-capitalistic city of Shenzhen.

The conditions and reasons on which this city came of being are very specific and, above all, different from conditions of the cities that Rossi was looking into. One of the main differences that I feel could be of great significance is the time span in which Shenzhen developed from a local village into a sprawling metropolis. What took European cities centuries, Shenzhen "accomplished" in two decades. What happens when a city comes into existence in a glimpse of time, in a comparative fraction of a second? Do the rules of reading such an entity still comply with the rules set out by Rossi?

2. Pre-assumptions and Focus

First, we must examine the main focus of this argument and its critical assumptions which will confront Rossi's reasoning. The text will focus on the *Early Phase* in development of Shenzhen. This phase is not endemic to Shenzhen, in fact it is common for the whole Pearl River Delta (PRD). It assumes that urban fabric in this phase consists predominantly of housing and industry. Although there are some tertiary programs, such as rudimentary services and some governmental institutions, namely planning office, they are still too few to "motivate" and "engage" the urban fabric of such enormous proportions. The assumption is quite bold, even more so as the information on early developments is scarce, at best. Nevertheless, vast conurbations with predominant industrial and housing program are very common in the north of the PRD basin even today as this area started developing later, when Shenzhen moved to its *Later Phase*, defined by tertiary program permeating the urban fabric and pushing industry to less expensive areas in the north.

Another argument that supports the idea of the *early phase* is that history is not a popular subject when it comes to these new developments and, it is usually bent to suit the needs; it certainly would not be for the first time. As an example: Shenzhen University started to enrol first generation of students into undergraduate program in 1995 when the program was recognized by the Ministry of Education. Although University states in its curriculum that it was founded in 1983, there is a twelve-year gap with no records of any kind. After 1995 the "history" of Shenzhen University has an entry every year on which they are very proud of and are describing it to quite an extent.

The reason of focusing on Shenzhen and not on any of the other parts of PRD is also a historical one. Although its condition today has progressed, it is the only new “city” in PRD conurbation that has some sort of recorded “history” from the last 25 years.

This analysis will refer to two very distinct *urban artifacts*¹ in the fabric of Shenzhen, namely, a historically formed Urban Village and “capitalistically” planned urban fabric. The reasons for isolating these two are twofold. Firstly, these two urban artifacts are predominant in the fabric of Shenzhen. Secondly, in terms of their political, historical, geographical and sociological existence, they could not be more different. This will give us a spectrum needed to account for multitude of different contingencies.

Firstly, we must examine a brief history of Shenzhen and forces that constituted it. This will follow with an explanation of the city with “notions and tools” developed by Rossi for the purpose of reading and understanding the urban form. Furthermore, it will attempt to propose additional instruments or a revision of Rossi’s theory.

3. Shenzhen



Fig. 1 Deng Xiaoping on one of the “advertisements” for building a new Shenzhen

Explaining the story of Shenzhen, one gets immediately trapped in bivalency. Should it be portrayed as an unprecedented success or as a disaster bound to happen? However the argument is bent, the facts remain:

Everything started in 1978 when a certain government official named Deng Xiaoping (that served as *de facto* leader of China) implemented an *Open Door Policy*, as the fragile communistic doctrine that relied on introverted and self-sufficient principles was threatened by ever stronger globalized economy and capitalistic forces. A necessary step of “subtle” infiltration of capitalistic ideas and

¹ I am using the term *urban artifact* as defined and used by Rossi in *The Architecture of the City*.

global markets into communistic ecosystem was necessary for China to survive. The *Open Door Policy* dictated a *One Country, Two Systems* concept, where the majority of China (still communistic, enclosed and “self-sufficient”) benefits from *Special Economic Zones* (SEZ), unique areas where government dominated planning, ownership and development is replaced with public-private partnerships and capitalistic model of the western city. These zoned enclaves were branded by the same government official as:

...a window to technology, management, knowledge, and foreign policies. Through the zones, we can import technology, acquire knowledge, and learn about management, which is also a form of knowledge. The Special Economic Zones will become a foundation for opening to the outside world. We will not only benefit in economics and personal training, but also extend the positive impact of our country on the world.”²

With great enthusiasm and dedication, on scale that only Chinese are capable of, they started to design and construct new nodes of interchange between world’s most opposite ideologies. Shenzhen’s proximity to Hong Kong was one of the main reasons to transform it into the first of many SEZs to come. In 1981, six hundred projects with foreign participation (mainly from Hong Kong) were undertaken. In following two years, 4,000 professional personnel and 100,000 workers started with a fishing village of 25,000 inhabitants and ended up 15 years later with a sprawling metropolis of 4,000,000.

