Rethinking the Dimension In Urban Acupuncture
--“Super scale” strategy in practice

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Zhang Yimeng
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This thesis aims to make a better understanding of the urban acupuncture theory. It attempts to hold an overall view of the theory and discuss its benefits and challenges. By applying a critical discourse analyzes on the concerned theorists, the thesis seeks to find the answer on how the theory of Urban Acupuncture could be applied to practice. Accordingly, based on the urban acupuncture theory, by three projects which located in different countries and different situations, the practices try to draw strategies from varies projects. By analyzing these projects with a theoretic look, a link between the theory and practice can be made and thereby lead to a better implementation for future projects.

The way to make the design involves a research on the context in three cities, an analysis of the reality and solutions for to the urban problems. All the designs are concerned in three scales: large, middle and small. In this way, the proposals try to give solution in the different visions, varying from an urban scope to an architectural perspective. The three projects in Barcelona, Catania and Beijing, vary from the locations and social reality, but on the same situation concerned with public spaces and how to make a better urban environment in an architectural way.

Urban acupuncture is originated from an alternative Chinese therapy which focused the treat on specific spots on human body, but the cure is for the whole nerve system. In this sense, the urban acupuncture is a strategy which focused on small scale interventions, but aimed to achieve a better urban environment.

The urban acupuncture concerns mainly two dimensions—a small scale intervention and a big scale effect. Keeping this in mind, I realized a design strategy called the “Super Scale”. It does not mean another special dimension, but a way of thinking on the common line in my three projects. It is a rethinking of the dimension while making the design, more specifically, a scale-up thinking. And in the three projects, “Super Green Manzana”, “Super Kiosk” and “Super Hutong”, I would explain the way how “Super Scale” thinking works in practice and its role played in urban acupuncture.

Key words: Urban acupuncture, architectural strategy, urban dimension, urban intervention, public space, theory and practice

Abstract

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Intention

Chinese acupuncture vs. Chinese urban planning

Urban acupuncture is originated from an alternative Chinese medical science. This therapy holds that the imbalanced state is the fundamental cause of diseases. By putting the needles on some essential points of the human body, the Qi (energy) could be rebalanced, and the disease will consequently disappear. In this sense, urban acupuncture is a strategy which focused on some small scale interventions, but aimed at achieve a better urban environment. The small scale interventions are normally fast-making and cost less resources, but the result is long term and profound.

Chinese are the inventors of this wise acupuncture therapy, but ironically, they are making unnecessary big scale surgery in the urban planning, which leaves scars on the city. The big scale deconstruction is deterring the city step by step, but it seems that many of us are not aware of that as we are keeping reconstruction without considering about the dimension. There by, the aim of the thesis is to explore the theory of urban acupuncture, rethink about the dimension issue in urban planning and architecture design. Consequently, apply both the thinking of rescale as a strategy to a better Chinese urban practice in the future.
The chapter 1 is an introduction of the research line and the theoretical exploration on urban acupuncture, by citing from theorists Manuel de Sola Morales, Jaime Lerner, Casanova & Jesus and some others, it generates an image of what is the urban acupuncture theory and why we need to apply it into practice nowadays.

The chapter 2 is about three projects made by myself – one in Barcelona around the monument Sagrada Familia, one in Catania on a traditional market square and another one in my own city of Beijing, where I have chosen the site to make the proposal. In this chapter, one can see how the urban acupuncture theory could be practiced in different scales.

The chapter 3 is an analysis of the three projects in terms of urban acupuncture. By a comparison of the projects, we could draw a common line of the strategy “Super Scale” – what is the “Super scale” thinking and how it works when try to make a design.

In chapter 4, consequently, a small conclusion could be drawn.

Methodology

It is hard to give the birthday gift to a friend, because we need to think through all the possibilities to find the most appropriate one personalized to the friend. Then we could tell some story of the gift. This story makes the gift unordinary and the value is added to the object itself. The same way works for theory and practice. To make a research on the theory is to tell the profound meaning behind the practice, verse visa, without a good practice, any theory seems not adequate. So the theory helps to make better the practice. In this thesis, we can see that the theory and the practice are complemented.

By applying a critical discourse analyzes on the concerned theorists, the thesis seeks to find the answer on how the theory of Urban Acupuncture could be applied to practice. Accordingly, based on the urban acupuncture theory, by three projects which located in different countries and different situations, the practice try to draw strategies from varies projects. By analyzing these projects with a theoretic look, a link between the theory and practice can be made and thereby lead to a better implementation for future projects.

The way to make the design involves a research on the context in three cities, an analysis of the reality and solutions to the urban problems. All the designs are concerned in three scales: large, middle and small. In this way, the proposals try to give solution in the different visions, varying from an urban scope to an architectural perspective. The three projects in Barcelona, Catania and Beijing, vary from the locations and social reality, but on the same situation concerned with public spaces and how to make a better urban environment in an architectural way.
1.1.1 Manuel de Solà-Morales

Manuel de Solà-Morales i Rubio (1939-2012), the Barcelona architect founded the Laboratori d’Urbanisme de Barcelona (LUB), and he created new concepts and introduced innovative practices for transforming urban design in Europe. As an architect and also an urban planner, he dedicated on the difference between architecture and urban design.

The interdependent network
The acupuncture takes place in the “things that mattered” in the city, they are in small scale. What’s more important for de Solà-Morales, they are in an interdependent system, so that the effect that brought up by the intervention is not only on the referred site, but on an entire urban network. Project acupuncture is less concerned with the small, the minute or the delicate than with the strategic, the systemic and the interdependent...

Actions performed on the ear, the Chinese experts say, will have beneficial effects on the lung or the knee. Acupuncture is above all about a much higher appreciation of the epidermis as a rich, complex and enormously influential membrane, In the skin of the city, our architectural instruments, our experience as city dwellers and our bodily sensations are the real working material, useful and substantial in themselves, even for cause-and-effect relations of the most abstract kind. He adds: “So there is a certain analogy between intervening in the skin of the city and the techniques of acupuncture—not because it involves using needles or making small incisions, but because the epidermis is understood to form a system” (Manuel de Sola- Morales, AMT, pp 26).

Pay attention and rearrange
His method of applying the acupuncture is: firstly, pay attention to the urban reality, secondly, to find out the matters of the city, and thirdly, rearrange them. Here he emphasized the meaning of urban acupuncture which is the revitalization of the city. “To operate on the skin of the city is to be constantly attending to the way things are, and to questions about which things need adding, removing or modifying, or how better to rearrange them. There is no way of finding out other than to plunge into the strategy of things, of urban things” (Manuel de Sola- Morales, AMT, pp 26).

Seeking for urbanity
By the acting of urban acupuncture, Manuel de Sola- Morales is seeking for the urbanity.

The urban skin texture and transmitting of energy
Manuel de Solà-Morales treats the architecture of the surface textures as the raw material of the urban projects. He observes the city and tries to address specific urban problems, corresponded with reality. “The skin of cities is composed of constructions, textures and contrasts, of streets and empty spaces, of gardens and walls, of contours and voids... It is precisely the contact between our bodies and these forms of physical matter that constitutes the urban experience... This is why the ramps and staircases, the gateways and corners are so important, because in them we feel with our weight the shape and the size of the city.” (Manuel de Sola- Morales, AMT, pp 23)

In his book “A matter of things”, De Solà-Morales firstly noted the theory of urban acupuncture. He refers to the ancient medical practice of acupuncture, where the human body has 361 sensitive points. These points transmit sensory impressions to the rest of the body, through twelve meridians or pathways. “The ancient oriental practice of acupuncture regards the sin of the human body as the principal energy transport system. With 361 sensitive points scattered over the surface of the body transmitting their sensory impressions to the rest of the organism, exterior and interior, by means of twelve meridians or pathways. The urban skin also channels qualitative energy, and if acupuncture speaks of cold and hot energy, the qualities of the urban epidermis are also blunt or sharp, mental or sensorial.” (Manuel de Sola- Morales, AMT, pp 24).

The location of the needles
For him, to make urban acupuncture, to locate the needles is the first step. And where to put the needles are points in the urban fabric which hold the potential richness to be transformed. “As in therapeutic acupuncture, the location of the sensitive point is the first step in the strategy treatment of the urban skin. It is dexterity in the identification of the spot and the channels of influence in the fabric that enable us to add new qualities, adequate energy, whether cold or hot, and to empower urbanity in its various modes. The energy at these locations is linking to the existing richness and especially potential richness of urban sites” (Manuel de Sola- Morales, AMT, pp 18).

The Dutch architecture critic Hans Ibelings stating that “The essence of
his work lies not in planning or the art of city building, but in creating and stimulating urbanism and achieving a maximal effect through minimal intervention... His interventions unleash a heightened potential: the possibility of urbanity. And architect Rafael Moneo cited in a Harvard symposium in 2003 that "We have to look for reasons of a different order. The continuity of the city does not mean a strict evolution. We have to allow for the leaps, the slashes, the unique urban circumstances that interventions inevitable involve. To identify these moments and the conditions that together led to the ‘urbanity invention’ taking place, is what MSM sought to do when auscultating the city."

### Moll de la Fusta

In many of his urban projects, de Solà-Morales emphasized the mix of urban function and proper intensity, the mobility and accessibility created by infrastructure and public traffic to achieve the urbanity. The architecture is built not only for its specific function; it works as the material matter in the urban fabric.

His works for Barcelona aimed to improve the public space as a plan of a series small transformation after the fall of Franco’s regime. One of the successes is the case of Moll de la Fusta which located in the Barcelona coast. He created a platform that connected the coast and the residential area. The platform gives accessibility to the dwellings as a transition from the city life to the seaside view. On this elevated area, there are palm trees and necessary urban furnitures for people to have a rest. What's more, this space is not only a road to pass by or a square to connect both sides. It gives a broad seafront view for the people, as the case of park guell's platform. The first time that I visited it was with a couple of friends from the old city to the Barcelonate beach. We were cycling in a group there with the wet wind from the sea. That was so comfortable and made us forget about the traffic under it. We felt that we are travelling also on the way.

### 1.1.2 Jaime Lerner

Jaime Lerner is the mayor of Curitiba in Brazil, also an architect and urban planner. In the mid-1960’s, he transformed his city from a congested, grimy, crime-ridden one into a world-renowned model of green living and social innovation. In 2003, he published a book called “Acupuncture Urbana” This book is not a theoretical book. It is more like a diary or travel note of Jaime Lerner. Maybe because of his role of a mayor, he cares about people above all. He writes in a narrative way to tell the meaning of urban acupuncture and the way to do it. For him, the transforming cities has to do with not only their physical features but also psychological, cultural, and many other factors.

In the introduction of his book, he writes: "I have always nurtured the dream and the hope that with the prick of a needle, disease may be cured. The notion of restoring the vital signs of an ailing spot with a simple healing touch has everything to do with revitalizing not only that specific place but also the entire area that surrounds it."

### A method to revitalization

Jaime Lerner believes in that intervention is all about revitalization. "I often ask myself how it is that some cities manage to make important and positive changes, there are scores of answers, but one seems to me to be common to all innovative cities: every city that succeeds has undergone an awakening, a new beginning; this is what makes a city respond." (Jaime Lener, UA )

This defines the background of making urban acupuncture. The urban acupuncture can be seen as a method to revitalize the city.