SEZ was a commercial success. Because of the enormous economical pressures there was no time for strategic planning. Crude industrial areas sprouted by need and housing projects were erected on basis of necessity and prescribed architectural recipes. Through this process newly built fabric spread violently, encompassing all of the fishing and agricultural villages in the designated area.

² CHUNG, Chuihua Judy: *A Great Leap Forward*, Taschen, 2001

3.1. Early Phase



Fig. 2 still present ideological propaganda

In the early phase of unprecedented and bold development, the city was an agglomeration of primary and secondary functions. New urban fabric was growing uncontrollably which resulted in fragmentation of space. Industrial area next to new dwelling area next to village next to industrial area (Fig. 3). There was no apparent logic in spatial order of the city. The main driving forces of economy and capital could be rivalled only by even more ominous persistence of communistic legacy (Fig. 2), especially the affiliation to demonstrate and propagate the notion of progress and forward thinking through visual image of the city. This building of identity through architectural means (a skill of the Chinese culture) dictated big boulevards, grand vistas and un-human scale of open space, ending in soaring housing towers (now built by the developers instead of the Red Party) (Fig. 4).



Fig. 3 fragmentation of built fabric (*early phase* of urbanization, 60 km north of Shenzhen)



Fig. 4 new city image; big boulevards and developer's housing towers

This raises a question whether it is possible to call it a city as it was perceived as an industrial powerhouse which translates in China, in a country with a long tradition of thinking in absolute terms, into a place for work – industry, and a place to rest – dwelling. Another problem was that virtually all of the new population were former farmers that came from China's hinterland in search of prosperity and a better life, thus bringing with them customs and ways of life appropriate for a village. So not only was the physical structure of the city new, but also the social structure resembled more that of a village than that of a city. New social structures had yet to emerge.

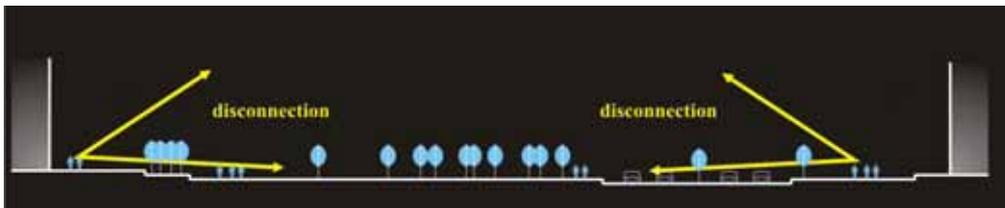


Fig. 5 un-human proportions of new planned developments

In this strange mix of communistic instruments of propaganda and capitalistic forces a shining city of new China was born. A city built on image and capital, where place of individual is buried underneath years of ideology and economical forces. Sarcasm aside, these conditions translate into open space

that has no dwellable character for the individual. The scale makes it unusable thus becoming empty and unsocial. The emphasis of moving around is on motorized transport, especially cars as another icon of progress (Fig. 4 and Fig. 5).

3.2. Later Phase



Fig. 6 Business district, Shenzhen

After the initial industrial hiccup and deeper filtering of capitalism into communistic ideology, the industrial basin started to expand northwards up the Pearl River Delta. The *industrial power house* condition of the *early phase* is still predominant in the northern areas of the delta. What happened to village of Shenzhen and surrounding villages, started to happen gradually across the whole area (Fig. 7). In order for Shenzhen to become more than conurbation of former villagers, there needed to be a catalyst that leaped the character of the place from that of production into that of service.

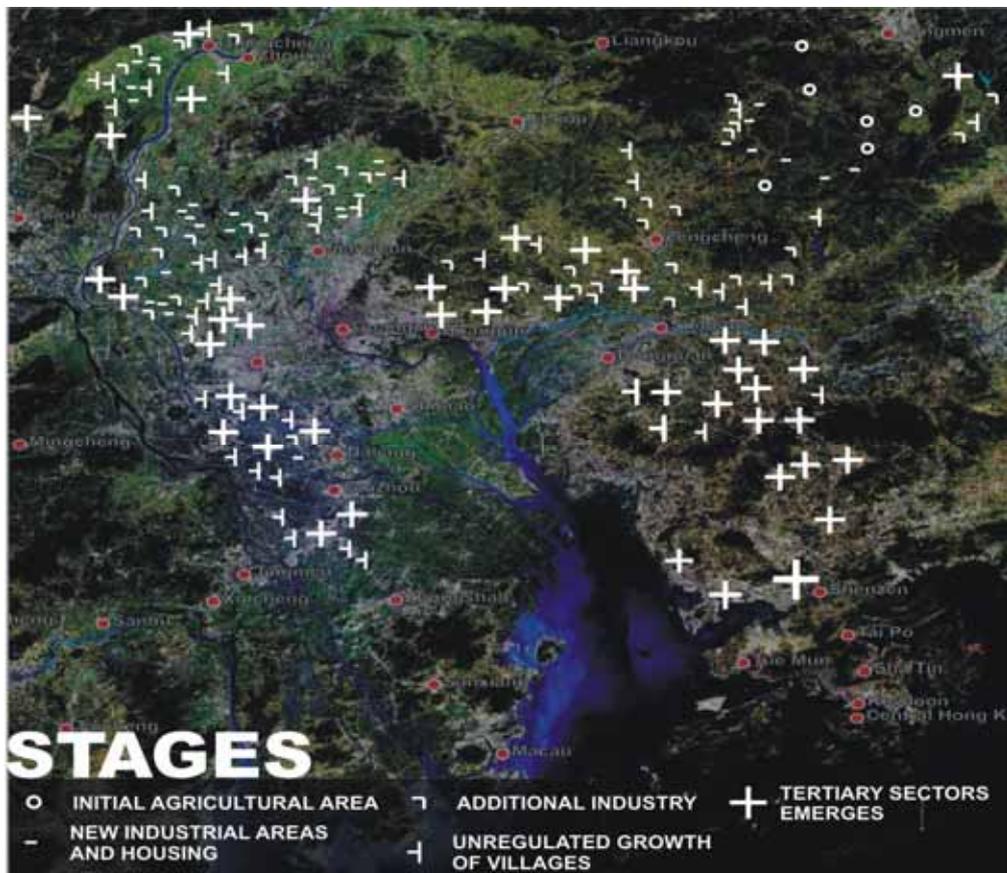


Fig. 7 expansion of SEZ, consequential movement of industry from Shenzhen to the north

As Shenzhen was growing more prominent, tertiary sector emerged, thus gaining some level of independence from Hong Kong. Entities, such as the university, research centres and business districts (Fig. 6) began to permeate the urban fabric, hence shifting the character of the place into becoming more than just a service oriented industrial town. These catalysts enabled solidification of distinct nodes of program along more important streets. Still, with no apparent spatial order, they are virtually unreadable from the plan, meaning that you have to be a local to know where to go for the best shopping, dining, best tailor...

3.3. Urban Village



Fig. 8 urban village encompassed by new housing developments

As a historically sedimented entity, the urban village needs some further attention. When SEZ "happened" the agricultural land that the farmers had was taken from them. As compensation they were allowed to build up their village and make their income by letting out the newly acquired space. The original fabric of village was quite rapidly replaced by six to nine story extrusions usually only few meters away of each other (Fig. 8). Government turned a blind eye to the uncontrolled urbanization process that violated all building codes. It was a *status quo* on the basis of compensation for lost agricultural land. As it was private property, the villagers had total jurisdiction and even had their own law enforcement officers.



Fig. 9 open space quality: organization in urban village and new housing fabric

Urban Village is the only historically sedimented artifact in the whole urban landscape of Shenzhen. They grew out of original fishing and farming villages. These villages, formed in time, were evolved out of human needs thus made in human scale (Fig. 9). The open space was intricately connected and interwoven, where small allies led to internal courtyards that led to main streets and squares (Fig. 10). The street grid persisted and new extrusions were grafted onto. Although the housing units are quite high and the FAR ratio is even higher, the human scale of the villages is still a positive quality as opposed to the grand design ideologies of the “official” part of Shenzhen (Fig. 11).



Fig. 10 comparison of connection of public space in urban village and new housing

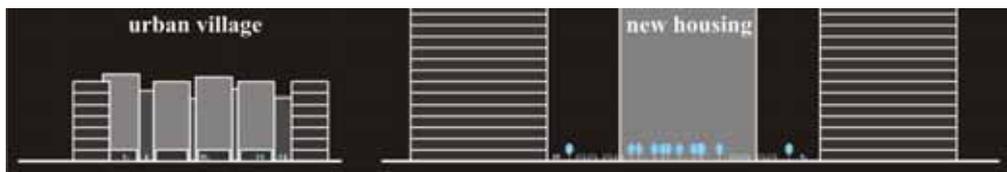


Fig. 11 scale of public space in urban village and in new housing

Urban Villages are nowadays considered as the places for lower middle class; the newcomers. It is the first step of the newly developing social ladder.