### Interaction and participation

He also believes that the urban acupuncture needs interaction and participation, it calls for cooperation. "A plan by itself cannot bring about immediate transformation. It is a spark that sets off a current that begins to spread. This is what I call good acupuncture- true acupuncture" (Jaime Lener, UA ).

His strategy involved even the education for the children. In the 1980’s, Lerner published a book for children and teenagers, helping them to understand how to make better the urban environment by drawings. Because he believes that after the children, they teach their parents.

### Creating meeting places

"Sometimes, I stop to watch how a drop of molasses draws a swarm of ants,
or how a bar or a general store in a poor neighborhood with their blazing lights and animation attracts people. In fact, it is mainly people who attract people. Man is both a protagonist and a spectator in the drama of everyday life unfolding on the city stage.” (Jaime Lerner, UA)

Good acupuncture is about drawing people out to the streets and creating meeting places. Mainly, it is about helping the city become a catalyst of interactions between people. A mass transit hub, for example, doesn’t have to be just a bus station, it can also be a gathering place.

The more cities are understood to be the integration of functions— bringing together rich and poor, the elderly and the young—the more meeting places they will create and the livelier they will become. The design of public space is important.

Continuity
The continuity is life for Jaime Lerner. City is a network of many fragments, by filing up the voids, adding new functions that are necessary, the continuity is created. “Many major urban problems arise from a lack of continuity. Filling up these many urban “voids” can be the first step to sound acupuncture. An important step is to add elements that may be missing from a given area. If there is plenty of commerce or industry but no people, then housing development could be encouraged. If another district is all homes and apartment blocks, why not boost services? And if a building is crumbling or a shop closes its doors, something new must be built in its place even if it is only temporary.” (Jaime Lerner, UA)

Transportation
Jaime Lerner believes that the city of the future will be served by surface transit which is faster, vastly cheaper and then invented a Bus Rapid Transport (BRT) system in Curitiba. It is a bus service that performs as efficiently as or better than subway line. He also invented smart bike, smart taxi and the ultimate mode of transportation which is the smart pedestrian. Smart pedestrians are those who are allowed to move freely through the city. “The smart pedestrian will demand efficient urban facilities; they will have to be smart shops, smart movie theaters, and smart services.” (Jaime Lerner, UA)

There are also other followers or developers of this urban acupuncture therapy. A Finnish architect and social theorist Marco Casagrande gives a new dimension to the theory. His work is mainly focused on the vegetation. He treated the city as an organic system and he believes that the participation of the citizens is important in urban acupuncture. Casagrande led a research in Taipei, Taiwan based on a theory call the “Third Generation city.” In the first generation, humans are using architecture depending on the environment. In the second generation, Humans are exploiting the natural resources and forming industrials cities like cancer on a skin. In the third generation city, nature takes over the architecture and architecture become part of the organic city. His way of urban acupuncture is to view the nature as energy to flow over the city. And the architectural ruins are where to put the needles on.

In the treasure Hill project in Taipei, the site is occupied by an illegal high density settlement of urban farmers. The government planned to move all the informal buildings and build a public park. Marco Casagrande saw the potential of this area and made several small interventions such as staircases to connect between the houses and the actual urban farm. But at last this proposal didn’t accomplish as the farmers were forced out for their illegalized staying. Another successful case is the “Bug Dome” project in Shenzhen, China. The location is in an overgrown construction site with skyscrapers surrounded. Some workers from rural Guangxi build the dome by bamboo without any layout or plan, just by their knowledge earned from the village life. They could use it for playing pokers at night or having a meal. Surprisingly, after some time, the bamboo dome was covered with green all over. In this case, people made the intervention and the nature helped as an urban acupuncture.

A book published by Helena Casanova & Jesus Hernandez in 2014, public space acupuncture introduced strategies and interventions for activating city life. This vision combined the concept of acupuncture and public space together. “The growing awareness of the importance of public space as a regulation of urban cohabitation has led some cities to look for new ways of understanding its creation, design and management according to what might be called public space acupuncture strategies, born from applying urban acupuncture strategies exclusively to the sphere of public space”. (Casanova & Jesus, He) Here Jesus Hernandez stressed the urban contexts
to use the acupuncture: “where an increase in social instability has already been detected, in neighborhoods with large, socially excluded immigrant populations, in city centers where public life is disappearing from the streets, or in new urban developments, where there is a lack of social cohesion.” He also treated the whole city as a system, and talked about the profound effect brought by the coordination. “The strategy undertaking is made up of a set of actions or interventions that can be executed independently, but which are coordinated under a series of guidelines that dictate the precise place and the right time for each one to be carried out, so that all of them together produced a broader effect than if they acted separately” (Casanova & Jesus He).

This book consists of nine case studies realized in eight European cities by different designers classified by time-based strategies, citizen participation and replace making. The strategies included in the book are with variety of topics, including flexible strategies, bottom-up strategies, temporary interventions, citizen participation, low-cost interventions, self-building transformable structures and nomadic interventions. And at last the author gives comparative graphic tables in geogtaphical location, urban context and scale of intervention.

1.2 Dimensions in urban acupuncture

Manuel de Solà-Morales, Jaime Lerner, Marco Casagrande tend  and Casanova & Jesus Hernandez tend to hold different understanding and importance on the term of urban acupuncture. Manuel de Solà-Morales treats the city as a skin with texture and he pays attention to where to locate the therapy. More important for him, is not the scale, but the whole interdependent system. For Jaime Lerner, he concerns more about the social strategies that concerned to people’s participation and the profound meaning of making urban acupuncture. And for Marco Casagrande, he treated the city as an organic system and the architecture is only a part of it as the nature would occupy the urban fabric as acupuncture. More specifically, Helena Casanova & Jesus Hernandez relates the urban acupuncture to the public spaces, and time, participation, place making are the strategies to achieve it.