4. Reading Shenzhen through Rossi

Having outlined the socio-political conditions and more important aspects of Shenzhen, one should attempt to explain them through Rossi's concept of how to read the city. His main postulation is, that the city can be read and understood purely through its form, as the form has a capacity to retain and sediment city's history in which the processes and reasons for its creation are embedded.

4.1. Autonomy of Urban Science

Rossi is arguing that urbanism can be understood as an independent science that supplies one with the necessary instruments to read, understand and address the city. That is done on basis of reading the physical form of the city itself, as this form is a morphological imprint of historical, cultural and sociological processes (or as he calls them with one term – urban dynamics). Such a definition of autonomy is a bit dubious as he permits for permeation of processes otherwise subject of study of other science fields. In contrast one could examine how Eisenman deals with this. He strips the architectural form of everything, especially of meaning, and looks at it purely compositionally. By doing so, Eisenman is trying to achieve *unmotivation of a sign in architectural language*. That could be argued is the most autonomous position one can take. Although they are both talking about some kind of independence of a science field, Eisenman perceives *interiority of architecture* completely differently than Rossi perceives *autonomy of urbanism*.

The problem of autonomy stays unresolved, even more so as he never postulates a clear definition and does not endorse it with a clear example. The following two passages will help clarify this better:

*"[City form] emerges as autonomous only when we take it as a fundamental given, as a construct and as architecture; only when we analyze urban artifacts for what they are..."*³

*"The architecture of the city summarizes the city's form, and from this form we can consider the city's problems..."*⁴

Therefore, by examining the form we can "consider the city's problems" thus we can identify how the city functions. By reconstructing how form was built (through history of that form itself) we can depict the processes that were constitutional in its creation. With this he is reversing causality and by so doing he defines the cause through effect; through form, he is defining what were the processes and how did they work. This does not necessarily bring us to the correct processes; it can only bring us to multitude of different ones, which could play a role. To see which processes actually contributed to the form from all that are possible, and how, it is necessary to define them through their own disciplines.

³ ROSSI, Aldo: *The Architecture of The City*, p. 22, Opposition Books, The MIT Press, 1984

⁴ *Ibid.*, p. 29

This problem of autonomy does not apply only in the Shenzhen case but is a wider unresolved issue. Nevertheless, for the sake of argument, let us assume that the city can be studied purely on the basis of its form. Let us try to read the urban village and the problem that it presents as an enclosed urban entity for the lower middle class of the social strata.

By studying the morphology of the urban village and comparing it with new housing developments it is apparent that the living conditions are quite bad; no sunlight, very scarce open space. This can indicate that the rents are much lower and that people with lower income live there. But no reading of the urban village's shape can account for the reasons of these conditions. The "regressional" speculative reasoning can not explain in its totality why is this area built up so differently than the rest of the fabric. To understand this, we need to know how communistic regime worked, that villagers actually owned land, that they were compensated for the expropriation of farm land with permission to build and rent space out. The government turned a blind eye on not upholding building regulations as part of this compensation. All of these socio-political factors could never be explained purely by observing the form and its physical transformations in history. Research of form through regressional historical method has to be complimented with top down understanding of historical, social and economical processes and conditions.

4.2. Permanence and Historical Method

When Rossi is talking about permanence and persistence of elements in the city he is referring to the theory of permanence as defined by Poète. He distinguishes two elements that are permanent, layout and plan of the city on one hand and *Monuments* and *Primary Elements* on the other (which will be addressed later). City's development can be induced or inhibited by the persistence of these elements. In spirit of his theory he argues for persistence of form and as such the form is able to motivate its surrounding fabric and therefore trigger growth of the city. Permanence is closely connected to historical comparative method through which we can elaborate these persistences and understand their role in the city. By understanding the history of form of an element that persists, we can understand how it works and what it does.