But all of these theories based on urban acupuncture share a common line, by applying small scale urban interventions in potential urban areas, to draw effects on the maximized urban skin.

Normally the urban acupuncture works in a place where facing a contradiction, with the coexistence of the old and the new, with the traffic problem brought by the modern life, with the fragments lefted by the deconstruction or the border between the developed and the undeveloped area ...In a word, the points in the urban fabric which hold the potential richness to be transformed.

The small scale interventions could be just a new kind of urban furniture, an spontaneous activity made by a group of people, an art scape in the square or street, a frame for the view of a monument...it could be some real project or could just be the participation of an public activity. Just because it is in small scale, we don't need to demolish all in the urban revitalization and in this way, the energy is saved and the transformation could be more sustainable. The interventions should be multi-functional with a public usage. The “small” is not obsulute physical samll, it could also be a district movement. The small is relative to the big. It is more of something that could be done easily and in a relative short time.

But the effect brought by the small scale acupuncture is a big one because the small interventions formed an interdependent system. The effect could
be on work directly or could also be a potential influence in a long term. The influence could be a revalue of the existing urban elements, the reestablish of the social interaction or the cultural identity. It is a catalyst for the existing fabric, for example, a small scale pocket park, a repeatible public center, a multi-functional architecture or a monumental public architecture.

But the process of urban acupuncture is a long-term one. It could be an experiment in a small scale at the beginning, and gradually change to a big scale movement in the city. In this way, different from the big scale reconstruction, it respects for the continuity and evolution of the urban development and it is a way of inclusion rather than creating fragments in the city in a short time. But the dimension of urban acupuncture is hard to define as it is flexible and changeable. So it is important to control the timeliness and scope in practice.
2.1 Barcelona: super green “manzana”

“When we discuss what sets Cerda’s Eixample apart we often refer to its special structuring that originates from the simplicity of its grid layout, acting as a supporting tool on which the city becomes a reality, and where the block is indisputably the substantial element. The mechanisms that this structure uses to create different free spaces respond to the replacement of some blocks by open spaces, as seen in the two blocks located on both sides of Sagrada Familia.” (Joan Busquets, Miquel C)

As can be seen from a map of Barcelona, Cerda’s uniform grid layout of Eixample, connects, but substantially different from the distinct neighborhoods of “Ciudad Vella” and “Gracia”, brought about equality for the people. But La Sagrada Familia appeared as a distinctive profile in the fabric of Eixample. The two parks on both sides of it also give an impressive view seeing from a distance.

Monument and Intensity

Normally “a monument is someone who have no warmth or affection, or who consider it above the common people, with phrases intended to defend them.” (Jaime Lerner, UA, pp91) But La Sagrada Familia is an exception. It became a monument for the character of a church and visited by millions of people every day, but its original design, by Gaudi, was to achieve the sense of nature by an artificial way as we can found in the interior that the constantly up going tree-like structures. It is a scared monument in terms of its height and social influence, but the concept is nature-like and human-approachable.

But nowadays, when we visit the Sagrada Familia, it is similar to a giant standing in the eixample, with his head high above into the sky. This happens because of a lack of attention in the surrounding environment and too much attention around the church, in a short word, the intensity.

A super “manzana”

In a large scale, we could think in another way, consider the 13 blocks around La Sagrada Familia as one super “manzana” to Incude the church to the context of the eixample. This action would make the energy of the church flow to the surrounding areas and release its intensity. At the same time, when this one super block is achieved, automatically, it would become a part of Av Diagonal, just like the case of L’illa Center. It would attract much attention from Av Diagonal. Furthermore, to Glories zone, one of the most important knots of Diagonal, the energy would spread. In short, in the super “manzana”, the energy from the tourists would be relieved from the church to the surrounding blocks. In a more general gaze, it would spread from the super “manzana” to the other big scale public spaces in Av Diagonal even in Barcelona.
A green "manzana"

"You go to a square, but you lose yourself in a park. A square often is where you watch the world go by; a park is where you discover what lies within yourself." (Jaime Lener, UA, pp89) In front of the monuments in terms of a sacred church, it is a standard practice to place a square for people to gather, but around La Sagrada Familia, it is an exception. We can see clearly from the Google satellite map: two parks. The name of these two parks, "park of Gaudi" and "park of Sagrada Familia" defines exactly its role to serve for the church as a good example. Tourists come here to take photos of the attraction; children come to play on the ground; their parents come here to watch their children play; Venders and buskers come here for the people who come here. Once working as a tour guide, when I was sitting in the park of Gaudi, waiting for my tour guests, a local sit closed to me and we began to talk. He likes the park more than the church because in his view, the church is something to see, and the park is something to use. He comes to the park every day from nearby, but it is troublesome to go across the roads for the amount of cars and the turning corners in the junctions. There is a lack of continuity.

A super "manzana" in this sense could create the continuity and accessibility. How to make the super "manzana"? The answer is— a green "manzana". It is a green network of parks centered from the Sagrada Familia radiated to the layers of blocks around it. The green could take place inside the courtyards of blocks, or on the streets, on the top of the buildings, even, dramatically, cover the Sagrada Familia.
A basket of green “manzana”s

This big park is more than a landscape, taking from the “third Generation City” theory from Marco Casagrande—In the third generation city, nature takes over the architecture and architecture become part of the organic city. It could be the first step of creating an organic city, from the Sagrada to the Eixample neighborhood, to Gracia neighborhood, to Sant Marti neighborhood, even to the whole Barcelona! No matter the size of the green “manzana”, from a super big green “manzana” to a tiny small green “manzana”, it is a basket of green “manzana”s, a green system in the city.