But what happens when one deals with an urban form of Shenzhen, especially in its *early stage* that has 15 years of "history" or even less? In terms of European (and even US) cities, that is not a history. Whenever one starts to analyse the form of Shenzhen, to see how it developed, one hits a wall. There was nothing there on which it urbanized, no previous urban artifacts, thus no history and therefore no permanencies that could trigger its development. The only artifact that could conditionally fit in this classification is the urban village⁵. Although it is impossible to categorize it as a primary element it has at least the aspect of persistence. But this persistence is neither inducing nor inhibiting the city. It is so insignificant to other forces that shape the city that it can not be taken into account.

⁵ Another element that is the most "persistent" is the street layout. It indeed shapes the city significantly, but as Rossi himself rejects pure functional approach as the imperative quality of an artifact, it therefore can not be seen as the most important and is exempted.

Again, one must examine the immaterial and ideological notions, to explain the permanencies and persistencies that define the form in *early stage*. One such permanence could be ideological image that is pursued by the regime and thus creation of big open spaces and grand promenades. Another would be a huge desire for “western” lifestyle. The idea of permanence and persistence is a strong one, but not strictly as a sedimentary quality of physical form. It must include metaphysical permanencies like ideologies, culture and identity that persist in individuals, groups, nations and political constructs to account for all the changes in the history of a city.

4.3. Function Versus Typology

Typology for Rossi is a conceptual operative notion. He refers to concept of a type as proposed by Quatremère de Quincy. Things that follow same underlying rules and principles could be understood as to be of the same typology. For Rossi this detaches the notion of typology from physical form and reconstitutes it as a conceptual entity that acts as apparatus, an instrument for analysis and measure. Type can be further understood as instrument that can work with temporal component, such as history and collective memory. Furthermore a traditional way of understanding the type (certain form with certain program) falls into classification of a model, which by Rossi’s view is the misreading of typology as it pursues purely functional aspects. Rossi strongly demotes importance of function and gives preference to more abstract notions when dealing with typology.

Although Rossi’s outlined definition could be embraced, we have to make a small remark on the negation of function regarding the typology when it comes to Shenzhen. Firstly we again face the problem of time and embedded history of Shenzhen especially in the *early phase*. Here, we should exempt the urban village as it does comply with the formulation of a typology and will focus on the new “developer’s fabric”. The only history and collective memory that is embedded in the “new” parts of the city is an ideological and economical one. As the ideology and economy permeate all spectrums of the city indistinctively, understanding it from an angle that exempts function would render all fabric as typologically identical. If we do not introduce the idea of a function into the mix, we can not distinguish between the various parts that indeed are different and conform to different rules. Industry was built with completely different function in mind than housing. That not only distinguishes industry from housing in the ways they render as physical forms but also in the ways they organize space.

Function not only brings differentiation of form, but also enables form to responds to changes and forces of the city. Function should not be understood as a static entity where one function can reside only within one type of form (also acknowledged by Rossi), but rather that function is a dynamic property that is ascribed to physical form. In this way form can accumulate different functions through time thus “stretch” in time and become in Rossi’s terms a primary element or a monument. But as Rossi argues that ability as a generator comes from form itself, one could argue that it comes only when that form gets informed with different properties; one of them being function.

Later in the book Rossi does permit and acknowledge the importance of functions but only as “algebra of values”⁶ demoting them to “necessary evil”. He argues, that:

“...if urban artifacts present nothing but a problem of organization and classification [thus function], then they have neither continuity nor individuality. Monuments and architecture have no reason to exist...”⁷

4.4. Primary Elements and Monuments

“[Primary elements] are those elements capable of accelerating the process of urbanization.”⁸ They are nuclei of aggregation and densification that act as generators of urbanity, transforming the urban fabric and triggering development. They are unique and singular elements in the fabric of the city. Meaning, the fabric should not prevalingly consist of primary elements as they would then loose their capacity to generate new urban fabric, thus not being primary elements anymore.

Particular place within primary elements go to what Rossi calls monuments. They are special kinds of primary elements that in addition to activating the city, they are also objects of special cultural and historical significance. Through their form they embed history and collective memory and in turn culture, thus making them persistent and catalytic. In this sense they are the very essence of Rossi’s theory as their physical persistence acts as collector of city’s history, sociology and processes. Their form stands for ideas of itself and for ideas of it former self.

If we again bring in the Shenzhen’s infamous *early phase* (and exempt the urban village, as we already established it is not a primary element of any sort), we can reason as follows. Shenzhen is an artifact that is 15 years old, as such it has no history, therefore no collective memory can be imbedded in any of its parts, and so none of its parts can be called a monument. Furthermore as Shenzhen was an industrial powerhouse comprised of dwellings and industry there were no singular and differentiated elements that could trigger urbanization thus there were no primary elements of any sort.