A new pedestrian for approaching

No doubtly, Gaudi, in his age, couldn’t imagine the crazy amount of visitors and how the church influences the traffic around it. The touristic couches that parking nearby and the crowded clustered visitors are aggravating on the church. La Sagrada Familia is the heart of Barcelona, but around it, the space is losing the identity of this city and is becoming a cluttered market of tourists.

The excessive use of vehicle is becoming a social problem, like the cholesterol in the city. We already invented the microwave oven, but we want it to be even faster to be prepared, never satisfied. If there is car or bus, we won’t walk. That makes more roads for cars and fewer pedestrians in the city.

In many streets of Barcelona, we can always find the “big eye” tour couches, people like the idea because it is more comfortable and efficient to make one tick from the tour plan. If we can change the tour couch to another dimension further from the church, accordingly, the tourists need to use the pedestrians to approach the scared church which will also bring more interaction with the city on their way.

Small scale vegetation

The second step is a small scale intervention in each courtyard of the blocks. It is to open up the block’s front buildings from the courtyard to the street and make vegetation inside it. This sounds not like something new as in central Eixample, since 1987, there was a group of interventions opening up the courtyards by passages, public facilities or open spaces. This movement contributed on the Eixample by relinking the interior life and the street life, formed a continuous network of public space. As said in the book “Cerda and the Barcelona of the future, reality versus project”: The main reason for the design of some open spaces is the vegetation, generating a thought-provoking and diverse garden...They can include plants that ease the visual harshness of the exposed dividing walls... By connecting a pedestrian layout to an adjacent open space, one can walk through it as well as see inside it, thereby encouraging different activities in the same place. It can hold the two above-mentioned urban realities: the one related to the Eixample’s grid system and the one originating from interventions into the block’s interior. “(Joan Busquets, Miquel C), to connect the street to the inner yard aimed at encouraging interaction and the reason to include green in the courtyards is...
to ease the harshness produced by this action. Especially in the case of super green “manzana”, the vegetation is more than a landscape for the courtyards, “it is the green water drop of the green sea”. The green could flow from a family window to the whole wall and ground, from the courtyard to the streets and squares, integrating to the existing parks, evading the ground of La Sagrada Familia, even its façades, and finally spread from super “manzana” to sea of the city. The vegetation could take place from a spot to an entire organic system, in varies scales.

**Public participation**

The point is that everyone likes green and everyone could participate in it. And it is a long term process. The citizens would leave alone their home-theater, go out of the gate, to take care of the climbing plants on the community wall, go through the street, to say “hola” to his friend in another block and ask about their planting; tourists when climbing up the tower of Sagrada Familia, could see a “thought-provoking and diverse” urban garden in the urban fabric, suddenly, they could realize the Gaudi’s original design, an artificial nature which is growing day by day with the plants in every corner of the city. As the reality of being a tourist city, Barcelona is opening its door to all the curious guests. If the reality exist, why don’t we face it? By open more public space and wave them into the urban fabric by green strategy, the intensity is balanced and the green communication between locals and tourists could relieve all the contradictions.
2.2 Catania- super “kiosk”

The outdoor fair in Sicily

The warm Mediterranean climate not only grants various fruits and vegetables to Sicily, but also affected the form of the fairs. Sicily’s outdoor market tradition dates from the ninth-century. Almost every town and urban neighborhood has its “mercatino” (“little market”) open once a week. “A regular shopping mall excludes us from the city, but markets and street fairs have always been a reference point for the city.” (Jaime Lerner, UA) The Sicily markets, with a colorful assortment of fruits, vegetables, fish and meats to vendors barking about bargains for anybody who will listen. It is a cacophony of sights and sounds, crowded and chaotic with various products from food to clothes.

The Piazza Carlo Alberto Market in Catania, as a typical Sicily market, started to be used as a market for decades. It consists hundreds of “kiosks” or “umbrellas” – the tarpaulins suspended as “tents” to protect the wares from the rain or the sun. And the market takes place every weekday in the day, including all Saturday in the square of Carlo Alberto.

Market “Invasion” to the city

It is interesting how people began to use this outdoor space as a market, and it is far more interesting how these kiosks of the market overspreads into the in-between spaces. The market takes place mainly in the square, but if you look through the satellite pictures, you would find out that the flexible kiosks “invades” dynamically into the streets of S.Gaetano, Cosentino and Teocrito on the southern side of the square... (fig 2-2-4) Curiously, in the northern side of the square, this phenomenon didn’t happen. Why? Considering in a bigger dimension, taking the square’s location for reference, in the south, many Catania monuments and attractions occupied brought life and let the energy flow. But in the north, the narrow north portal of the square is closed by buildings that formed the shape of it. There’s a lack of link to other open spaces comparing to the south part of the square (fig 2-2-4).

The therapy is to demolish some constructions (all to be eliminated in the Municipality plan) placed at the north of the square, to open a way for the kiosks to go to the north part of the city. A new dimension is then established in the urban fabric. “A square must have entrance. They are open to all, but with portals, they seem more special to the individual. They are small, and still can belong to millions. Sometimes they are so big that they seem to belong to no one at all.” (Jaime Lerner, UA) The market, carrying its social interaction and urban identity, brings energy to more in-between spaces in the city. Perhaps by opening the north portal, the market could affect the whole north area of it, just in the same way that the green would grow from the central park Giardino Bellini to the market square, finishing as a small public park in the north portal of the square. Overall, the public space would be enlarged from the specific square to a big dynamic network (fig 2-2-7).
An irresponsible market

In this outdoor market, you can see the vendor’s greeting smile from another kiosk; you can feel the wind coming off the water and blowing on your face; the warm sunshine pouring on your body; and the sound, the special sound! Without any barrier around, the vendors’ barking and bargains spread over the square and forms a crowded and chaotic ambience which just represents the character of Sicily and Italian people.

But it is not perfect. The flexibility of kiosks-mode brings a successful market to the square, but its flexible timetable also brings disadvantage. On the dilapidated parking building roof from the southern side, you can have a perspective of what is happening every day. As the fair is a contemporary activity which takes place in the day in every weekday and when finished, it left a lot of rubbish all over, especially for the church that located in the central axis. Let alone at night, when the venders leave with their kiosks, also taking them with the life of the square, it even becomes a dangerous place.

“Super kiosks”

Interestingly, the strategy is a “small scale” intervention which is “bigger scale” kiosks. I call it the “super kiosk”. It is “super” not only for its dimension as a kiosk, but also for its contribution to revitalize the square, even the entire city.

When firstly visited the site in Catania, the special market kiosks in the square associated me with the ancient Chinese kiosks (亭, Ting). "In the traditional Chinese architecture, three basic elements that form a building: the platform (台基, Taiji), the building body (屋身, Wushen) and the roof (屋面, Wumian) are not indivisible (fig 2-2-11). Sometimes those three elements could be developed individually. For example, the Temple of Heaven becomes a building with only platform; the Chinese kiosk becomes a building only with roof and platform and in the case of when with only platform and building body, it is a yard." (Li Yunsu, Huaxia Yijiang) The typology of kiosk in Catania market—the tarpaulins suspended as “tents” to protect the wares, could be developed to a kind of “super kiosk” with “roof” and “platform”, tent as the roof, and stand as the platform. More similarly, the way that the kiosks distributed in the square is just the way that the “super kiosk” distributed in the urban fabric.

This bigger scale “super kiosk” really is potential to work as “platform” and “roof”—platform as an urban stage and a roof as urban frame (fig 2-2-13). For example, two “super kiosk” that located in front of the church together formed an urban frame that could be seen by people from the central street. In this way, the statue of the church is reestablished (fig 2-2-14). Subsequently, at night, people could sit on the big steps of the church to have a good view of what’s on show on the urban stage, with the city as a backstage. (fig 2-2-15)
The “super kiosks”, like the needle for acupuncture, locates in the place where there is the sickness—a lack of life or with need to be revitalized. In the case of Carlo Alberto square, the locations of the intervention are: in front of the church, on the parking building and in the new produced park (fig2-2-9). With its magic energy, the “super kiosk” could enrich the life of the square. And in terms of the city, the locations could be the any places that need to be revitalized in the whole public space network.

While the usage of the market kiosks is flexible, the usage of the “super kiosk” is also flexible and diverted. In the case of the sad parking building, it could be located on the top of the building to benefit from its situation for a good viewpoint. Here one can have a cup of coffee, talking with another, while pointing to the place where he just bought the authentic “Granita”! In this case, the “super kiosk” works more than its dimension of a kiosk. It involved the dilapidated parking building to become part the square with its energy. In terms of the north park, as a new born, it also needs attention. The “super kiosk” here attracts people with an exhibition of the Sicily’s market culture and let them stay.
fig 2-2-14 "Super kiosk" in the day and at night
(Drawn by the author)
I will rebuild a city by words, rebuild my Beijing using my Beijing to deny the real Beijing. In my city, the time flies back, the old trees revive with spring, the disappearing smell, sound and light are recalled, the demolished courtyard houses, Hutongs and temples are reinstated, the roofs wave to the low skyline, the pigeon whistles sound over the sky, children know the change of the seasons, residents carry a good sense of orientation. I open the city gate to welcome the universal wanderers, the homeless souls and all the curious guests.

--Bei dao (poet)
written after 30 years going back to his hometown, Beijing

"Cultural heritage sites and relics are classic humanistic creations, of which imperial and religious structures are the most outstanding representatives. The local culture, however, is represented mostly by residential structures. In residential structures we find a trove of historical and cultural 'gems,' the 'flesh and blood' of history, things that embody the kind of spirit that makes the city different or even unique. Take for example Beijing. The 'soul' of the city is not to be found in the Temple of Heaven or the Forbidden City. It is epitomized by the hutongs and siheyuan courtyards.

--Feng Jicai (Beijing born writer)

The beauty of old Beijing exists in the empty space between architecture, where trees grow and birds live. As such, the buildings themselves do not have to show any special shape in order to be unique.

--Lao She (Beijing born writer)

"The largest ones are really micro-cities," "People who live there have their own schools, restaurants and supermarkets. But you often don’t know they are there. They are behind these big walls."

--Yung Ho Chang (Beijing architect)
Hutong and Siheyuan

Beijing’s traditional neighborhood is a real container of the living culture with two major components: Siheyuan (courtyard houses) and Hutongs. Perhaps we can say the old city of Beijing a city of courtyard houses with the Forbidden City as the biggest one in the center. “The countless square units, like the cells of an organism, containing the traditional way of living, fill the city with life” (Xie LI, Adaptive Reuse in Beijing’s traditional Neighbourhoods). Siheyuan or called courtyard houses (fig 2-3-2), is a typical kind of residential building in Beijing. Four one-story building close out a yard in the middle. Hutong is the narrow alleyways between courtyard houses (fig 2-3-3)The space gradually transformed from “public to semi-public to private”. Hutong has gone far beyond the transportation function, becoming a unique element in Beijing’s traditional neighborhood (fig 2-3-4). Rows of Siheyuans and tree-lined Hutongs together formed the old neighborhood of Beijing.