If both of the stated assumptions are brought together, we are presented with an urban form that because of it’s apparent lack of history, primary elements and monuments, does not conform to Rossi’s idea of a city thus can not be understood as such. This confronts us with two very important questions. Firstly, what is this urban form if it is not a city? Is it just a big sprawling village with 4 million inhabitants? Secondly, what does account for the leap from this condition to the next, from *early phase* to the *later phase*?

The later question could be argued in the following manner. If there was nothing physical and more importantly, no history to account for creation of primary elements, than there had to be immaterial forces at work that do not

⁶ ROSSI, Aldo: *The Architecture of The City*, p. 46, Opposition Books, The MIT Press, 1984

⁷ *Ibid.*, p. 48

⁸ *Ibid.*, p. 87

originate from the physical form and are able to generate. We could sum up that these immaterial forces are crystallized in policies and ideologies that have the ability to generate urban form and primary elements as well.

The first question, what can we call a city, is a deeper problem and not just an inability of Rossi's reading of form. We should agree with Rossi that if physical form has nothing else imbedded than the function and if we add, that function is as pervasive and unvaried as it is in the *early phase* of Shenzhen, it is hard for us to understand such an urban construct as a city. But what if the inability of calling this construct a city is not a problem of construct itself but rather a problem of our understanding? We will address this in the Epilogue.

5. Conclusion

Understanding city as a built object purely through its form is commendable but it can not account and explain all of the processes that are happening in contemporary cities like Shenzhen. A theory that works well with European and US cities, cities with history, can start explaining newly developing urban conurbations only after a certain moment. Rossi's theory can not account for leaps that happen from the unmotivated sprawling village into a city. The historical comparative method employed comes short of its vital ingredient – history.

Generally Rossi's theory works well but we could propose a few alterations. It can not be said that urban science can work as an autonomous field; rather it should be complimented with other fields. We should also supplement the idea of persistence that endorses only sedimentary potential of physical form with metaphysical permanencies like ideologies. There should be higher emphasis on importance of a function in typology although typology should still be understood as a conceptual notion with historical component. Idea of primary elements and monuments is sound, although we should argue that understanding it purely as workings of a form can not explain contemporary urban conditions like Shenzhen. It should be complimented with a notion that allows immaterial concepts to be perceived as primary elements.

6. Epilogue

A core question remains unresolved. What to do, when we end up with an urban form of 4 million people and does not conform to our understanding of the city? Does the urban theory have to be revised? Or maybe we and our modes of thinking are the ones in question. By “we” I am referring to western cultural and historical ideology. As our culture and way of living became so pervasive we started to “export” our “success” to other countries, nations, to other social and cultural environments. These exports came to mesh with local culture, traditions and understanding, and although they got generally used for the same purpose the modality in its use rendered them alien to us. A good example is a simple public coach. When I was on a small island in Indonesia and went on a coach, it was told to me that we will start our journey as soon as the coach is full. When all the seats were taken I thought that the driver will start the engine and we will be on our way, but no. They started bringing in stools and positioning them in the corridor and when those were full, some additional people were hanging out the doors. After they have filled up the lower cargo compartments they started to fill up the roof; live pigs, chicken even some people were hitching a ride there. Now the coach was full and we were on our way.

Although it is a crude example it shows that things although used for the same purpose have modalities of usage. Furthermore there is also a difference in meaning of certain concepts. What westerners regarded as a “full coach” was not even remotely close to what the Indonesian villagers considered it to be. If a difference can be seen in such a banal mechanical object and if that difference comes from a different perception of reality because of cultural divergences, than what happens to mental constructs that were exported together with the public bus? What happens to concepts such as democracy or capitalism, or in our case, the capitalistic city? What happens when a notion of capitalistic city meshes with China – with thousands of years of isolated history and culture that took a completely different route than the western world? Who are we to say that the *early phase* of Shenzhen is not as equally a city as it is today?

In a spirit argued at the beginning, that the city has so far eluded all of its theoretical classifications, I feel that I am entitled to a metaphysical suspense. Maybe by concentrating on the physical form, we are leaving out the key element in construction of the city, the people. Maybe it is them that should be looked at as propelling elements and not just their imprint. They are the monuments; their strife and desire to surpass are the driving forces and catalysts for any built form. They are the city.

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