From the former writings of poets, writers and architects, we can see a warm love from these people, for the Hutong and Siheyuan in the old neighborhood of Beijing. For them, the Hutong and Siheyuan represent the genuine Beijing rather than the famous monuments. Because Hutong and Siheyuan are the “flesh” and “blood” of the old neighborhood and the soul of the city, Beijing. Hutong is a realm of diverse possibilities to be discovered because of the chessboard street pattern, fishbone lanes divide and connect neighborhoods, fulfilling various non-transportation activities from chess playing to chatting, from kid’s playing to peddlers’ working. The winding and twisting alleyway made it a maze full of surprise.
Lost in new Beijing: the old neighborhood

Beijing is a city of various scales. It has the Forbidden City in the center which was used by the emperors in the past, and imperial city that included a big landscapes to the forbidden city. Inner city outside of the imperial city which is the main dwelling neighborhood for ordinary people. And out of the inner city, it is the new constructed city with rings of layers keeping enlarging.

“Historical cycles that took a century to unfold in the West can be compressed into less than a decade in today’s China. And that’s as true of Beijing’s preservation movement as it is of the nation’s ferocious building boom.” (Nicolai Ouroussoff)

Each urban act, when related to china, is so fast and in such a big scale. It is an undeniable fact that the recent history of Beijing’s courtyard houses is a history of deconstruction and construction. This brought many cut in the old neighborhood which makes the city full of fragments. But it could also be an opportunity. We can take these vacant spaces and insert new energy to rebuild the continuity.

From a bird view of Beijing, it is easy to distinguish the pieces of old neighborhood from the rest of the context also because of the rapid changing scales. The Forbidden City which is the “inner box” of the inner city, attracts the most of the tourists. The Beihai Park on the western side of the Forbidden City, is totally an inner park. The biggest open space Tianmen square is another city in the city. All this elements are built in a huge scale, thus makes the old neighborhood so ordinary and so humble. As the soul of the old neighborhood, the Hutong and courtyard houses deserve the attention from public and could become the new attractions to the “curious guests”.

The points for intervention could be the places where the urban elements meet, from a big street to Hutong or from the old neighborhood to the tourist attractions.
The insertion to the vacant space in old neighborhood should be a space which can create interaction to give energy to the whole city and served for both tourists and locals with a new balance.

In a vertical perspective, the "Super Hutong" is a stage for a variety of activities. It makes things happen and interact. On the platform, local people could use it to get on their traditional activities, like sing a song together or flying the pigeons to hear the whistle sound. Visitors could have a good view of the surrounding courtyard houses from this higher level, thus the private courtyards would become more public without being disturbed (fig 2-3-16). On the same level of the streets, it is an enlarged Hutong where people pass by and stay for a while to enjoy the sound of the layers of life here (fig 2-3-17).

The project is just located in one of this situation. It is on one side of a big street which linked Beihai Park and Jingshan Park. The two parks used to be served for the emperors in the past as their leisure zone connected to the Forbidden city. And now it is served as the following attractions for thousands of tourists who come to visit the Forbidden city. The local people also like to use the parks for their public necessity. But now it seems to be imbalanced the situation.

From a top view point of Jingshan Park, we can notice a distinct six-floor building which gives a very unharmonious impression (fig 2-3-12). When decided to demolish it, a vacant space come into being.

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In the old Beijing inner city, not only the building has a big scale, also the streets. It is commonly seen a narrow Hutong directly inserted into a some 20-meter-wide avenue. The micro daily Hutong life which is full of color and sound is crashed hardly with the hustle bustle life of the big street. The dimension changed suddenly (fig 2-3-21). As a result, when turning from a big street to Hutong, our organs are too busying distinguishing what is happening around to miss many interesting Hutong spaces.

This “super Hutong” involves with how the scales changes between surrounding environments—the Hutongs, the streets and the courtyard houses. The “super Hutong” has the width of two or three courtyard houses. It can work as a transition from the big street to normal Hutong and make people stay (fig 2-3-22). In some cases, the “super Hutong” could further be linked to the surrounding courtyard houses as an addition for the basic life need. It could also be one bicycle station for People who are wandering in the Hutong maze in a more interesting way.

The “super Hutong” is an extension of the old Hutong, everything could happen here, and also nothing happened. It waves to the old neighborhood as viewing from the top of Jingshan Park (fig 2-3-24).
Figure 2-3-24 Super "Hutong" (Drawn by the author)
Chapter 3  Analysis

Through these three practices, we could have a clearer vision on how the urban acupuncture could be applied into different projects. In most cases, the urban acupuncture pays attention to the small scale interventions, and seeks for a big scale effect. Here in three projects, the strategy of “Super Scale” is more similar to a new born middle scale. But rather than to consider the urban context in a middle scale, “Super Scale” is a strategy of design. More specifically, it is a way of thinking during the design process. By a comparison of the three projects in the contexts and the ways to apply for the “Super Scale”, we could know when and how to use this strategy in the future projects.
### 3.1 The context

**With potential to become the public center**

The first step of urban acupuncture— to find the sensitive spots to put the needles is a very essential step.

All the three projects are located in the city center with many possibilities. Surrounding this monument, there is a big intensity brought by the tourists. And there is a traffic problem which is deterring the sacredness of the church.

In Barcelona, the project is located near the monument Sagrada Familia. Surrounding this monument, there is a big intensity brought by the tourists. And there is a traffic problem which is deterring the sacredness of the church.

In Catania, the project is located in a dynamic market, but when the market is over, there is a lack of night life, and the vendors left rubbish everywhere, even in front of the church.

In Beijing, it is located in the old neighborhood which is losing its identity and there are not so much public spaces for the dwellers to use. What’s more, it is closed to the Forbidden City where also attracts thousands of tourists.

These places, whether with a monument, a tourist attraction, or have an historical value, though facing many problems, still have the potential to become the center for public activities. These places can strongly affect the surroundings. Those are the sensitive points to put the needle on.

**With repeatable Components**

Especially, in all these three projects, we can find a repeatable typology of urban elements. In Barcelona, it is the typology of Manzanas in L’excample. In Catania, it is the repeatable kiosks distributed in the square. In the project of Beijing, it is the Hutong-Siheyuan mode.

With those typologies, it is possible to make the “Super Scale” inclusion because even with a scale-up of the components, it is still related continuously with the urban context by its small scale components.

And all the interventions take place in the in-between spaces, like the courtyard inside the blocks, the squares of the market, or the Hutong between Siheyuans. These in-between spaces could be used as public space and improve the urban environment.

### 3.2 The “Super Scale” strategy

The “Super Scale” strategy is applied in the three projects as “Super green Manzana”, “Super kiosk” and “Super Hutong”. For example, in the project of Sagrada Familia, we considered the 13 blocks around it as one “Super Block”. In the projects of Catania, we created a new Kiosk in a bigger scale. In Beijing’s old neighborhood, we made a new “Hutong” with the size two or three big as the traditional courtyard.

They are called the “super”, but within it, still we can find the small scale. Because all these super sizes are composited with small sizes components. So when people get into the new public spaces, they will not feel it is a bigger scale. It is a big scale only in the view of the small components.

The “Super Scale” elements work as a transition in the urban fabric to solve incorrect dimension problems in the city. In Barcelona, the church’s profile is not correct when facing with the formal L’example. By introduce green to “Super Manzana”, the surrounding environment of the church could be changed and then make them one totality. In Catania, the “Super kiosk” could be seen as the Kiosks in the open-space network, as the actual kiosks in the market square. The “Super Kiosk” arouses the activity by its big platform on the square. People could use it as a place for a rest, or gathering, or even they can put their kiosks under the super kiosk. At night, it could be used as an urban stage to attract people to make the square an active place again. In the project of Beijing, the “Super Hutong” is the transition from big streets to normal Hutong. People would have an opportunity to stay there and pay attention to the next Hutong that they will pass by.

Now it is clear that the “Super Scale” is an inclusion of the exceptions, a transition of the different scales. The “Super Hutong” includes several Hutongs and Siheyuans. The “Super manzana” includes several manzanas and streets. The “Super Kiosk” includes small kiosks and the square space. So the “Super Scale” interventions actually are not a solid building, they are the urban things with urban elements to be included and the in-between spaces. It is much more a public space than a closed building.
Chapter 4 Conclusion
At the beginning, by making a better understanding of the urban acupuncture theory, the thesis seeks to find the answer on how the theory of Urban Acupuncture could be applied to practice. Accordingly, based on the urban acupuncture theory, by three projects in Barcelona, Catania and Beijing which located in different countries and different situations, the practices try to draw strategies from varies projects. By analyzing these projects with a theoretic look, a link between the theory and practice can be made and thereby lead to a better implementation for future projects.

The way to make the design involves a research on the context in three cities, an analysis of the reality and giving solutions for to the urban problems. All the designs are concerned in three scales: large, middle and small. In this way, the proposals try to give solution in the different visions, varying from an urban scope to an architectural perspective. The three projects in Barcelona, Catania and Beijing, vary from the locations and social reality, but on the same situation concerned with public spaces and how to make a better urban environment in an architectural way.

The urban acupuncture is a strategy which focused on small scale interventions, but aimed to achieve a better urban environment. The urban acupuncture concerns mainly two dimensions—a small scale intervention and a big scale effect.

Keeping this in mind, I realized a design strategy called the “Super Scale”. It is a way of thinking on the common line in my three projects. It is a rethinking of the dimension while making the design, more specifically, a scale-up thinking and a thinking of inclusion. In the three projects, “Super Green Manzana”, “Super Kiosk” and “Super Hutong”, it is clear that this “Super Scale” strategy works on the context with potential to become the public center and has a repeatable urban typology. The “Super Scale” is an inclusion of the exceptions, a transition of the different scales for a better urban acupuncture and a better urban dimension.
Urban Context

Location

Barcelona  Caltaniseta  Beijing

City center  City center  City center

Site scales

Barcelona  Caltaniseta  Beijing


1. With potential to become the public center

Barcelona  Caltaniseta  Beijing

Movement intensity: Tourists and local

Movement: Social identity: Tourists and local

Old vs. New: Social identity: Tourists and local

2. With repeatable components

Barcelona  Caltaniseta  Beijing

Repeatable “Manzana”  Repeatable “Isola”  Repeatable “Hsizong”

“Super-Scale” Strategy

Scale-up of urban components

Barcelona  Caltaniseta  Beijing

Super Manzana for reflection

Super Isola for gathering

Super Hsizong for transition

1. Small scale intervention

Barcelona  Caltaniseta  Beijing

Open courtyards for vegetation

Big Isola bring rights to create interaction

Urban stage: Recall traditional activities

2. Middle scale example

Barcelona  Caltaniseta  Beijing

New parks in courtyards and streets

New gathering points in urban open spaces

New public centers in old neighborhood

3. Big scale effect

Barcelona  Caltaniseta  Beijing

A system of public attractions

A system of open spaces and parks

A system of new public centers
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